The sessions and delegates at the ECR just keep on increasing, so we have spread out into some other amazing spaces around the Austria Center and created our very own ‘ECR City’.

Explore all our locations and get to know the neighbourhood:

**Austria Center Vienna (ACV):** well-established and home to the ECR for many years the ACV and the temporary structure used for the technical exhibition are the heart of ECR City.

**M Building:** only accessible through the Austria Center, this modern conference building rented from the United Nations is a great addition to the main ACV building. The International Village (national society stands) can be found here, as well as a variety of sessions and many meeting rooms.

**The Cube:** rooms in a nearby church have been rented, a contemporary architectural gem in a cuboid form, made of dark chromium steel, hence the term ‘the Cube’. This space is exclusively dedicated to interventional radiology and conveniently located between the underground exit and the congress venue.

**Sky High Stage:** overlooking the ACV and the whole of Vienna from the top of the neighbouring Saturn Tower, this spectacular location can be reached within minutes from all other ECR City locations. Our brand new MyT3 sessions will take place here, as well as the Clinical Trials sessions.

**Transportation:** look out for our e-scooters and rickshaws that will add a bit of extra fun to cruising through ECR City.
Welcome to Vienna

WELCOME TO THE
EUROPEAN CONGRESS
OF RADIOLOGY 2018
### TIMETABLE

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<tr>
<th>Time</th>
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<tr>
<td>08:30</td>
<td>Special Focus Session SF 1</td>
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<td>ECR Press Conference</td>
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<td>09:00</td>
<td>E3 - ECR Academies E18, E121</td>
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<td>Scientific Sessions (200)</td>
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<td>E3 - ECR Master Class</td>
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<td>Refresher Courses (100)</td>
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**Wednesday, February 28**

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<td>Coffee &amp; Talk (open forum)</td>
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**Thursday, March 1**

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**Sunday, March 4**

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**The Voice of EPOS • In the ECR Online & EPOS Lounge**

- Wednesday, Friday, Saturday, 09:00–12:00
- Wednesday – Friday: 09:00–16:00
- Saturday: 09:00–15:00
- Sunday: 09:00–12:00
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<td>16:30 - 17:00</td>
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CONGRESS VENUE
Austria Center Vienna
Bruno Kreisky Platz 1
1220 Vienna, Austria

ONSITE OPENING HOURS

Registration
Tuesday, February 27 .................. 12:00–18:00
Wednesday, February 28 .............. 07:00–18:00
Thursday, March 1 to Saturday, March 3 . . 07:30–18:00
Sunday, March 4 ..................... 07:30–16:00

Preview Centre
Tuesday, February 27 .................. 12:00–18:00
Wednesday, February 28 to Saturday, March 3 ................... 07:30–18:00
Sunday, March 4 ..................... 07:30–16:00

ECR Online & EPOS Lounge
EPOS™ – Scientific Exhibition
Wednesday, February 28 to Saturday, March 3 ................... .08:00–18:00
Sunday, March 4 ..................... .08:00–15:30

Technical Exhibition
EXPO Halls and EXPO Foyer D
Thursday, March 1 to Saturday, March 3 . . 10:00–17:00
Sunday, March 4 ..................... 10:00–14:00

EXPO Gallery (First Level)
Wednesday, February 28 ................ 14:00–17:00
Thursday, March 1 to Saturday, March 3 . . 10:00–17:00
Sunday, March 4 ..................... 10:00–15:30

Travel Service
Tuesday, February 27 .................. 12:00–18:00
Wednesday, February 28 to Saturday, March 3 ................... 08:00–17:30
Sunday, March 4 ..................... 08:00–12:00

Press Office & Business Centre
Wednesday, February 28 to Saturday, March 3 ................... 08:00–18:00
Sunday, March 5 ..................... 08:00–16:00

SESSIONS IN JOINT SPONSORSHIP WITH

CIRSE Cardiovascular and Interventional Radiological Society of Europe
EFOMP European Federation of Organisations for Medical Physics
EFRS European Federation of Radiographer Societies
ESCR European Society of Cardiovascular Radiology
ESER European Society of Emergency Radiology
ESGAR European Society of Gastrointestinal and Abdominal Radiology
EHSNR European Society of Head and Neck Radiology
ESMOFIR European Society of Molecular and Functional Imaging in Radiology
ESNR European Society of Neuroradiology
ESOI European Society of Oncologic Imaging
ESPR European Society of Paediatric Radiology
ESSR European Society of Musculoskeletal Radiology
ESTI European Society of Thoracic Imaging
ESUR European Society of Urogenital Radiology
EUSOBI European Society of Breast Imaging
EuSoMII European Society of Medical Imaging Informatics
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Please note that sessions are marked with a logo to indicate their classification according to the European Training Curriculum.

LEVEL I First three years of training
LEVEL II Fourth and fifth years of training (general radiologist standard)
LEVEL III Subspecialty training standard
FOREWORD BY THE ESR PRESIDENT

DEAR COLLEAGUES AND FRIENDS,

It is my great pleasure to welcome you to ECR 2018!

The European Congress of Radiology has attendees from all over the world – from over 140 countries and many diverse cultures. It is a multi-professional meeting where international experts can shake hands with students, medical residents exchange ideas with physicists, and radiographers share their perspectives with industry representatives.

I chose ‘Diverse & United’ as our congress motto this year, as radiology is such a diverse specialty, covering a huge range of medical and scientific topics: from ever more refined diagnostic options to image-guided minimal invasive treatment options. Alongside our diversity, as radiologists and radiographers we should also stay united, which is in the interest of our specialty and our patients. This is what our congress is: something to offer for everyone, regardless of profession, cultural background or specialisation.

Being Congress President in 2015 gave me the unique opportunity for re-evaluation and to implement new things that I feel strongly about as well as fine-tune features that already existed. It was generally important to me to introduce new ideas in order for those of you who’ve even been coming to Vienna for decades, just like me, to get the chance to experience multiple innovations.

MyT3 is a new session format, adapting the ECR even more to these fast-moving times. 240 daring colleagues will present their scientific thesis in just three minutes! As if this wasn’t dramatic enough, we decided to hold these speedy sessions on the Sky High Stage which overlooks the city of Vienna, as only the sky is the limit for this new generation of radiology professionals.

Additionally, we created another new session format, ‘Coffee & Talk’, which is highly interactive with much more time for discussion than usual and in a relaxed atmosphere, with the possibility to also enjoy a coffee or other hot beverage. The interesting lectures on offer in these sessions call for an exciting exchange bringing together different statements and opinions as well as Viennese coffee culture.

For the first time, the CUBE will open its doors to you: a theme park for interventional radiology, designed for residents who haven’t specialised yet. Challenges, quizzes, training and much more will be focused on IR in emergencies plus other everyday topics, including the aorta, oncology, peripherals, and stroke. Without wanting to give away too much, I recommend paying the Cube a visit during lunchtime for ‘the main event’: the daily highlight involving experts in the arena, less challenging as well as more challenging interventions and much more. Come be part of it!
I have given a strong focus on radiographers this year, whose work is crucial for every medical imaging facility. In order to underline how welcome they are at the ECR, we introduced the new Shape Your Skills Programme for radiographers at the beginning of their career who were selected based on the quality of their abstract submission. They were awarded free admission to the congress and hotel accommodation. Additionally, there is a Radiographers Evening on Friday night for the first time. Don’t miss it!

And last but not least, on a less professional note, we all have to eat and it was important for me to broaden the choices for all of us by introducing the ECR Food Village. Street Food is ‘the in thing’ in Berlin right now for people who want to enjoy some fresh air, stretch their legs and grab a bite. So throughout as well as just outside the conference centre, you can indulge in the cuisine of our ESR Meets countries (China, Portugal, Switzerland) or also try a typical Berliner Currywurst.

I invite all of you to look around, experience and re-discover the ECR, the new as well as the familiar features, as diverse and united as we are!

Bernd Hamm
ESR President
OPENING OF ECR 2018

Wednesday, February 28
17:45–19:00, Room A

BERND HAMM
Berlin/DE
ESR PRESIDENT

WILHELM CONRAD RÖNTGEN
HONORARY LECTURE

Value-based radiology: the future is now! [A-273]

Thursday, March 1
12:15–12:45, Room A

MARC DEWEY
Berlin/DE

MARIE CURIE
HONORARY LECTURE

Hybrid imaging: the story so far and what to expect next [A-486]

Friday, March 2
13:00–13:30, Room A

KATRINE RIKLUND
Umeå/SE

JOSEF LISSNER
HONORARY LECTURE

Human papilloma virus and head and neck cancer: the new face of malignancy [A-714]

Saturday, March 3
12:15–12:45, Room A

AGNIESZKA TROJANOWSKA
Lublin/PL
HEADLINE SESSIONS

15TH ANNIVERSARY OF INVEST IN THE YOUTH
Friday, March 2
12:15-13:00, Room A

IMAGE INTERPRETATION QUIZ
Imaging wizardry
Friday, March 2
14:00-15:30, Room A
Moderator:
E. JANE ADAM
London/UK

JUNIOR IMAGE INTERPRETATION QUIZ
Young radiologists in the landscape of artificial intelligence
Saturday, March 3
12:55-13:55, Room A
Moderator:
OLIVIO F. DONATI
Zurich/CH
INFORMATION FROM A–Z

ARTIFICIAL INTELLIGENCE & MACHINE LEARNING
Artificial intelligence, machine learning, deep learning – terms that seem to be on everybody's mind. The ECR, known for its innovative drive, has heeded the call for an extensive programme dedicated to the most recent research and achievements in these areas. International experts in the field will share their insights in a plethora of sessions delivered throughout the congress. See separate leaflet.

ARTS & CULTURE
Delegates are encouraged to visit the Arts & Culture Desk in the entrance hall for information on Vienna’s cultural events such as exclusive opera performances, delightful concerts, and the fascinating exhibitions in Vienna’s most important and remarkable museums.

BADGES
For organisational and security reasons, badges must be worn at the congress venue. Access to the different areas will only be granted upon presentation of an appropriate badge.

Lost or Forgotten Badges
In the case of loss, a replacement badge will only be provided on full payment of the applicable onsite registration fee. Forgotten badges will be replaced against a deposit of the full onsite fee.

BOOK OF ABSTRACTS
In keeping with the ESR’s commitment to environmental sustainability, and due to demand from its members, the Book of Abstracts is only available online. All abstracts can be accessed at http://i3-journal.org/for-readers/. You can also create your own personal Book of Abstracts with the help of the popular ECR Interactive Programme Planner on our platform ECR Online (ecronline.myESR.org). Abstracts of EPOS™ presentations are not published in the Book of Abstracts.

BROADCAST ZONES
The ECR features specific Broadcast Zones, where you can listen to sessions and view the corresponding presentation material in a relaxed atmosphere when the actual lecture rooms are overcrowded. Broadcast Zones are located:

- In the Austria Center Vienna next to Room B (2nd level), Rooms O and N (1st level), Rooms E1 and F2 (entrance level) and Foyer G (lower level)
- In the M Building next to Rooms M 1, M 2, M 3, M 4 and M 5

See Floor Plans on pages 33–42.

BUSINESS CENTRE
The Press Office & Business Centre, located on the entrance level, offers copy facilities for a small charge.

Opening hours:
Wednesday, February 28 to Saturday, March 3: 08:00–18:00
Sunday, March 4: 08:00–16:00

CAFÉS & RESTAURANTS
If you are looking for an ideal meeting point, or if you just want to take a short break, try one of the various foyer cafés and restaurants. They are located throughout the congress venue, on all levels of the building, and offer a variety of tasty hot and cold snacks.

Check out the most delicious dishes at ‘The Dragon’s Delight’ (Foyer A), ‘Café Grand Vienna’ (Foyer D), ‘Taberna Lisboa’ (Foyer G) and the outdoor ‘Swiss Village’, situated just to the right of the congress venue’s main entrance. And don’t miss ‘Der Berliner’, next to the ‘Swiss Village’, serving up delicious currywurst!

See page 31 for details.

Please see the ‘coffee-cup’ and ‘knife and fork’ signs on the Floor Plans on pages 33–42 of this programme to locate the various foyer cafés.

CASE-BASED DIAGNOSIS TRAINING
Please refer to the E³ – Rising Stars Programme and see page 94.

CASES OF THE DAY
From Wednesday to Saturday, five Cases of the Day covering different sections of radiology are shown on computer stations in the ECR Online & EPOS Lounge on the 1st level. Participants are invited to submit their diagnoses. The winners will be announced on the ESR website.

We would like to acknowledge the contribution of the following authors to the Cases of the Day:

Wednesday:
Case 1:  E. Ozturk; Istanbul/TR
Case 2:  C. Gutiérrez, A. Torregrosa-Andrés; Valencia/ES
Case 3:  D.M.J. Lambregts, B.J. Jansen; Amsterdam/NL
Case 4:  S.E.J. Connor; London/UK
Case 5:  K. Dolic; Split/HR
Thursday:
Case 1: E. Terrazas, M. Tijerin, I. Barber; Barcelona/ES
Case 2: E. Luyckx, A. Snoeckx, P.M. Parizel; Antwerp/BE
Case 3: S. M.L. Gargan, O. Buckley; Dublin/IE
Case 4: A. Páez-Carpio, C. Zwanzger-Medina, G. Isus-Olive, L. Oleaga-Zufiría; Barcelona/ES
Case 5: A. Ž. Snoj, M. Mušič; Ljubljana/SI

Friday:
Case 1: K. Cortis, G. Galea; Msida/MT
Case 2: R. Kohler; Sion/CH
Case 3: L. Schneider¹, P.A. Poncelet², L. Monnier-Cholley³, Y. Menu¹; Innsbruck/AT, ²Brussels/BE, ³Paris/FR
Case 4: A. Nitti, R. Girometti, A. Linda, C. Zuiani; Udine/IT
Case 5: A. Scarsbrook, K. Lau, O. Hulson; Leeds/UK

Saturday:
Case 1: R. Oberle, P. Mildenberger; Mainz/DE
Case 2: R. Picasso, F. Zaattni, C. Martinoli; Genova/IT
Case 3: I. Shrainer, K. Petrov, B. Bashankaev; Moscow/RU
Case 4: C. Brito, P. Vilela; Almada/PT
Case 5: F. Pipan¹, P. Claustr²; ¹Udine/IT, ²Vienna/AT

CHARGING STATIONS
Charge your mobile device at one of 10 charging stations located in Foyers A, B, E, F, G and K, as well as in the ECR Online and EPOS Lounge and the EuroSafe Imaging Lounge. Free of charge, kindly supported by the ESR.

CHURCHES AND RELIGIOUS COMMUNITIES IN VIENNA
Vienna is a multi-denominational, multi-cultural city. We will be pleased to provide you with information on local religious communities and places of worship at the Travel Service Desk.

CLINICAL TRIALS IN RADIOLOGY (CTiR)
For the fourth time, at ECR 2018, Clinical Trials in Radiology (CTiR) sessions are taking place. The CTiR sessions are comprised of presentations on recent trials which are very likely to have an impact on clinical practice. Session places are allocated on a first-come, first-served basis. Please refer to pages 153–155 for the programme of the sessions. See separate leaflet.

CME ACCREDITATION SYSTEM
The ESR is happy to provide you with a fully digital CME acquisition system for ECR 2018. Please note that we no longer provide printed CME stickers.

Evaluation and CME acquisition will be possible via
- The official ECR app, ECR 2018, available via the App Store (iOS) and Google play (Android)
- More than 130 laptops in the ECR Online & EPOS Lounge located on the 1st level

Please note that evaluation of the sessions is only possible February 28 – March 4, 2018.

CME credits will only be awarded if
- You are logged into http://eval.myESR.org with your
  - Username and Password or
  - Last Name and Personal ID (printed on your badge)
- You have fully completed the electronic questionnaire for each session

See pages 24–25.

CMEasy
When you arrive at the congress venue, please pick up a bluetooth ‘tag’ in the entrance hall and attach it to your badge.

With a personalised tag (personalisation is possible at the CMEasy counters in the entrance hall), we can track which sessions you attend, meaning you can claim CME credits in the easiest way possible – automatically!

Shortly after leaving a lecture room, we will send you an email notifying you about your attendance. Confirmation and granting of your CME credits will follow the next day. A link to an evaluation form will also be provided for you to evaluate the session.

For more information, visit myESR.org/cme

CME – HOW THE CREDITS ARE COUNTED
After the congress, you can go online any time to the MyUserArea and print out your ‘CME Confirmation’ sheet. This sheet lists in exact detail all the sessions you visited and evaluated during the congress as well as the number of hours attended.

For more information see pages 24–25.
COAT CHECK
The coat check services are located on the entrance level, in Foyers E and F, as well as on the lower level next to Room D. This service is free of charge, kindly supported by the ESR.

COFFEE & TALK SESSIONS
Don’t miss this new informal session format taking place in the stylish EuroSafe Imaging Lounge, Room Coffee & Talk (1st level). Stop by and contribute to the lively discussions while sipping your coffee or tea. Topics vary from radiation protection and value-based imaging to EuroSafe Imaging, imaging biobanks and management tips. Please refer to pages 149–152 for the programme of the sessions. See separate leaflet.

COMMUNICATION AREAS
If you are looking for the perfect place to meet and talk with friends or just to relax and browse through ECR Today, ECR 2018 offers areas perfectly equipped for communication and recreation; the ESR Meets Lounge right in the middle of the entrance hall, the Radiographers Lounge on the lower level, the Free Publications Area behind the café at the main entrance, the EuroSafe Imaging Lounge and the ECR Online & EPOS Lounge on the 1st level, and the Rising Stars Lounge on the entrance level near Foyer F, which welcomes all students, residents and trainees.

CONFIRMATION OF PAYMENT AND ATTENDANCE
Congress-related confirmation will be available during and after the congress from the ESR website (www.myESR.org) via the MyUserArea (login with your last name and your Personal ID as printed on your badge).

CONGRESS LANGUAGE
English

CONGRESS VENUE
Austria Center Vienna
Bruno Kreisky Platz 1
1220 Vienna, Austria
Phone: (+43 1) 533 40 64–0
To reach the ACV by public transport from the city centre (Stephansplatz) take the U1 underground line (red line, direction Leopoldau). Get off at Kaisermühlen/Vienna International Centre and take the exit marked Donau-City-Straße. Travelling time: approximately eight minutes.

ECR CITY
The number of delegates and sessions at the ECR has increased markedly in recent years. That’s why we have decided to take advantage of surrounding locations to create our very own ‘ECR City’. In addition to the well-established Austria Center Vienna and the temporary structure used for the technical exhibition, the ECR now co-opts the United Nations’ M Building for its entire duration. ECR 2018 will also see the introduction of the ‘Cube’, a space dedicated to interventional radiology and conveniently located between the underground exit and the congress venue. In addition, hosting a variety of sessions will be the spectacular Sky High Stage, which overlooks the Austria Center (and the whole of Vienna) from the top of the neighbouring Saturn Tower.

‘ECR ONLINE’
After its success in previous years, the ESR is once again providing a live streaming service for ECR 2018, ECR Online, in an effort to bring the ECR to everyone. Almost all ECR sessions are being broadcast live via the ESR website, with a social media stream integrated into the web interface to provide a fully interactive experience. ECR Online is kindly supported by Bayer.
Link: ecronline.myESR.org

ECR ONLINE & EPOS LOUNGE
The ECR Online & EPOS Lounge has 130 computer terminals where delegates can watch ECR sessions either live or on demand. In addition, Education on Demand (the ESR’s e-learning platform), EPOS™ and EuroSafe Imaging congress posters, EURORAD and the Cases of the Day can be accessed. Enjoy the Lounge’s relaxing atmosphere while you catch up with the congress sessions.

‘ECR TODAY’
ECR Today, the popular daily newspaper of the congress, is published from Wednesday to Sunday and distributed in the entrance hall of the congress venue and in the entrance area of the Technical Exhibition. In addition, all issues are available online at www.myESR.org/publications.

ECR 2018 APP
The ECR 2018 App gives iPhone, iPad and Android users a new way to experience the congress. The app is packed with features, including general congress information, scientific and educational programme details, full abstracts, and even floor plans of the Austria Center. You can download the ECR 2018 App from iTunes/Google Play.
EFOMP (European Federation of Organisations for Medical Physics) WORKSHOP

This workshop is the 20th in the series of EFOMP Workshops on new technology in diagnostic radiology. This year’s workshop is entitled ‘Dose management systems and repositories: the present and the future’. It has been organised by EFOMP in collaboration with the ESR to address the current and future technological requirements for radiology imaging equipment (please refer to page 176). This year, there will be an additional Joint Session between the ESR and EFOMP on CT screening (see page 184).

EFRS MEETS SESSION

After the enormous success at previous ECRs, which reflects the good relations between the ESR and the European Federation of Radiographer Societies (EFRS), the EFRS is again hosting a dedicated session, ‘EFRS meets Switzerland and Portugal’. It underlines the essential role of radiographers in medical imaging. Please refer to page 72 for the programme of the session.

EIBIR BOOTH

Visit the EIBIR Booth in the M Building for the most recent news on the European Institute for Biomedical Imaging Research.

EMERGENCY INFORMATION/FIRST AID

For fire, medical or police assistance, please contact ACV Information or the nearest available ECR or ACV staff member. A medical specialist trained in emergency medicine will be present for the duration of the congress. See Red Cross sign on the Floor Plan page 35 (entrance level).

EPOS™ – SCIENTIFIC EXHIBITION

The ECR 2018 electronic scientific exhibition is open Wednesday to Saturday from 08:00 to 18:00, and Sunday from 08:00 to 15:30. EPOS™ can be accessed via the 130 workstations in the ECR Online & EPOS Lounge, which is located on the 1st level. Make sure to attend the The Voice of EPOS sessions in the ECR Online & EPOS Lounge and the special Voice of EPOS Radiographers sessions in Foyer K, where the authors of the best posters will present those in moderated poster sessions. See pages 113-120.

ESR MEETS LOUNGE

Visit the ESR Meets Lounge in the entrance hall! Whether you are looking for an ideal meeting point or just want to take a short break – the ESR Meets Lounge will suit your needs. Free wireless LAN is provided for your convenience. Watch out for artistic performances from the ‘ESR meets’ countries during the lunch breaks.

ESR MEETS SESSIONS

The purpose of ‘ESR meets’ is to forge closer ties between the ESR and its guest societies. The guest nations of this year’s ECR are China, Portugal and Switzerland. There are dedicated sessions for the radiological communities of these nations to demonstrate the excellence of radiology in their countries. Places at these sessions are allocated on a first-come, first-served basis. Please refer to pages 71-72 for the programme of the sessions.

EUROPEAN BOARD OF RADIOLOGY (EBR)

The EBR has a new home at the ECR! Visit the EBR Trailer just to the right of the congress venue’s main entrance to learn all about the European Diploma in Radiology (EDiR), how to apply, and where and when the next exams will take place. In addition, receive here all information about the Accreditation Council in Imaging (ACI), required criteria, documents and latest news in the field of radiology accreditation; and about the European Training Assessment Programme (ETAP), which as ETAP 2.0 is now turning physical assessment visits into virtual assessment. www.myEBR.org

EUROPEAN DIPLOMA IN RADIOLOGY (EDiR)

An examination for the European Diploma in Radiology is being held at ECR 2018. The examination takes place on Tuesday, February 27, in the ECR Online & EPOS Lounge and in the Voice of Epos Stage 3 area on the 1st level. Success in the examination certifies a standard of radiological knowledge deemed appropriate by the ESR for independent practice in general radiology. Don’t miss the EDiR Teaser on Friday, March 2, 13:30–14:00 in Room Z (2nd level)! www.myEBR.org
Enter the captivating world of interventional radiology (IR) at ECR 2018!

For the first time ever, ECR presents ‘the Cube’, an interactive exhibition dedicated to IR.

Challenges, quizzes, training and much more will take place on daily topics, including peripherals, the aorta, oncology, and stroke.

Wednesday to Saturday
8:30 - 18:00 at the CUBE

Details at myESR.org/cube
EUROPEAN EXCELLENCE IN EDUCATION (E3)

The E3 programme emphasises the importance of lifelong learning. It covers the entire range of educational issues, from undergraduate medical education to subspecialised continuing professional development. The E3 programme is structured according to the different levels defined by the ESR European Training Curriculum for Radiology. The E3 programme consists of the following five branches, which reflect the different levels of education in radiology, as well as the different stages of an individual’s professional career: Rising Stars Programme, European Diploma Prep Sessions, The Beauty of Basic Knowledge, ECR Academies, ECR Master Classes.

The Rising Stars Programme is designed especially for residents, students, radiographers and trainee radiographers. It consists of Basic Sessions, Student Sessions, Joint Sessions with ESOR (European School of Radiology), Case-Based Diagnosis Training, EFRS Radiographers’ Basic Session, and the Radiology Trainees Forum Programme including the RTF Highlighted Lectures and the RTF Quiz.

The European Diploma Prep Sessions aim to prepare prospective candidates for the European Diploma in Radiology (EDiR). They are also suitable for residents who want an overview of the various topics relevant to imaging and for those preparing for their national board examinations. The content of the programme reflects Levels I+II European Training Curriculum for Radiology (ETC) learning objectives across a two-year cycle. The sessions are held in close cooperation with the European Board of Radiology (EBR). Each of the six sessions is led by three lecturers and moderated by one chairperson.

The Beauty of Basic Knowledge programmes focus on knowledge essential to the daily practice of radiology. The format of these sessions reflects the tradition of conventional teaching sessions, in which experienced teachers share their insights into a topic of particular relevance with a group of attendees.

A Beauty of Basic Knowledge session either consists of one 55-minute lecture (plus 5 minutes of discussion) or two 30-minute lectures. The teaching format is usually case-based, and features some interaction with the attendees. The content of the sessions is mostly tied to the Level I European Training Curriculum (ETC) learning objectives. The Beauty of Basic Knowledge sessions are suited to residents and board-certified radiologists who want to refresh their knowledge in basic topics of imaging and image-guided therapy.

The ECR Academies consist of a series of four to six sessions relevant to a particular area of radiology. This may be a classic organ-based field or a technically oriented area of another field related to radiology, such as management. Each ECR Academy spans several days, in which the different facets of the area in question are covered by experts in the field. An ECR Academy is a coherent course in which the different sessions complement one another in order to reflect the entirety of the field.

The ECR Academies are particularly suited to general radiologists or radiologists with a subspecialisation.

The ECR Master Classes focus on continuous professional development and lifelong learning. The classes are designed for subspecialised radiologists seeking cutting-edge information in their particular fields of interest. They are held by experts in the field and reflect state-of-the-art knowledge, as well as emerging trends. The ECR Master Classes are offered in cooperation with each of the following subspecialty societies: CIRSE (one on vascular and one on interventional radiology), ESCR, ESER, ESGAR, ESHNR, ESMOFIR, ESNR, ESOI, ESPR, ESSR, ESTG, ESUR, EUSOBI.

EUROPEAN SCHOOL OF RADIOLOGY (ESOR)

For the latest news on the European School of Radiology visit the ESOR Info Desk in the M Building (within the International Village). And don’t miss the ESOR Session on quality education in radiology on Thursday, March 1, 14:00–15:30 in Room M 3!
EUROSAFE IMAGING

EuroSafe Imaging is the ESR’s flagship initiative in radiation protection. It aims to promote the safe and appropriate use of medical imaging in Europe and around the world. Please view the EuroSafe Imaging Poster Exhibition in the EuroSafe Imaging Lounge on the 1st level, with submissions from all over Europe and beyond. Stop by the EuroSafe Imaging Booth in the same lounge to learn all about this important initiative, and visit the ESR iGuide Booth for a demonstration of the new clinical decision support web portal using the ESR’s imaging referral guidelines.

Don’t miss the new Coffee & Talk open forum sessions happening there (see pages 149–152 for details).

HEADLINE SESSIONS

For details on the Opening Ceremony, the anniversary session for Invest in the Youth, the Image Interpretation Quizzes and the Honorary Lectures by Marc Dewey, Katrine Riklund and Agnieszka Trojanowska see pages 8–9.

INDUSTRY WORKSHOPS

At ECR 2018 there are various Industry Workshops scheduled, organised by Bayer, Canon, Elesta, Emtensor, Flensburg University of Applied Sciences, GE HealthCare, Hologic, MammoSite, Pantavision and Philips. Please note that Industry Workshops are not CME-accredited. See separate booklet for details.

INSIGHTS INTO IMAGING

Insights into Imaging is the ESR’s online journal for education and guidelines. It is open access and PubMed indexed. Pick up free special print issues at the Jams & Journals Booth in the entrance hall!

INTERACTIVE PROGRAMME PLANNER

The ESR is again proud to present this popular interactive tool for ECR 2018. The IPP provides a convenient way to explore and customise the congress programme online, in both traditional browser and mobile device versions. Featuring various search and browse functions for sessions as well as posters, the IPP also includes a ‘basket’ option, which enables users to collate items from the programme to create their own personal calendar and even print a personalised Book of Abstracts. The IPP is integrated into the platform ECR Online.

Link: ecronline.myESR.org

INTERNATIONAL VILLAGE

More than 50 national and international radiological societies present their meetings and societies in the International Village, which is located on the entrance level of the M Building. Radiographer societies including the European Federation of Radiographer Societies (EFRS) are represented with their booths in Foyer K on the lower level.

INTERVENTIONAL RADIOLOGY AT THE CUBE

Enter the captivating world of interventional radiology (IR) at ECR 2018! For the first time ever, ECR presents ‘the Cube’, an interactive exhibition dedicated to IR. Challenges, quizzes, training and much more will take place on daily topics, including peripherals, the aorta, oncology, and stroke. See separate leaflet.
INVEST IN THE YOUTH

Over the last 15 years, the ESR has invited more than 7,000 young radiology residents, medical physics PhD students and radiographers in training to the European Congress of Radiology, investing more than €5m in its flagship youth project. ECR 2018 celebrates 15 years of Invest in the Youth; do not miss the special 15th Anniversary Invest in the Youth Session on Friday, March 2, 12:15–13:00 in Room A!

JAMS & JOURNALS

Take home a taste of Austria by purchasing a delicious jam, chutney or syrup made from local fruit and vegetables, at the new Jams & Journals Booth in the entrance hall. Pick up free issues of European Radiology, our No. 1 journal in general radiology, free special issues of Insights into Imaging and European Radiology Experimental, as well as free copies of our IDOR books from previous years on breast, paediatric and thoracic imaging and neuroradiology.

(JUNIOR) IMAGE INTERPRETATION QUIZ

The Image Interpretation Quizzes are two traditional highlights of every ECR. This year’s themes are ‘Imaging wizardry’ and ‘Young radiologists in the landscape of artificial intelligence’ (see page 183).

LIABILITY

The ESR and the Austria Center Vienna are free from all liabilities that may arise from the delegates’ and presenters’ participation in ECR 2018 and its activities.

LOST & FOUND

Lost and found articles may be picked up or handed in at the ECR Information Desk located in the entrance area.

MEDITATION & PRAYER ZONE

The Meditation & Prayer Zone is located on the lower level next to Room K. You will find it marked on the Floor Plan.

MEETING ROOMS

Meeting rooms at ECR 2018 are to be found here:

In the Austria Center Vienna

Entrance level: Meeting Room 0.96-97
2nd level: Meeting Room 2.17

In the adjoining M Building

Entrance level: Meeting Rooms M6, M7, M8, M9, M24, M25, M26, M27, M28, M29, M30, M31, M32, M34.

You will find them marked on the Floor Plans (see pages 33–42). Please contact the Info Service Desk in the main lobby of the M Building for onsite booking of meeting rooms; on Sunday please contact the Meeting Room Service Desk at the registration desks.

MEMBERSHIP

For membership application and renewal, please go to the membership desk (within the registration area) in the entrance hall.

MULTIDISCIPLINARY SESSIONS

The concept of these sessions is to promote a multidisciplinary approach to detection and treatment, integrating radiologists and other clinicians to share their expertise. The topics that are covered this year are: coronary imaging and treatment, psychoradiology, and the polytrauma patient. Please refer to pages 85–86 for the programme of the sessions.

MyT3 – MY THESIS IN 3 MINUTES

ECR 2018 features a brand new scientific session format, where residents and young radiologists present their scientific theses in just three minutes! These special sessions will take place at the spectacular new location, the Sky High Stage, overlooking the Austria Center from the top of the nearby Saturn Tower. Please refer to pages 157–171 for the programme of the sessions. See separate leaflet.

NEW HORIZONS SESSIONS

The aim of the New Horizons Sessions is to provide practitioners with an overview of the new developments in a specific area of practice e.g. specialty, technique, or disease. These developments may become routine within a few years, or may indicate a new direction for research and clinical application. There are four New Horizons Sessions at ECR 2018, entitled ‘The machines are coming: how will they change our future?’, ‘Immunotherapy: a revolution in cancer care?’, ‘Radiomics: what is it and how can we use it?’ and ‘The new horizon for radiology’. Session places are allocated on a first-come, first-served basis. Please refer to pages 73–74 for the programme of the sessions.

OPENING CEREMONY

The ECR 2018 Opening Ceremony will take place Wednesday, February 28, 17:45–19:00 in Room A (2nd level). ESR President Prof. Bernd Hamm from Berlin will officially open the congress. Don’t miss the breathtaking performance by the Symphoniacs, a group from Berlin mixing classical and modern music in their own inimitable style!
CLINICAL TRIALS IN RADIOLOGY

STRAIGHT FROM THE RESEARCH CENTRE ...

... TO THE WORLD’S MOST INNOVATIVE IMAGING MEETING

Watch and listen to the results at the SKY HIGH STAGE

Wednesday to Friday
10:30 - 12:00

Details at ipp.myESR.org
Type of session CTiR
PRESS

The ECR 2018 Opening Press Conference takes place on Wednesday, February 28, 12:15-13:30 at the Sky High Stage on top of the Saturn Tower nearby the Austria Center Vienna. For press accreditation, please contact the Press Office & Business Centre on the entrance level. To obtain a press badge, you must present an international press ID or a confirmation letter from the relevant medium. Delegates and exhibitors may display their press kits in the Press Office & Business Centre. There are also several publicly available computer terminals as well as workspace and plug points for you to work with your personal laptop.

Opening hours:
Wednesday, February 28 to Saturday, March 3: 08:00–18:00
Sunday, March 4: ........................... 08:00–16:00

PREVIEW CENTRE

Speakers are reminded to check in at the Preview Centre’s welcome desk at least three hours prior to their scheduled presentation, even if they have already uploaded their presentation prior to the conference. Six speaker welcome desks will be at the speakers’ disposal.

Onsite presentation upload procedure:
» Check in at the Preview Centre Welcome Desks
» Proceed to a preview station to upload, check and edit your presentation

The Preview Centre is located on the 1st level, next to the ECR Online & EPOS Lounge.

Opening hours:
Tuesday, February 27: ........................... 12:00–18:00
Wednesday, February 28 to Saturday, March 3: 07:30–18:00
Sunday, March 4: ........................... 07:30–16:00

Presentations should be saved on a USB memory stick (CD/DVD-ROM are not accepted) and brought to the Preview Centre.

All presentations will be transferred to the session room and made available at the time of your presentation. The uploaded material remains the property of the speakers.

PROFESSIONAL CHALLENGES SESSIONS

These sessions are intended to communicate and exchange issues on radiological training and education, research networking, radiological management and professional developments. This year’s topics are ‘Mass casualties’, ‘How can radiologists expand their role in ‘peripheral’ vascular intervention?’, ‘Closing the gap between education and clinical practice for radiographers’, and ‘Artificial intelligence and big data in medical imaging’. Places are allocated on a first-come, first-served basis. Please refer to pages 83–84 for the sessions’ programme.

PUBLIC TRANSPORT

Tickets for public transportation are available online at shop.wienerlinien.at or at any underground station.

Underground map: see page 32.

RADIOGRAPHERS

The ECR is recognised as the official annual scientific meeting for medical imaging for radiographers by both the European Federation of Radiographer Societies (EFRS) and the European Society of Radiology (ESR).

Radiographer sessions taking place in Room K will be simultaneously translated into French, German, Italian and Spanish. Participants making use of the simultaneous translation are asked to return their receivers and headsets when leaving Room K.

Visit the Radiographers Lounge on the lower level (next to Room K) to meet and network with your colleagues, and the Voice of EPOS Stage 4 in the Lounge, where radiographer colleagues present their posters in person. For the first time, at ECR 2018, the three best radiographer paper abstracts, the three best radiographer poster abstracts and the best radiography student abstract will be awarded by the ESR and the EFRS. The Radiographer Awards Ceremony will take place Thursday, March 1, 13:30–13:50 in the Radiographers Lounge.

RADIOLOGY TRAINEES FORUM (RTF)

The RTF promotes and coordinates the efforts of radiology trainees at a European level in order to improve the progress of radiology and related sciences. One of the RTF’s most important goals is to provide an equal level of radiological knowledge and skills for radiology trainees all over Europe.

Highlighted Lectures organised by the RTF will be given on Saturday, March 3, 10:30–12:00 in Room O on the 1st level (see page 94).

The RTF General Assembly (RTF delegates meeting) takes place on Friday, March 2, 13:30–14:30, in Meeting Room 0.96/0.97 (entrance level). For more detailed information please visit the RTF Meeting Point in the Rising Stars Lounge on the entrance level, near Foyer F.

Don’t miss the Meet & Greet Session with ESR President Bernd Hamm (Friday, March 2, 16:00–16:30) in the Rising Stars Lounge.

And join us at the RTF Quiz with Quizmasters José Cáceres and José Vilar on Thursday, March 1, 12:30–13:30 in Room B (2nd level).
INFORMATION FROM A–Z

RECORDING / PHOTOGRAPHY
Video or audio recording of presentations is not allowed without the speaker’s/exhibitor’s and ECR’s prior permission. Flash photography is not permitted during presentations. Interviews must take place outside the lecture room. For queries, please contact the ESR Press Office.

REFRESHER COURSES
74 Refresher Courses have been organised by the various scientific subcommittees for ECR 2018. Based on the topic of the session, some refresher courses are presented in an ‘integrated’ format with an organised panel discussion, similar to Special Focus Sessions.
Places are allocated on a first-come, first-served basis.
Please refer to pages 121–147 for the programme of the sessions.

REGISTRATION OPENING HOURS
Tuesday, February 27: 12:00–18:00
Wednesday, February 28: 07:00–18:00
Thursday, March 1: 07:30–18:00
Friday, March 2: 07:30–18:00
Saturday, March 3: 07:30–18:00
Sunday, March 4: 07:30–16:00

RESTAURANT RESERVATIONS
Our staff at the Dining & Shopping Desk in the entrance hall will be pleased to recommend places to eat close to your hotel or near a certain theatre, and will be happy to reserve a table for you.

RISING STARS LOUNGE / RESIDENTS & STUDENTS LOUNGE
The Rising Stars Lounge for residents and students is located on the entrance level near Foyer F. In the lounge you will find information on the European School of Radiology, the European Diploma of Radiology and the Radiology Trainees Forum.
Don’t miss the Meet & Greet Session with ESR President Bernd Hamm (Friday, March 2, 16:00–16:30).

RISING STARS PROGRAMME
The E³ – Rising Stars Programme is part of the E³ – European Excellence in Education programme. See pages 89–94.

SATELLITE SYMPOSIA
Industrial Satellite Symposia are presented by international companies. Please note that Satellite Symposia are not CME-accredited. Places are allocated on a first-come, first-served basis.
See separate booklet for details.

SCIENTIFIC PRESENTATION AWARDS
The authors of the best scientific papers and scientific/educational exhibits will be presented with a certificate and given free ECR 2019 registration.

Scientific Papers: The award will be assigned to the best paper presentation of each topic based on the evaluation by session moderators and subcommittee members. Selection criteria comprise quality of presentation, scientific content and overall impression of the performance.
The award winners will be informed after the congress and will be published on the ESR website.

Scientific/educational exhibits: The EPOS reviewer team and the scientific subcommittee members evaluate all submitted posters. Authors of the best-rated posters will receive diplomas, which will be awarded on Friday, March 2, 15:00–15:30 in the ECR Online & EPOS Lounge.

SCIENTIFIC SESSIONS
Accepted papers for oral presentation are presented in the 132 Scientific Sessions.
Several sessions feature keynote lectures with a concise educational introduction related to the topic.
Places are allocated on a first-come, first-served basis.
Please refer to pages 121–147 for the programme of the sessions.

SECURITY / SAFETY
The safety of all congress attendees is of utmost importance to the European Society of Radiology. The Austria Center Vienna and the ESR have taken security precautions to ensure the maximum possible safety for all ECR participants.
Please inform our staff, especially our room attendants, immediately if security problems occur.
The ESR reserves the right to check your identification upon admission to the congress centre and/or inside the building. You may be asked at any time to present adequate proof of identity by showing your passport, driver’s licence, national or military identification, or student ID, all with photograph and signature.

SKY HIGH STAGE
The Sky High Stage is one of the ECR’s spectacular new locations, just a few steps behind the congress venue, overlooking the Austria Center from the top of the nearby Saturn Tower.
The Clinical Trials in Radiology sessions, the My Thesis in 3 Minutes sessions and the ECR 2018 Opening Press Conference all will happen there.
Don’t miss the breathtaking view over Vienna from 100m above!
SMOKING
Smoking is not permitted inside the Austria Center Vienna. The ECR is a non-smoking congress. Outside the building, we kindly ask you to use the ashtrays provided. Please note that smoking is prohibited in front of the main entrance.

SOCIAL MEDIA
Keep up with goings on at ECR 2018 by following the ESR on Twitter and Instagram (both @myESR), as well as Facebook (facebook.com/myESR). The official congress hashtag is #ECR2018.

SPECIAL ASSISTANCE
Delegates with special needs may park on the lower level with direct elevator access to the Austria Center. All lecture rooms are accessible by wheelchair.

SPECIAL FOCUS SESSIONS
Special Focus Sessions deal with a topic at the cutting edge of development and clinical application. The topics of these sessions are presented so as to promote debate and to give an in-depth analysis. The chairperson introduces each aspect of the topic and the panelists then discuss their different perspectives and opinions. The audience is also given the opportunity to discuss their ideas with the lecturers. Places are allocated on a first-come, first-served basis. Please refer to pages 77–82 for the programme of the sessions.

STATE OF THE ART SYMPOSIA
These sessions are intended to inform the audience about the ‘real state of the art’ of a given subject. Each of the lecturers is an expert on the topic as a whole or on some specific aspect of the topic, which will be the subject of the respective session. The presentations are followed by a discussion conducted by the panellists, led by the chairperson. Places are allocated on a first-come, first-served basis. Please refer to pages 75–76 for the programme of the sessions.

STUDENTS’ SESSIONS
At ECR 2018, students have again the chance to present their own abstracts in front of a huge audience. The submitters of the best 32 abstracts have been invited to Vienna to present their work in dedicated sessions. See pages 92–93.

TAXI
There is a taxi stand outside the main entrance.

TECHNICAL EXHIBITION
Opening hours:
EXPO Halls and EXPO Foyer D
Thursday, March 1 to Saturday, March 3: 10:00-17:00
Sunday, March 4: 10:00-14:00

EXPO Gallery (First Level)
Wednesday, February 28: 14:00-17:00
Thursday, March 1 to Saturday, March 3: 10:00-17:00
Sunday, March 4: 10:00-15:30
Detailed information on the Technical Exhibition can be found in the ‘Industry Programme & On-Show Guide’.

TRANSATLANTIC COURSE
ECR 2018 features again the joint course of the ESR and RSNA (Radiological Society of North America), which now features as ‘Transatlantic Course’ and which will this year focus on sports imaging.
The sessions will be interactive with electronic voting/self assessment.
Places for all courses are allocated on a first-come, first-served basis. Please refer to pages 109–110 for the course’s programme.

TRAVEL SERVICE
The ESR and ECR are proud to offer their delegates services that should facilitate their travel arrangements and make their stay in Vienna as pleasant as possible. The ESR’s Travel Service Desk is located in the entrance hall of the Austria Center Vienna.

Opening hours:
Tuesday, February 27: 12:00-18:00
Wednesday, February 28 to Saturday, March 3: 08:00-17:30
Sunday, March 4: 08:00-12:00

VOICE OF EPOS SESSIONS
Authors of the best posters will present their work in person. Sessions are grouped by topic or language/region, and take place on three different stages in and around the ECR Online & EPOS Lounge on the 1st level, from Wednesday to Sunday. ECR 2018 will feature an additional fourth stage dedicated to radiographers in the Radiographers Lounge in Foyer K on the lower level, from Wednesday to Friday.
Please refer to pages 113–120 for the programme of the sessions.

WIFI
Free wireless LAN access is available throughout the congress venue and all lecture rooms. The name of the public WiFi is ‘ECR2018’.
Please be considerate of your colleagues and do not use the WiFi excessively.
GENERAL INFORMATION

Europe
Each ECR delegate has access to confirmation of all activities attended (CME Confirmation and Record of Attendance). For Europe, the event has been accredited by the UEMS-EACCME and it is possible to claim up to 33 CME credits. Please note that this number may differ from the maximum number of credits your national jurisdiction approves for your continuous medical education. For more information, see CME CONFIRMATION below.

The Österreichische Ärztekammer (Austrian Medical Chamber) has granted a maximum of 40 DFP (Diplom-Fortbildungs-Programm der Österreichischen Akademie der Ärzte) credits for ECR 2018.

USA and Canada
Based on the agreements on the mutual recognition of credits between the AMA (American Medical Association), RCPSC (Royal College of Physicians and Surgeons of Canada) and the UEMS-EACCME, American and Canadian physicians attending ECR 2018 will have their credits converted to AMA PRA Category 1 credits in the USA and MOC Section 1 credits in Canada.

Worldwide
CME points claimed at the ECR are accepted by the majority of national CME authorities worldwide where CME is mandatory for physicians. Please consult your national jurisdiction for the maximum number of CME points it will approve following your attendance at ECR 2018.

CME ACQUISITION PROCEDURE

The ESR is happy to provide you with a fully digital CME acquisition system for ECR 2018. Please note that we no longer provide printed CME stickers.

Evaluation and CME acquisition will be possible via:

» The official ECR app, ECR 2018, available via the App Store (iOS) and Google play (Android)
» More than 130 laptops in the ECR Online & EPOS Lounge located on the 1st level

Please note that evaluation of the sessions you attend is only possible between February 28 and March 4, 2018. After this end date, evaluation will not be possible and no CME credits can be obtained. So please make sure to submit your evaluations of the sessions during the congress!

CME credits will only be awarded if:

» You are logged into http://eval.myESR.org with your
  - Username and Password or
  - Last Name and Personal ID (printed on your badge)
» You have fully completed the electronic questionnaire for each session

The combined participation and evaluation questionnaire is of great value to the organising committee when selecting topics for future ECRs. Please note that different types of sessions may have different evaluation forms.
CMEasy

When you arrive at the congress venue, please pick up a bluetooth ‘tag’ in the entrance hall and attach it to your badge.

With a personalised tag (personalisation is possible at the CMEasy counters in the entrance hall), we can track which sessions you attend, meaning you can claim CME credits in the easiest way possible – automatically!

Shortly after leaving a lecture room, we will send you an email notifying you about your attendance. Confirmation and granting of your CME credits will follow the next day. A link to an evaluation form will also be provided for you to evaluate the session.

For more information, visit myESR.org/cme

GUIDANCE

Confirmation of participation in the scientific programme may be obtained as follows:

Scientific Sessions
1. Attend the session.
2. Log in to http://eval.myESR.org or use the ECR 2018 app to evaluate the session.
3. Fill out this form completely during or after the session (but by March 4 at the latest!).

If you do not have a smartphone, tablet or laptop with you, please visit the ECR Online & EPOS Lounge located on the 1st level and evaluate the session(s) you visited on one of the CME & Evaluation terminals there.

Scientific Exhibition
1. Enter EPOS™ (Electronic Presentation Online System) on one of the 130 laptops in the ECR Online & EPOS Lounge and view posters.
2. Log in to http://eval.myESR.org or use the ECR 2018 app to evaluate the session.
3. Fill out this form completely after visiting the electronic scientific exhibition (but by March 4 at the latest).

A maximum of 3 hours of attendance at the scientific exhibition will be listed if the participant has completed and submitted the electronic evaluation form.

CME CONFIRMATION

Each ECR delegate has access to confirmation of all activities attended (via the documents ‘CME Confirmation’ and ‘Record of Attendance’) on the condition that the above procedures have been carried out. After the congress, delegates can go online any time to the MyUserArea and print out their ‘CME Confirmation’ document. This document lists in exact detail all the sessions visited and evaluated during the congress as well as the number of hours in attendance. The number of hours is identical to the number of CME credits awarded. If you tally the listed hours yourself and there is a discrepancy to the ‘Total hours earned’ position, this may have several reasons.

The UEMS-EACCME has accredited the ECR congress with a maximum of 33 CME credits. According to its regulations, a maximum of 8 CME credits may be awarded per day. So if you attend 10 hours of sessions on a given day they will all be listed on your ‘CME Confirmation’ document though only 8 credits will be calculated into your total. The maximum for the entire congress is 33 CME credits, so the ‘Total hours earned’ position on your ‘CME Confirmation’ document will never show more, even if the sum of all hours attended may be greater.

Please note that there are 0 CME points for industry workshops and satellite symposia, though they are also listed in the ‘CME Confirmation’ document. Although participants may partially attend multiple concurrent sessions, the total number of hours printed at the end of the list limits the credit to the equivalent of a single session during that time slot.

This service will be available from March 5 onwards via the MyUserArea on the ESR website.

Please note that your personal Username and Password are required for login. In case you do not remember them, please use your Last Name and Personal ID as printed on your badge to retrieve your login credentials.

The printout of your record should be submitted to your national jurisdiction (usually responsible for accreditation) for approval of your CME credits. Please note that the record of attendance will be issued only to the participant. It will not be supplied to any accreditation agency or other organisation.

For further information, please contact ESR’s CME support at cme@myESR.org.
ECR 2018 CELEBRATES 15 YEARS OF «INVEST IN THE YOUTH»

To invest in youth is to invest in the future

Over the last 15 years, the ESR has invited more than 7,000 young residents in radiology and radiographers in training to the European Congress of Radiology, investing more than €5,000,000 in its flagship youth project.
15TH ANNIVERSARY
INVEST IN THE YOUTH SESSION

Friday, March 2, 12:15–13:00, Room A

Chairperson's introduction [A-474]
M. Szczerbo-Trojanowska; Lublin/PL

An introduction by the ESR President [A-475]
B. Hamm; Berlin/DE

Former participants (A) in the programme [A-476]
C. Messina; San Donato Milanese/IT

Former participants (B) in the programme [A-477]
M. Basta Nikolic; Novi Sad/RS

Molecular imaging in oncology [A-478]
G. Cook; London/UK

New era in ischaemic stroke treatment [A-479]
K.A. Hausegger; Klagenfurt/AT
Visit our spectacular new location SKY HIGH STAGE and join 240 daring colleagues presenting their scientific theses in just three minutes!

TOPICS:

- Oncologic imaging
- Genitourinary
- Chest
- Cardiovascular
- Neuro
- Interventional radiology

Musculoskeletal
- Head and neck
- Abdominal and gastrointestinal
- Breast
- Radiographers
- Paediatrics

Details at ipp.myESR.org
Type of session MyT3
In 2015, the ECR became the largest congress in Europe to receive the Austrian Ecolabel *(Umweltzeichen)*, signifying its recognition as a green meeting.

This achievement followed the implementation of numerous measures designed to reduce the congress’ environmental impact, and it reflected a deepened commitment on the part of the ESR to making the congress sustainable. Receiving the accolade was not, however, the end of the path. Ensuring that the ECR is a green event is a constantly evolving task, and the recognition of the *Umweltzeichen* bestows a duty upon the ESR to lead by example and find new ways to improve the congress’ ecological credentials.

Minimising the CO2 emissions is of central concern when running a green congress. Large congresses are by their nature power hungry events, and choosing a venue that prioritises green energy is essential to limiting a congress’ carbon footprint. The Austria Center Vienna, a recognised ‘Green Conference Centre’, has been the home of the ECR since 1991. Having already prioritised the use of green energy for several years in order to lessen the carbon dependence of events held there, the venue recently installed a 120 square metre solar array, which supplies thermal energy used to heat water in its kitchens and toilets. Reducing electricity consumption is also a goal of the venue, which has implemented LED lighting throughout its premises to reduce electricity needs.

Given the large number of exhibitors present at the ECR, limiting the raw waste produced by the congress is a collaborative effort. Exhibitors are asked to use only reusable stands and decorations at their booths and to avoid gifting non-recyclable give-aways to attendees. Exhibitors are also encouraged to avoid distributing aluminium cans or plastic bottles due to the potential for chemical leaks should these items fail to be recycled.

The ESR continues to search for and implement new measures to enhance the green credentials of our meeting. One way the ESR is looking to improve is by improving the sustainability activities central to the planning of the ECR. This as well as partnering with more environmentally conscious organisations will lead to even greener ECRs in the future.
European Board of Radiology

An institution dedicated to the harmonisation of radiological standards.

Check the updated EBR website to find out more about our projects.

myebr.org
Feeling peckish at ECR 2018? Curious to sample some tasty treats from around the world? Or are you just looking for a friendly place to meet? Whatever your need, we have you covered, with a variety of options for the foodies, the famished and the fraternisers!

Get some fresh air and that alpine feeling with a trip through the ECR’s Swiss Village, located outside, next to the Austria Center’s main entrance. The village’s four market-style huts feature a variety of sumptuous Swiss offerings, best enjoyed at the communal long table. Sure to be a social hub of ECR, the Swiss Village is the place to meet, greet and make merry.

For a sit-down meal inside the Austria Center, two fine restaurants are at your service. If the sound of richly spiced Portuguese cuisine makes your mouth water, set sail like Vasco da Gama for Taberna Lisboa in Foyer G. If a Chinese feast is more what you fancy, The Dragon’s Delight in Foyer A will fulfil your fantasy.

Perhaps a quick pick me up is what the radiologist ordered, or maybe Viennese café culture is rubbing off on you. Either way, our wide range of cafés, located throughout the ACV and the M Building, will put a smile on your lips and a skip in your step. However, if its local specialties you’re after, go no further than Café Grand Vienna in Foyer D. With a variety of local coffees, like the Wiener Melange, and plenty of Austrian sweets, Café Grand Vienna will simply leave you wanting more.

And, not to be dissed or missed, Der Berliner is serving up irresistibly delicious currywurst for the duration of the congress. Heed the President’s call and tuck into this modern classic, to be found next to the Swiss Village. Bon appétit!

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**Eats at the ECR**

- **Swiss Village** <br>Outdoors, situated just to the right of the congress venue’s main entrance
- **Taberna Lisboa**<br>Lower Level, Foyer G
- **The Dragon’s Delight**<br>2nd Level, Foyer A
- **Café Grand Vienna**<br>Lower Level, Foyer D
- **Café Motto**<br>Entrance Level, to the left of the main entrance (on your way in)
- **EuroSafe Imaging Café**<br>First Level, EuroSafe Imaging Lounge
- **Café in the International Village**<br>M Building, Entrance Level
- **Der Berliner**<br>Outdoors, to the right of the congress venue’s main entrance
FLOOR PLANS
3 - THIRD LEVEL ACV
All purple Rooms on this level - with the exception of Room M1 - are Meeting Rooms.
1 - FIRST LEVEL M BUILDING

Room M4

Room M2

Room M3

BROADCAST ZONE
ESR DIGNITARIES

RICHARD L. EHMAN
Rochester, MN/US
HONORARY MEMBER

In recognition of his outstanding contributions as educator and researcher, and his pioneering work in developing new imaging technologies, Professor Richard L. Ehman from Rochester, United States, will receive ESR Honorary Membership at ECR 2018.

Richard L. Ehman is professor of radiology and the Blanche R. & Richard J. Erlanger Professor of Medical Research at the Mayo Clinic in Rochester, Minnesota. He is also an Emeritus member of the Mayo Clinic Board of Trustees.

Prof. Ehman received his bachelor’s degree in physics and his medical degree from the University of Saskatchewan, and completed his residency in diagnostic radiology at the University of Calgary in Canada. He then pursued a research fellowship at the University of California, San Francisco, and a clinical fellowship at the Mayo Clinic, before joining the faculty there in 1985.

Prof. Ehman is known for his contributions in clinical practice, education, research and leadership. His research programme focused on developing new imaging technologies, such as magnetic resonance elastography, which was pioneered in his laboratory. He is an inventor, holding more than 60 U.S. and foreign patents. Many of these inventions have been commercialised and are widely used in medical care.

He has served as chair of the Radiology and Nuclear Medicine Study Section of the National Institutes of Health (NIH), as a member of the Advisory Council of the National Institute of Biomedical Imaging and Bioengineering of the NIH, and as a member of the Council of Councils of the NIH.

Prof. Ehman was awarded the Gold Medal of the International Society for Magnetic Resonance in Medicine in 1995 for his research contributions and the Outstanding Researcher Award of the Radiological Society of North America (RSNA) in 2006. He was elected to the National Academy of Medicine (formerly the Institute of Medicine) of the National Academies of Science in 2010 and named Mayo Clinic Distinguished Investigator in 2014. He was awarded the Gold Medal of the Asian Oceanian Society of Radiology in 2016 and was inducted into the National Academy of Inventors in 2017.

Prof. Ehman has served as president of many professional organisations, including the International Society for Magnetic Resonance in Medicine (2002–03), the Academy of Radiology Research (2012–14), and the Society for Body Computed Tomography and Magnetic Resonance (2013–14). He served as President of the RSNA in 2017.

At ECR 2018, Professor Richard L. Ehman will be presented with Honorary Membership of the European Society of Radiology.

ZHENG YU JIN
Beijing, China
HONORARY MEMBER

In recognition of his outstanding accomplishments as educator, and for his unique role in advancing radiological techniques in China, Professor Zheng Yu Jin from Beijing, China, will be awarded ESR Honorary Membership at ECR 2018.

Zheng Yu Jin is director, professor and doctoral tutor of the Beijing Union Medical College Hospital and principal of the Ministry of state-level key disciplines. He is also director of the Beijing Union Medical College Medical Imaging Department and chairman of the Chinese Society of Radiology.

Prof. Jin has been engaged in diagnostic imaging and interventional radiology for more than 30 years. From 1990, he has carried out new radiological techniques, such as bronchial artery interventional therapy in haemoptysis, coronary artery and intracranial arterial thrombolysis and dual-source CT coronary angiography, to explore the relevant technical standards, which were recognised by domestic and foreign guidelines. Since 2000, he has taken a global lead in the design and development of magnetic resonance whole-body diffusion-weighted imaging for the assessment of malignant tumours and MR guided focused ultrasound therapy, and conduction of multi-centre study in China.

Prof. Jin has conducted many national key research projects and won the second prize of National Science and Technology Progress, first prize of Scientific and Technological Progress by the Ministry of Health, first prize in Science and Technology, second prize of Huaxia Medical Science and Technology, and many more. He has published over 120 articles and 8 professional books.

Prof. Jin has been leading medical school education, adult education, continuing education and other different levels of teaching over the years. He introduced foreign advanced group discussions and the interactive feedback system. He has received the National Top Quality Courses and Textbook for Higher Education in Beijing awards and the Excellent Teaching Team of Beijing award, among others.

Under his leadership, the Beijing Union Medical College Hospital has been elected best department in China’s best specialist reputation ranking list, contributing to the development of domestic imaging diagnosis and interventional medicine, and leading the field of radiology in China.

Prof. Jin has given several invited keynote speeches on radiology in China and Asia throughout the world, bringing Chinese radiology onto the international stage.

Prof. Jin has received the honorary title of Outstanding Teacher of Central Health, Outstanding Young and Middle-aged Specialist, Chinese Physician Award and Beijing Excellent Teacher.

At ECR 2018, Professor Zheng Yu Jin will be presented with Honorary Membership of the European Society of Radiology.
SEUNG HYUP KIM
Seoul, Korea
HONORARY MEMBER

In recognition of his achievements in genitourinary imaging and intervention, and in particular of his untiring efforts in furthering international relations, Professor Seung Hyup Kim from Seoul, Korea, will be presented with ESR Honorary Membership at ECR 2018.

Seung Hyup Kim is professor of radiology and urology at the Seoul National University (SNU) College of Medicine, Korea. Prof. Kim received his medical degree and master’s degree, in diagnostic radiology, from SNU in 1979 and 1982 respectively. He then completed his internship and residency in radiology at Seoul National University Hospital (SNUH) and obtained his board certification in 1983. In 1988 he completed his PhD on diagnostic radiology at SNU.

After his military service, he became a radiology instructor at SNU and spent a year as a visiting radiologist at the Hospital of Pennsylvania University in the United States. In 1998 he was promoted to professor of radiology at SNU, and five years later, professor of radiology and urology. Prof. Kim served as associate dean from 2002 to 2004, chair of the department of radiology from 2008 to 2010 and vice-president of SNUH from 2010 to 2013.

His main subspecialty is genitourinary imaging and intervention, and he has 377 publications including 224 SCI-indexed papers, 11 monographs and 12 book chapters. His main works are Radiology Illustrated: Uroradiology and Radiology Illustrated: Gynaecologic Imaging.

Prof. Kim was the secretary general of the 11th congress of the World Federation for Ultrasound in Medicine and Biology (WFUMB), which was held in Seoul in 2006. He was one of the key members in upgrading the Korean Society of Ultrasound in Medicine (KSUM), by giving its annual meeting an international dimension using the ‘KSUM Open’ slogan and adopting English as one of the congress languages.

He has been serving the Asian Federation of Societies for Ultrasound in Medicine and Biology (AFSUMB) in various roles since 2001, including council member, treasurer, secretary and president.

He has been involved with the WFUMB for many years as councilor, vice-president, and member of various committees. Currently he is president-elect of the federation.

At ECR 2018, Professor Seung Hyup Kim will be awarded Honorary Membership of the European Society of Radiology.

LORENZO BONOMO
Rome, Italy
GOLD MEDALLIST

In recognition of his excellent contributions to the specialty of thoracic imaging, and of his prominent role in unifying European radiology and in founding the European Society of Radiology, Professor Lorenzo Bonomo from Rome, Italy, will be awarded the ESR Gold Medal at ECR 2018.

Lorenzo Bonomo is professor of radiology at the Catholic University of Rome.

In 1970 he received his medical degree from the Catholic University in Rome, where, in 1975, he also completed his residency in radiology and obtained his board certification. A year later, he started working at the University of Chieti, where he was subsequently appointed professor of radiology and chairman of the radiology department, two positions he held until 2003.

That year, Prof. Bonomo moved back to the Catholic University of Rome, where he served as chairman of the radiology department and director of the radiology training programme until he retired in 2016.

His main field of interest is in thoracic radiology and he has published over 400 scientific papers on the topic. He served as president of the European Society of Thoracic Imaging (ESTI) from 2000 to 2001.

From 2002 to 2004, as the president of the Italian Society of Radiology (Società Italiana di Radiologia Medica e Interventistica – SIRM), he supported international cooperation and actively contributed to the founding of the European Society of Radiology (ESR).

An active member of the ESR for many years, Prof. Bonomo served as president of the European Congress of Radiology (ECR) in 2012 and as president of the society for the term 2014–2015.

He has received widespread recognition for his work and has been awarded honorary membership by the Italian, Argentinian, Bulgarian, French, German, Greek, Romanian, Serbian and Spanish radiological societies, as well as the Radiological Society of North America (RSNA) and European SocieTy of Radiotherapy and Oncology (ESTRO).

He has also received honorary membership of ESTI and the Gold Medal of the European Society of Emergency Radiology (ESER).

At ECR 2018, Professor Lorenzo Bonomo will be awarded the Gold Medal of the European Society of Radiology.
**ESR Dignitaries**

**FILIPE CASEIRO ALVES**
Coimbra, Portugal

**GOLD MEDALLIST**

In recognition of his major scientific achievements, especially in the field of gastrointestinal and abdominal radiology, and his continual contributions to the development of the ECR’s scientific programme, Professor Filipe Caseiro Alves from Coimbra, Portugal, will be presented with the ESR Gold Medal at ECR 2018.

Filipe Caseiro Alves is head of the Imaging Department at Coimbra University Hospital and full professor of radiology at the Faculty of Medicine, University of Coimbra, Portugal.

He is also chairman of the commission for curricular undergraduate reform and coordinator of the medical undergraduate course at Coimbra University.

Prof. Caseiro Alves received his medical degree from the University of Coimbra in 1982 and his radiology board certification in 1990. A year later, he obtained his European certificate of clinical sonography and in 1998 completed his PhD in internal medicine and radiology.

He has been involved with the European Society of Radiology for many years, especially for the organisation of its annual meeting, the European Congress of Radiology (ECR). He was successively chairman of the subspecialty committee for gastrointestinal radiology in 2005, member of the Congress Committee and chairman for scientific papers in 2013 and chairman of the postgraduate educational programme within the ECR 2014 Programme Planning Committee.

Prof. Caseiro Alves has also served in many leadership roles within the European Society of Gastrointestinal and Abdominal Radiology (ESGAR), notably as president in 2012–2013, president of the ESGAR annual meeting and postgraduate course in 2007, and member of the ESGAR Executive Committee between 2004 and 2013. In 2016 he was awarded the society’s Gold Medal in recognition of his contribution to the development of the society and gastro-abdominal radiology in Europe.

At the national level, he currently serves as president of the Portuguese Society of Radiology and Nuclear Medicine (Sociedade Portuguesa de Radiologia e Medicina Nuclear – SPRMN) and is a full member of the Portuguese National Academy of Medicine.

At ECR 2018, Professor Filipe Caseiro Alves will be presented with the **Gold Medal** of the European Society of Radiology.

**NICOLAS GRENIER**
Bordeaux, France

**GOLD MEDALLIST**

In recognition of his outstanding achievements in science and research, in particular in magnetic resonance imaging and urogenital radiology, and his untiring efforts in furthering and developing new methods in these fields, Professor Nicolas Grenier from Bordeaux, France, will be awarded the ESR Gold Medal at ECR 2018.

Nicolas Grenier is professor of radiology and head of urogenital and vascular radiology at Pellegrin University Hospital in Bordeaux, where he also coordinates the radiology and nuclear medicine departments.

Prof. Grenier graduated in medicine and completed his residency in radiology at Bordeaux University. He subsequently did fellowships in paediatric radiology at Montreal University and magnetic resonance imaging (MRI) at the University of Pennsylvania in Philadelphia, U.S.

His main fields of interest are MRI and ultrasound in urogenital and vascular applications, and particularly functional and molecular aspects of renal parenchymal diseases. He has developed methods to carry out renal functional MRI and intrarenal cellular targeting with iron oxide nanoparticles for inflammatory mapping and for tracking labelled mesenchymal stem cells. He has also evaluated the role of ultrasound elastography in diffuse renal diseases for the diagnosis of fibrosis.

Prof. Grenier is also active in the field of urologic oncology with the development of multiparametric MRI of renal tumours, and participates in the development of a new bifunctional instrument to diagnose prostate cancer combining ultrasound and optical imaging for future innovative theragnostic approaches.

He has authored more than 160 articles in peer-reviewed journals and 40 book chapters.

Prof. Grenier is a co-founder and past-president of the French Society of Urogenital Imaging. He has served as president of the European Society of Urogenital Radiology (ESUR) from 2000 to 2002 and as president of the European Society of Molecular and Functional Imaging in Radiology (ESMOFIR) from 2011 to 2014.

Furthermore he has served as board member and president of the French Academic College of Radiology (Collège des Enseignants en Radiologie de France – CERF) for many years and helped to improve the structuration of clinical research in radiology and education for residents and medical students.

At ECR 2018, Professor Nicolas Grenier will be presented with the **Gold Medal** of the European Society of Radiology.
ESR Dignitaries

**MARC DEWEY**
Berlin, Germany

**HONORARY LECTURER**

In recognition of his achievements in cardiovascular imaging and his dedication in coordinating and furthering clinical trials, Professor Marc Dewey from Berlin, Germany, has been invited to deliver the Wilhelm Conrad Röntgen Honorary Lecture at ECR 2018.

Marc Dewey is Heisenberg Professor of Radiology of the German Research Foundation and Vice Chair of the Department of Radiology at Charité – Universitätsmedizin Berlin.

His main research interest is in cardiovascular imaging and he is currently coordinating the Pan-European DISCHARGE randomised trial comparing invasive and non-invasive coronary angiography.

He is also editor of the comprehensive textbook *Cardiac CT*, and section editor cardiac of *European Radiology* and consultant to the editor of *Radiology*. His team has published 190 articles with an overall impact factor of more than 1,300 and his h-index is 40.

Originally from Berlin, Prof. Dewey was president of the Berlin Röntgen Society for the term 2011–2013, a time he used to initiate the Gustav Bucky Award, to honour a German radiologist who pioneered x-ray techniques and was forced to leave Germany in 1933.

Prof. Dewey received the two highest scientific awards of the German Röntgen Society; the Röntgen Award in 2009 and the Curie Ring in 2012. In 2011, he served as secretary of the German Röntgen congress.

He has taken on several roles within the European Society of Radiology (ESR), notably as a member of the Programme Planning Committee of the European Congress of Radiology (ECR), the Accreditation Council in Imaging of the European Board of Radiology (EBR) and the ESR Education on Demand e-learning editorial board. He also is coordinator of the ‘Clinical Trials in Radiology’ sessions at ECR since 2015. In 2019, he will serve the society as chairperson of the scientific papers subcommittee of ECR.

At ECR 2018, Professor Marc Dewey will present the Wilhelm Conrad Röntgen Honorary Lecture, titled ‘Value-based radiology: the future is now!’

**KATRINE RIKLUND**
Umeå, Sweden

**HONORARY LECTURER**

In recognition of her major contributions to radiology and nuclear medicine, especially in the field of hybrid imaging, Professor Katrine Riklund from Umeå, Sweden, will present the Marie Curie Honorary Lecture at ECR 2018.

Katrine Riklund is full professor, consultant in diagnostic radiology and pro-vice-chancellor of Umeå University. Prior to her current positions, she headed both the Clinical Department of Radiology and Nuclear Medicine at Umeå University Hospital and served as deputy dean of the medical faculty between 2008 and 2011.

She graduated at Umeå University in 1988, and licensed in radiology and nuclear medicine in 1994 and 1997, respectively. She defended her PhD thesis about radioimmunoscintigraphy and radioimmunotherapy in 1992.

Prof. Riklund started her work in translational research between immunology and nuclear medicine by developing and evaluating monoclonal antibodies in the diagnosis and treatment of gynaecological cancers. She soon became interested in hybrid imaging, particularly to carry out research in cognition, neurodegeneration and movement disorders. She also works in prostate and colorectal cancer imaging research.

To pursue all her interests, Prof. Riklund has been using SPECT/CT, PET/CT and PET/MR extensively, with a special focus on dopamine in pre- and postsynaptic neuronal activity imaging.

She has served in many leadership roles for the European Society of Radiology (ESR) since 2009. She was chair of the Finance Committee, member of the Education Committee and the European Training Assessment Programme (ETAP), and sat on the ESR Board. She was the first chairperson of the ESR Board of Directors and Executive Council, and is immediate past-president of the society. She is also the founding president of the European Society for Hybrid Medical Imaging.

Prof. Riklund has made many contributions to the society’s annual meeting, the European Congress of Radiology (ECR), notably by serving as its president in 2016 and as a member of the Congress Committee before that.

At home, she is past president of the Swedish Society of Radiology and the Swedish Society of Nuclear Medicine. She is also chairperson of the Centre for Medical Image Science and Visualisation at Linköping University, and the Centre for Functional Brain Imaging and Wallenberg Centre for Molecular Medicine at Umeå University, Sweden.

At ECR 2018, Professor Katrine Riklund will present the Marie Curie Honorary Lecture, titled ‘Hybrid imaging: the story so far and what to expect next’.
AGNIESZKA TROJANOWSKA
Lublin, Poland

HONORARY LECTURER

In recognition of her achievements in head and neck imaging and her work in education and research, Professor Agnieszka Trojanowska from Lublin, Poland, will deliver the Josef Lissner Honorary Lecture at ECR 2018.

Agnieszka Trojanowska is assistant professor in the Department of Radiology and Nuclear Medicine at Lublin University Hospital in Poland.

She received her medical degree from Lublin University Medical School in 1997 and became a board certified radiologist in 2005. Seven years later she completed her subspecialisation in head and neck radiology.

Prof. Trojanowska is president of the European Society of Head and Neck Radiology for the term 2017–2020, and former president of the Polish Society of Head and Neck Imaging, a position she held between 2010 and 2016. She is also the immediate past Chairperson of the Head and Neck Subcommittee of the European Society of Radiology (ESR). In 2008 she founded the Polish School of Head and Neck Imaging.

She is also active in the International Society of Magnetic Resonance in Medicine and Biology, as a member of the Executive Committee, and sits on the Erasmus Courses board of ISMRMB.

Prof. Trojanowska has held lectures for the European School of Radiology (ESOR) ASKLEPIOS subspecialty courses and the European Society of Magnetic Resonance in Medicine and Biology (ESMRMB).

An active researcher, she has authored 68 publications, one book and 19 book chapters. She acts as a reviewer for major radiological journals, including European Radiology and the European Journal of Radiology. She has also been a member of the head and neck section of European Radiology.

At ECR 2018, Professor Agnieszka Trojanowska will present the Josef Lissner Honorary Lecture on a topic she knows particularly well: ‘Human papilloma virus and head and neck cancer: the new face of malignancy’.
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B. Verbst; Leiden/NL

SECTION COORDINATORS
EPOS Editor .................................................................................. I.G. Lupescu; Bucharest/RO

EUROPEAN EXCELLENCE IN EDUCATION (E³)

E³ – European Diploma Prep Sessions..................................................... B. Ertl-Wagner; Munich/DE
E³ – The Beauty of Basic Knowledge ..................................................... C. Loewe; Vienna/AT
Cardiovascular and Interventional Radiology......................................... A Survival Guide
to Musculoskeletal Imaging .................................................................. Y. Cassar-Pullicino; Oswestry/UK
E³ – ECR Academies............................................................................. M.-P. Revel; Paris/FR
Chest Imaging ...................................................................................... State-of-the-Art and Advanced MR Imaging
of the Musculoskeletal System ................................................................. M. Dewey; Berlin/DE
Update on Hepatobiliary Imaging .......................................................... A. Frishi; Ankara/TR
Tips and Tricks in Pancreatic and GI Tract Imaging ................................ Y. Menu; Paris/FR
Interactive Teaching Sessions for Young (and not so Young) Radiologists...... E. Castañer; Sabadell/ES

CASES OF THE DAY................................................................................. M. Sánchez; Barcelona/ES

IMAGE INTERPRETATION QUIZ .......................................................... E.J. Adam; London/UK

JUNIOR IMAGE INTERPRETATION QUIZ .............................................. O.F. Donati; Zurich/CH

EVALUATION ...................................................................................... M.H. Fuchsjäger; Graz/AT

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## SCIENTIFIC SUBCOMMITTEES

### ABDOMINAL AND GASTROINTESTINAL

The ESR would like to thank **ESGAR** for their cooperation on this subcommittee.

**Chairpersons:**
- A. Ba-Salamah; Vienna/AT
- L. Curvo-Semedo; Coimbra/PT

**Abdominal Viscera**

**Members:**
- E. Biscald; Genoa/IT
- G. Böhm; Linz/AT
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**GI Tract**

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- A. Plumb; London/UK
- M. Radzina; Riga/LV
- M. Zappa; Paris/FR

**BREAST**

The ESR would like to thank **EUSOBI** for their cooperation on this subcommittee.

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### CARDIAC

The ESR would like to thank the **ESCR** for their cooperation on this subcommittee.

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- J. Glowacki; Zabrze/PL
- S. Harden; Southampton/UK
- M. Hrabak Paar; Zagreb/HR
- A. Kalifatidis; Thessaloniki/GR
- C. Loewe; Vienna/AT
- R. Salgado; Antwerp/BE
- G. Sommer; Basle/CH
- B.K. Velthuis; Utrecht/NL

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The ESR would like to thank **ESTI** for their cooperation on this subcommittee.

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- E. Öztürk; Istanbul/TR
- N.J. Screaton; Cambridge/UK
- H.-O. Shin; Hannover/DE
- M. Silva; Parma/IT
- A. Snoekx; Edegem/BE
- S. Vdniolj Donlagic; Maribor/SI

### IMAGING INFORMATICS

The ESR would like to thank **EuSoMII** for their cooperation on this subcommittee.

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- F. Kainberger; Vienna/AT
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- N. Pyatigorskaya; Paris/FR
MOLECULAR IMAGING
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The ESR would like to thank CIRSE for their cooperation on this subcommittee

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The ESR would like to thank ESNR for their cooperation on this subcommittee

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........................................ E. Papadaki; Iraklio/GR
........................................ M. Severino; Genoa/IT
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*The ESR would like to thank CIIRSE for their cooperation on this subcommittee*

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*The ESR would like to thank EFOMP for their cooperation on this subcommittee*

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*The ESR would like to thank ESOI for their cooperation on this subcommittee*

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*The ESR would like to thank EFRS for their cooperation on this subcommittee*

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*The ESR would like to thank ESER for their cooperation on this subcommittee*
ECR 2018 TOPIC COORDINATORS

E3 – EUROPEAN EXCELLENCE IN EDUCATION

E3 – Rising Stars Programme
- M. Szczero-Trojanowska; Lublin/PL
- Basic Sessions
  - M. Szczero-Trojanowska; Lublin/PL
- Joint Sessions of the ESR and ESOR (European School of Radiology)
  - N. Gourtsoyanni; Athens/GR
  - M. Szczero-Trojanowska; Lublin/PL
- EFPS (European Federation of Radiographer Societies)
  - Radiographers’ Basic Sessions
    - S.J. Foley; Dublin/IE
  - Case-Based Diagnosis Training
    - K.M. Friedrich; Vienna/AT
    - S. Robinson; Vienna/AT

E3 – European Diploma Prep Sessions
- B. Ertl-Wagner; Munich/DE

E3 – The Beauty of Basic Knowledge
Cardiovascular and Interventional Radiology
- C. Loewe; Vienna/AT
A Survival Guide to Musculoskeletal Imaging
- V. Cassar-Pullicino; Oswestry/UK

E3 – ECR Academies
- Chest Imaging
  - M.-P. Revel; Paris/FR
- State-of-the-Art and Advanced MR Imaging of the Musculoskeletal System
  - M. Dewey; Berlin/DE
- Update on Hepatobiliary Imaging
  - D. Akata; Ankara/TR
- Tips and Tricks in Pancreatic and GI Tract Imaging
  - Y. Menu; Paris/FR
- Interactive Teaching Sessions for Young (and not so Young) Radiologists
  - E. Castañer; Sabadell/ES

E3 – Master Classes
Abdominal and Gastrointestinal (ESGAR)
- A. Ba-Salamah; Vienna/AT
  - L. Curvo-Semedo; Coimbra/PT
Breast (EUSOBi)
- F.J. Gilbert; Cambridge/UK
Cardiac (ESCR)
- A. Jacquier; Marseille/FR
Chest (ESTI)
- M. Rémy-Jardin; Lille/FR
Molecular Imaging (ESMOFIR)
- L.S. Fournier; Paris/FR
Genitourinary (ESUR)
- G.M. Villeirs; Ghent/BE
Head and Neck (ESHNR)
- M. Lell; Erlangen/DE
Interventional Radiology (CIRSE)
- T. Rand; Vienna/AT
Musculoskeletal (ESSR)
- C. Martinoli; Genoa/IT
Neuro (ESNR)
- M.P. Wattjes; Hannover/DE
Paediatric (ESPR)
- L.-S. Ording Müller; Oslo/NO
Vascular (CIRSE)
- P. Vilares Morgado; Porto/PT
Oncologic Imaging (ESOI)
- C.J. Zech; Basle/CH
Emergency Imaging (ESER)
- S. Wirth; Munich/DE

TRANSATLANTIC COURSE OF ESR AND RSNA (Radiological Society of North America):
SPORTS IMAGING
- L.W. Bancroft; Orlando, FL/US
- A.J. Grainger; Leeds/UK

PROS AND CONS SESSIONS
Do we need dynamic contrast enhancement (DCE) in prostate mpMRI?
- H.-P. Schlemmer; Heidelberg/DE
Gadolinium: image wisely.
- P.M. Parizel; Antwerp/BE

CLINICAL TRIALS IN RADIOLOGY
- M. Dewey; Berlin/DE

MY THESIS IN 3 MINUTES
- M. Dewey; Berlin/DE
- M. Zins; Paris/FR

HANDS-ON WORKSHOPS
MRI of the Prostate
- P. Asbach; Berlin/DE
- B. Hamm; Berlin/DE
Ultrasound Elastography
- S. Franchi-Abella; Le Kremlin-Bicêtre/FR
WATCH MORE THAN 2,500 LECTURES
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PROGRAMME OVERVIEWS
WEDNESDAY, FEBRUARY 28

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<tr>
<td>08:30-09:00</td>
<td>E1 121 E1 - ECR Academies: Interactive Teaching Session for Young (and not so Young) Radiologists Emergency radiology</td>
<td>RC 101 GI Tract GI bleeding: how to solve the problem?</td>
<td>RC 104 Chest When and how to use perfusion imaging in pulmonary vascular and airway disease?</td>
<td>RC 112 Paediatric musculoskeletal imaging</td>
<td>RC 108 Head and Neck Differential diagnoses you don’t want to miss</td>
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<td>E1 221 E1 - ECR Academies: Interactive Teaching Session for Young (and not so Young) Radiologists Musculoskeletal radiology: inflammation</td>
<td>SS 201a Abdominal Viscera Multiparametric liver imaging</td>
<td>SS 201b Abdominal Viscera Innovations in pancreatic imaging</td>
<td>SS 215 Vascular The large vessels of the chest</td>
<td>SS 209 Interventional Radiology Gastrointestinal interventions</td>
<td>SS 204 Chest COPD and infiltrative lung diseases</td>
<td>SS 207 Genitourinary Urinary tract tumours</td>
<td>SY 1a Joint Satellite Symposium*</td>
<td>SS 208 Head and Neck Advanced MRI techniques in head and neck imaging</td>
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<td>E1 24A E1 - The Beauty of Basic Knowledge: Cardiovascular and Interventional Radiology</td>
<td>SS 301a Abdominal Viscera Detection and staging of HCC</td>
<td>SS 301b Abdominal Viscera Modern imaging techniques of the liver</td>
<td>SS 315 Vascular Carotid and plaque imaging</td>
<td>SS 309 Interventional Radiology Aortic and arterial interventions</td>
<td>SS 304 Chest Quantitative CT: a new diagnostic and functional tool</td>
<td>SS 307 Genitourinary Prostate cancer diagnosis</td>
<td>SY 1b Satellite Symposium 12:15-13:45</td>
<td>SS 308 Head and Neck Temporal bone, temporomandibular joint and maxillofacial imaging</td>
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<td>RC 401 Abdominal Viscera Imaging of the complicated postoperative abdomen</td>
<td>RC 404 Chest CT - patterns in chest radiology: back to basics and beyond</td>
<td>WF/EFSUMB Joint Session of the ESR Working Group on Ultrasound with EFSUMB Elastography of superficial structures: where are we now?</td>
<td>RC 412 Paediatric Vascular and interventional radiology in children</td>
<td>RC 408 Head and Neck Pathways for tumour spread</td>
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17:45-19:00 Room A: Opening of ECR 2018

Registration: Tuesday, February 27: 12:00–18:00 / Wednesday, February 28: 07:00–18:00
### TODAY’S HIGHLIGHTS

**Wednesday, February 28**

#### Room A
17:45-19:00
**OPENING OF ECR 2018**
ESR President Bernd Hamm officially opens ECR 2018

#### Room E1
08:30-10:00
**SF 1**
Hepatocellular carcinoma: diagnosis, staging and current guidelines

#### Sky High Stage
CT 2
10:30-12:00
**Clinical Trials in Radiology**

#### Coffee & Talk
C 1
12:00-13:00
**EuroSafe Imaging meets Japan Safe Radiology**

#### Sky High Stage
C 2
14:00-15:00
**The best recipes for failing as a department chair**

#### Room E2
14:00-15:30
**MY 3**
My Thesis in 3 Minutes Oncologic Imaging

#### Room G
16:00-17:30
**SF 4**
Gadolinium deposition: is it harmful?

#### Room F2
16:00-17:30
**PC 4**
Mass casualties

#### Room L8
16:00-17:30
**MS 4**
The heart team: coronary imaging and treatment

#### Room X
16:00-17:30
**Joint Session of the ESR and EFSUMB (European Federation of Societies for Ultrasound in Medicine and Biology)**
Exploring the microscopic from macroscopic: the strengths of multiparametric MRI

#### Room M1
16:00-17:30
**EU 1**
EuroSafe Imaging Session

#### Sky High Stage
MY 4
16:00-17:30
**My Thesis in 3 Minutes Genitourinary**

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### THURSDAY, MARCH 1

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**Registration:** 07:30-18:00

ECR Online & EPOS Lounge / EPOS™ – Scientific Exhibition: 08:00-18:00

www.myESR.org
<table>
<thead>
<tr>
<th>Coffee &amp; Talk 1st Level (ACV)</th>
<th>E1 Entrance Level (ACV)</th>
<th>E2 Entrance Level (ACV)</th>
<th>F1 Entrance Level (ACV)</th>
<th>D Entrance Level (ACV)</th>
<th>G Entrance Level (ACV)</th>
<th>K Entrance Level (ACV)</th>
<th>Sky High Stage (Tower)</th>
<th>ECR Online &amp; EPOS Lounge Voice of EPOS 1st Level (ACV)</th>
<th>Foyer K Voice of EPOS Radiologists Lower Level (ACV)</th>
<th>Room/Time</th>
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<tbody>
<tr>
<td>PS 527 Pros &amp; Cons Session 3</td>
<td>SA 5b State of the Art Symposium (MS)</td>
<td>BS 5 E* Rising Stars Programme: Basic Session Musculoskeletal and soft tissues</td>
<td>RC 516 Oncologic Imaging Functional imaging in oncology beyond morphological: where are we now?</td>
<td>RC 514 Radiographers Successful paediatric imaging</td>
<td>MY 5 My Thesis in 3 Minutes Chest</td>
<td>PS 527 Pros &amp; Cons Session 3</td>
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</table>

**Programme Overview**

**THURSDAY, MARCH 1**

**Coffee & Talk**

1. **1st Level (ACV)**
   - **E1 Entrance Level (ACV)**
   - **E2 Entrance Level (ACV)**
   - **F1 Entrance Level (ACV)**
   - **D Entrance Level (ACV)**
   - **G Entrance Level (ACV)**
   - **K Entrance Level (ACV)**
   - **Sky High Stage (Tower)**
   - **ECR Online & EPOS Lounge Voice of EPOS 1st Level (ACV)**
   - **Foyer K Voice of EPOS Radiologists Lower Level (ACV)**
   - **Room/Time**

**M 1 Entrance Level (M Building)**

**M 2 Entrance Level (M Building)**

**M 3 Entrance Level (M Building)**

**M 4 Entrance Level (M Building)**

**M 5 Entrance Level (M Building)**

**Tech Exh: EXPO Gallery (First Level): 10:00–17:00**

**Tech Exh: EXPO Halls and EXPO Foyer D: 10:00–17:00**

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*Not CME accredited*
**TODAY’S HIGHLIGHTS**

**Thursday, March 1**

- **Room A** HL 1 WILHELM CONRAD RÖNTGEN HONORARY LECTURE
  12:15–12:45 Value-based radiology: the future is now! Marc Dewey; Berlin/DE

- **Room B** NH 5 The machines are coming: how will they change our future?
  08:30–10:00

- **Studio 2018** SA 5a Whole-body MRI: ready for prime time?
  08:30–10:00

- **Room E2** SA 5b Current guidelines and diagnostic criteria in multiple sclerosis (MS)
  08:30–10:00

- **Room D** SF 5 Cystic pancreatic lesions: how to differentiate, how to manage?
  08:30–10:00

- **Room E1** PS 527 Do we need dynamic contrast enhancement (DCE) in prostate mpMRI?
  08:30–10:00

- **Room L 8** Joint Session of the ESR and UEMS: a united European voice
  08:30–10:00

- **Sky High Stage** CT 6 Clinical Trials in Radiology
  10:30–12:00

- **Room B** RTF Quiz
  12:30–13:30

- **Room M 3** ESOR Session (European School of Radiology)
  Trends in quality education in radiology
  14:00–15:30

- **Room B** SF 8d Artificial intelligence and radiology: a perfect match?
  16:00–17:30

- **Room O** SF 8a CT examination of pregnant patients: a dilemma for the radiologist and the mother
  16:00–17:30

- **Room G** SF 8c The ten-minute abdominal MRI: make the dream come true!
  16:00–17:30

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**FRIDAY, MARCH 2**

- **Room/Time** A 2nd Level (ACV) B 2nd Level (ACV) C 2nd Level (ACV) X 2nd Level (ACV) Z 2nd Level (ACV) O 1st Level (ACV) N 1st Level (ACV) Studio 2018 1st Level (ACV) L 8 1st Level (ACV)
  08:30-09:00 E’ 921 Abdominal Viscera: Advances in hepatobiliary CT and MRI
  09:00-09:30 EM 1 ESR meets Switzerland: Radiology and Swiss chocolate: a sweet combination
  09:30-10:00 HL 2 Headline Session
  10:00-10:30 SY 14 Satellite Symposium* SY 13 Satellite Symposium* SY 12 Satellite Symposium*
  10:30-11:00 SS 1001a Abdominal Viscera: Advances in hepatobiliary CT and MRI
  11:00-11:30 SS 1001b GI Tract: Rectal cancer: old problems, new tools
  11:30-12:00 SY 24C E’ 24C: The Beauty of Extracranial Vascular and Interventional Radiology: How to think outside the box?
  12:00-12:30 HL 2 Headline Session
  12:30-13:00 SS 1009 Interventional Radiology: Vascular interventions: intra and extracranial
  13:00-13:30 SY 21 Satellite Symposium* SY 28 Satellite Symposium* SY 25 Satellite Symposium*
  13:30-14:00 IIQ Image Interpretation Quiz Imaging: wizardry
  14:00-14:30 SY 21 Satellite Symposium* SY 25 Satellite Symposium* SY 28 Satellite Symposium*
  14:30-15:00 SY 21 Satellite Symposium* SY 25 Satellite Symposium* SY 28 Satellite Symposium*
  15:00-15:30 SY 21 Satellite Symposium* SY 25 Satellite Symposium* SY 28 Satellite Symposium*
  15:30-16:00 SY 21 Satellite Symposium* SY 25 Satellite Symposium* SY 28 Satellite Symposium*
  16:00-16:30 SY 21 Satellite Symposium* SY 25 Satellite Symposium* SY 28 Satellite Symposium*
  16:30-17:00 SY 21 Satellite Symposium* SY 25 Satellite Symposium* SY 28 Satellite Symposium*
  17:00-17:30 SY 21 Satellite Symposium* SY 25 Satellite Symposium* SY 28 Satellite Symposium*

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**Registration:** 07:30–18:00

**ECR Online & EPOS Lounge / EPOS™ – Scientific Exhibition:** 08:00–18:00

www.myESR.org
## Programme Overviews

### FRIDAY, MARCH 2

<table>
<thead>
<tr>
<th>E1</th>
<th>Entrance Level (ACV)</th>
<th>E2</th>
<th>Entrance Level (ACV)</th>
<th>F1</th>
<th>Entrance Level (ACV)</th>
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<th>Lower Level (ACV)</th>
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<th>Lower Level (ACV)</th>
<th>Sky High Stage (Tower)</th>
<th>ECR Online &amp; EPOS Lounge Voice of EPOS Radiography (Lower Level (ACV))</th>
<th>Foyer K</th>
<th>Room/Time</th>
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<tbody>
<tr>
<td>RC 902 Breast</td>
<td>Minimal-invasive local treatment of breast cancer: the future is now</td>
<td>RC 911 Neuro</td>
<td>Carotid vascular disease</td>
<td>BS 6 E - Rising Stars</td>
<td>Programme: Basic Session</td>
<td>Image-guided interventional oncology</td>
<td>RC 910 Musculoskeletal</td>
<td>Imaging: hip and spine</td>
<td>EF 1 EFOMP Workshop: Radiation therapy planning and the future: dose management systems and repositories: part A</td>
<td>SF 9b Special Focus Session</td>
<td>Radiographers in preclinical imaging research</td>
<td>MY 79 My IFS in 3 Minutes Interventional Radiology</td>
<td>08:30-09:00</td>
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<td>SS 1002 Breast</td>
<td>MRI</td>
<td>SS 1011a Neuro</td>
<td>Stroke: prediction of outcome</td>
<td>SS 1016b Emergency</td>
<td>Imaging: improvements in trauma and intervention</td>
<td>SS 1014 Musculoskeletal</td>
<td>Imaging: shoulder imaging and intervention</td>
<td>SS 1010 Emergency</td>
<td>Imaging: non-traumatic emergencies</td>
<td>EF 1 EFOMP Workshop: Radiation therapy planning and the future: dose management systems and repositories: part B</td>
<td>CT 10 Clinical Trials in Radiology 3</td>
<td>10:00-10:30</td>
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<td>C 6 Coffee &amp; Talk (open forum)</td>
<td>ESR assisted pilot project</td>
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<td>C 7 Coffee &amp; Talk (open forum)</td>
<td>What is an imaging biobank and how can one be built?</td>
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<tr>
<td>RC 1202 Breast</td>
<td>MRI for early detection, staging and management of breast cancer</td>
<td>RC 1211 Neuro</td>
<td>Inflammatory and infectious CNS pathology</td>
<td>ESR/ESOR 3 E - Rising Stars</td>
<td>Programme: Joint Session with ESR Radiologic anatomy</td>
<td>Neuro</td>
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<td>RC 1216 Oncologic Imaging</td>
<td>Cancer screening</td>
<td>RC 1210 Musculoskeletal Imaging</td>
<td>Shoulder MRI: mastering technique and making my report relevant</td>
<td>NH 12 Horizons Session</td>
<td>Radiologists: what is it and how can we use it?</td>
<td>SF 12a Special Focus Session</td>
<td>Radiographers: challenging informing patients about radiological risk</td>
<td>12:00-12:30</td>
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<td>C 14 Coffee &amp; Talk (open forum)</td>
<td>Young radiologists in Europe</td>
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**Technical Exhibition:** EXPO Gallery (First Level): 10:00-17:00

*Not CME accredited*

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**Technical Exhibition:** EXPO Halls and EXPO Foyer D: 10:00-17:00

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Final Programme | ECR 2018  
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<table>
<thead>
<tr>
<th>Coffee &amp; Talk 1st Level (ACV)</th>
<th>E1</th>
<th>E2</th>
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<th>Sky High Stage</th>
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<td>10:30-11:00</td>
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| Room/Time | 12:00-12:30 | 12:30-13:00 | 13:00-13:30 | 13:30-14:00 | 14:00-14:30 | 14:30-15:00 | 15:00-15:30 | 15:30-16:00 | 16:00-16:30 | 16:30-17:00 | 17:00-17:30 |

* Not CME accredited

Technical Exhibition: EXPO Gallery (First Level): 10:00-17:00

Technical Exhibition: EXPO Halls and EXPO Foyer D: 10:00-17:00
TODAY’S HIGHLIGHTS

Saturday, March 3

Room B  EM 2  ESR meets Portugal  10:30-12:00
Discovering Portuguese radiology: past, present, future

Room A  HL 3  JOSEF LISSNER HONORARY LECTURE  12:15-12:45
Human papilloma virus and head and neck cancer: the new face of malignancy
Agnieszka Trojanowska; Lublin/PL

Room A  JIIQ  12:55-13:55
JUNIOR IMAGE INTERPRETATION QUIZ
Young radiologists in the landscape of artificial intelligence

Room A  SF 13a  Chest imaging of cystic fibrosis: from infants to adults
08:30-10:00

Room D  SF 13b  Paediatric MRI: can we make gadolinium superfluous?
08:30-10:00

Room B  PC 15  10:30-12:00
Artificial intelligence and big data in medical imaging

Room M 3  SF 13c  Drug elution or drug illusion in vascular disease
08:30-10:00

Room M 5  TC  09:30-12:00
Transatlantic Course of the ESR and the RSNA
Upper extremity sports injuries
Lower extremity sports injuries
Musculoskeletal interventional procedures
Postoperative imaging of sports injuries

Room M 1  NH 14  12:30-13:45
The new horizon for radiology

Room B  PC 15  14:00-15:30
Artificial intelligence and big data in medical imaging

Room O  SF 15a  Hybrid imaging in oncology
14:00-15:30

Room E1  SF 15b  14:00-15:30
Contrast-enhanced spectral mammography

Studio 2018  SF 16  16:00-17:30
Placental imaging: how, when and why?

Room E2  MS 16  16:00-17:30
Psychodiagnosis: a blend of molecular, functional and structural imaging with a taste of psychology

SUNDAY, MARCH 4

Registration: 07:30-16:00
ECR Online & EPOS Lounge / EPOS™ – Scientific Exhibition: 08:00-15:30
### SUNDAY, MARCH 4

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<th>F1 Entrance Level (ACV)</th>
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<td>VoE 28 / Stage 1</td>
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<td>The high-risk patient enigma</td>
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<td>VoE 28 / Stage 2</td>
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<td>RC 1711 Neuro</td>
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<td>Diffuse low-grade gliomas: new</td>
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<td>VoE 25 / Stage 2</td>
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<td>things you should know</td>
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<td>RC 1716 Oncologic Imaging</td>
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<td>VoE 10 / Stage 2</td>
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<td>to prostate cancer: can we</td>
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<td>VoE 10 / Stage 1</td>
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<td>make a difference?</td>
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<td>VoE 30 / Stage 1</td>
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<tr>
<td>SS 1802a Breast</td>
<td>SS 1811a Neuro</td>
<td>E1 1823 E - Europe-</td>
<td>SS 1802b Breast</td>
<td>SS 1810 Musculoskel-</td>
<td>SS 1813 Physics in</td>
<td>SS 1814 Radiogra-</td>
<td>MY 17 My Thesis in 3 Minutes Radiographs</td>
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<td>Image-guided biopsy/treatment</td>
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<td>Contrast-enhanced</td>
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<td>Medical Imaging</td>
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<td>mammmography and phase-</td>
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<td>Development</td>
<td>Quality imaging in</td>
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### Technical Exhibition: EXPO Gallery (First Level): 10:00–15:30

### Technical Exhibition: EXPO Halls and EXPO Foyer D: 10:00–14:00
## TODAY’S HIGHLIGHTS

### Sunday, March 4

<table>
<thead>
<tr>
<th>Room</th>
<th>EM 3</th>
<th>ESR meets China</th>
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<tbody>
<tr>
<td>B</td>
<td>10:30–12:00</td>
<td>A glance of China through images</td>
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<table>
<thead>
<tr>
<th>Room</th>
<th>SA 17</th>
<th>Intervventional treatment of stroke: a game changer</th>
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<tbody>
<tr>
<td>N</td>
<td>SF 17a</td>
<td>New treatments for musculoskeletal tumours</td>
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<thead>
<tr>
<th>Room</th>
<th>SF 17b</th>
<th>Abdominal emergencies: friends and enemies</th>
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<tr>
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<th>MS 17</th>
<th>The polytrauma patient</th>
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<tr>
<th>Room</th>
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<th>Room</th>
<th>Joint Session of the ESR and ESTRO (European Society for Radiotherapy and Oncology)</th>
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<thead>
<tr>
<th>Room</th>
<th>E3 1726a</th>
<th>The high-risk patient enigma</th>
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<td>M 5</td>
<td>08:30–10:00</td>
<td>Emergencies following tumour therapy</td>
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<tr>
<th>Coffee &amp; Talk</th>
<th>C 10</th>
<th>EuroSafe Imaging Stars</th>
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<td>11:00–12:00</td>
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<th>The Beauty of Basic Knowledge: Cardiovascular and Interventional Radiology</th>
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<td>12:30–13:30</td>
<td>The heart of the matter: imaging the myocardium</td>
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Please note that sessions are marked with a logo to indicate their classification according to the European Training Curriculum.

**LEVEL I**  First three years of training

**LEVEL II**  Fourth and fifth years of training (general radiologist standard)

**LEVEL III**  Subspecialty training standard

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Don’t miss this new informal session format taking place in the stylish Coffee & Talk Room (EuroSafe Imaging Lounge, 1st level).

Stop by and contribute to the lively discussions while sipping your coffee or tea.

TOPICS:
- Radiation protection
- Value-based imaging
- EuroSafe Imaging
- Imaging biobanks
- Management tips
- Clinical decision support
- Undergraduate radiology teaching
- Audit

Details at ipp.myESR.org
Type of session C
Once again, the ESR will welcome a number of guest countries to the ECR as part of the ‘ESR meets’ programme.

The national radiological societies of China, Portugal and Switzerland will present their most recent scientific developments in joint sessions with the ESR, and try to strengthen links between professionals from different countries and disciplines. The European Federation of Radiographer Societies (EFRS) will also host its own ‘meets’ session for radiographers, in conjunction with representatives of the Swiss Association of Radiographers (SVMTRA) and the Portuguese Association of Radiographers (ATARP).

Both the ESR and the EFRS warmly welcome these societies and hope to see ECR delegates attend the sessions in large numbers.
**ESR/EFRS MEETS SESSIONS**

### Friday, March 2, 10:30–12:00, Room B

#### ESR meets Switzerland

**EM 1** Radiology and Swiss chocolate: a sweet combination

**Presiding:** B. Hamm; Berlin/DE
D. Weishaupt; Zurich/CH

**Introduction:** What Swiss radiology and Swiss chocolate have in common  
[D-450]
D. Weishaupt; Zurich/CH

**Truffle No. 1: MR-diffusion of the urogenital tract: where it really helps**  
[H.C. Thoeny; Berne/CH]

**Interlude 1: From cocoa bean to chocolate creations**  
[A-451]
A. Trümpler; Ennenda/CH

**Truffle No. 2: hip preservation surgery: a fast evolving field also for imaging**  
[C.W.A Pfirrmann; Zurich/CH]

**Interlude 2: From cocoa bean to chocolate creations**  
[A-453]
A. Trümpler; Ennenda/CH

**Truffle No. 3: multiparametric imaging in head and neck oncology**  
[M. Becker; Geneva/CH]

**Panel discussion: The way of maintaining and improving quality of Swiss radiology**

### Friday, March 2, 14:00–15:30, Room K

#### EFRS meets Switzerland and Portugal

**EM 4** Discovering Portuguese radiology: past, present, future

**Presiding:** F. Caseiro Alves; Coimbra/PT
B. Hamm; Berlin/DE

**Introduction:** SPRMN President address  
[Z.Y. Jin; Beijing/CN]

**Introduction: Across Switzerland**  
[Z.Y. Jin; Beijing/CN]

**Introduction: Across Portugal**  
[Z.Y. Jin; Beijing/CN]

**Radiographers in Switzerland: challenges and chances**  
[Y. Jaermann; Vevey/CH]

**The Portuguese NHS: the structural pillar that strengthens Portuguese democracy**  
[G. Paula; Coimbra/PT]

**(Helv)ethic: from a project to a new culture**  
[F. Riondel; Geneva/CH]

**MRI, the image modality for the future: hybrid, diagnostic and therapeutic**  
[V. Silva; Porto/PT]

**Panel discussion**

### Saturday, March 3, 10:30–12:00, Room B

#### ESR meets Portugal

**EM 2** Discovering Portuguese radiology: past, present, future

**Presiding:** F. Caseiro Alves; Coimbra/PT
B. Hamm; Berlin/DE

**Introduction:** SPRMN President address  
[F. Caseiro Alves; Coimbra/PT]

**Imaging biomarkers for diffuse liver disease**  
[M.M. França; Porto/PT]

**Prostate artery embolisation (PAE) for benign prostate obstruction (BPO): the paradigm shift**  
[T. Bilhim; Lisbon/PT]

**Cardiac CT from anatomy to functional information: comprehensive CAD evaluation**  
[H. Marques; Lisbon/PT]

**The soul of Portugal: Facts and sounds of the Portuguese guitar**  
[F. Caseiro Alves; Coimbra/PT]

### Sunday, March 4, 10:30–12:00, Room B

#### ESR meets China

**EM 3** A glance of China through images

**Presiding:** B. Hamm; Berlin/DE
Z.Y. Jin; Beijing/CN

**Introduction**  
[Z.Y. Jin; Beijing/CN]

**Multiparameteric analysis in imaging liver disease**  
[F.-H. Yan; Shanghai/CN]

**Multimodality imaging for insulinoma detection**  
[H.-D Xue; Beijing/CN]

**Interventional therapy for hepatocellular carcinoma: Chinese experiences**  
[X.-G. Li; Beijing/CN]

**Multimodality imaging for insulinoma detection**  
[F.-H. Yan; Shanghai/CN]

**Panel discussion**
The New Horizons Sessions aim to provide practitioners with an overview of the new developments in a specific area of practice, whether it is a subspecialty, a particular technique, or certain diseases.

These developments may become routine within a few years, or may indicate a new direction for research and clinical application.

Each session is 90 minutes long and features an introduction from a chairman, followed by three or four brief presentations on different aspects of the main subject, and concluded by a panel discussion that will hopefully answer some critical questions.

Places are allocated on a first-come, first-served basis.
## NEW HORIZONS SESSIONS

### March 1
**Thursday, March 1, 08:30–10:00, Room B**

**NH 5  The machines are coming: how will they change our future?**

- **Chairperson’s introduction**  
  [A-170]  
  H.-U. Kauczor; Heidelberg/DE
- **Deep learning: current performance**  
  [A-171]  
  B. van Ginneken; Nijmegen/NL
- **Artificial intelligence applications in radiology**  
  [A-172]  
  J.B. Seo; Seoul/KR
- **Big data for deep learning**  
  [A-173]  
  C.L. Schlett; Heidelberg/DE
- **Panel discussion: Machines in radiology: do we still need the radiologist?**

### March 2
**Friday, March 2, 08:30–10:00, Room C**

**NH 9  Immunotherapy: a revolution in cancer care?**

- **Chairperson’s introduction**  
  [A-385]  
  V.J. Goh; London/UK
- **CT: looks bigger, but it’s better**  
  [A-386]  
  C. Dromain; Lausanne/CH
- **The MR armoury in follow-up**  
  [A-387]  
  D.-M. Koh; Sutton/UK
- **Systemic and immunologic effects of image-guided interventions in oncology**  
  [A-388]  
  S.N. Goldberg; Jerusalem/IL
- **Panel discussion: How should radiology improve imaging to support this revolutionary care?**

### March 2
**Friday, March 2, 16:00–17:30, Room G**

**NH 12  Radiomics: what is it and how can we use it?**

- **Chairperson’s introduction**  
  [A-572]  
  O. Clément; Paris/FR
- **Radiomics: what is it and how does it work?**  
  [A-573]  
  L.S. Fournier; Paris/FR
- **Radiomics: technical validation**  
  [A-574]  
  R. Leijenaar; Maastricht/NL
- **Radiomics: biological correlation**  
  [A-575]  
  E. Sala; Cambridge/UK
- **Radiomics: clinical challenges**  
  [A-576]  
  T. Penzkofer; Berlin/DE
- **Panel discussion: Radiomics, the new holy grail in radiology?**

### March 3
**Saturday, March 3, 12:30–13:45, Room M 1**

**NH 14  The new horizon for radiology**

- **Chairpersons’ introduction**  
  [A-721]  
  L. Donoso; Barcelona/ES  
  B. Hamm; Berlin/DE
- **What will the radiologist’s job look like in 2025?**  
  [A-723]  
  W. Kim; Los Angeles, CA/US
- **Transforming the integrated diagnosis (ID) opportunity into the Diagnostic Institute (DI) innovative change management**  
  [A-724]  
  P.R. Ros; Cleveland, OH/US
- **Medical imaging and clinical laboratories: a fruitful liaison**  
  [A-725]  
  J.E. Wildberger; Maastricht/NL
- **Panel discussion: How to be prepared?**
STATE OF THE ART SYMPOSIA

These sessions will inform the audience about the ‘real state of the art’ of a given subject. Each of the lecturers is an expert on the given topic as a whole or on a specific aspect of the topic.

The 90-minute sessions are chaired by a moderator who will introduce three to eleven speakers addressing various issues within wider subjects such as anatomical regions, specific diseases, or particular techniques. The presentations will be followed by a discussion conducted by the panellists, led by the chairperson.

Places are allocated on a first-come, first-served basis.
STATE OF THE ART SYMPOSIA

1 March  Thursday, March 1, 08:30–10:00, Studio 2018
SA 5a  Whole-body MRI: ready for prime time?  LEVEL I

» Chairperson’s introduction  [A-196]
  F.E. Lecouvet; Brussels/BE

» The case of metastatic bone disease  [A-197]
  A.R. Padhani; London/UK

» The case of multiple myeloma  [A-198]
  L.-A. Moulopoulos; Athens/GR

» The case of lymphoma  [A-199]
  M.E. Mayerhöfer; Vienna/AT

» Beyond oncology: rheumatology and more  [A-200]
  S. Weckbach; Heidelberg/DE

» Panel discussion: Whole-body MRI: when, how and why should you do it?

1 March  Thursday, March 1, 08:30–10:00, Room E2
SA 5b  Current guidelines and diagnostic criteria in multiple sclerosis (MS)  LEVEL I

» Chairperson’s introduction  [A-208]
  A. Rovira-Cañellas; Barcelona/ES

» Update on new clinical diagnostic criteria  [A-209]
  C. Enzinger; Graz/AT

» MRI for MS monitoring: the use of guidelines in clinical practice  [A-210]
  M.P. Wattjes; Hannover/DE

» MRI in monitoring treatment complications  [A-211]
  J. Hodel; Créteil/FR

» Panel discussion: Do we need MRI to monitor and predict treatment response in MS?

4 March  Sunday, March 4, 08:30–10:00, Room F1
SA 17  Interventional treatment of stroke: a game changer  LEVEL II

» Chairperson’s introduction  [A-912]
  P. Vilela; Almada/PT

» Stroke, endovascular treatment: current approaches  [A-913]
  T. van der Zijden; Antwerp/BE

» Stroke, endovascular treatment: tandem lesions and acute phase stenting  [A-914]
  W. van Zwam; Maastricht/NL

» Stroke, endovascular treatment: beyond proximal occlusion and six-hour time window  [A-915]
  J. Macho; Barcelona/ES

» Panel discussion: Stroke, endovascular treatment: new horizons
The concept of a Special Focus Session is to deal with a topic at the cutting edge of development and clinical application. A traditional approach is inappropriate for such a session, which should reflect the lecturers’ forthright personal views on a developing subject. The topics of these sessions should be presented in such a way as to promote debate and give an in-depth analysis.

The chairman will introduce each aspect of the topic and the panellists will then discuss their different perspectives and opinions. The audience will have the opportunity to discuss their ideas with the lecturers. Session length: 90 minutes; three to four speakers.

Places are allocated on a first-come, first-served basis.
**SPECIAL FOCUS SESSIONS**

**SF 1  Hepatocellular carcinoma: diagnosis, staging and current guidelines**

- **Wednesday, February 28, 08:30–10:00, Room E1**
  - **Chairperson’s introduction** [A-016]
    G. Brancatelli; Palermo/IT
  - **Screening for HCC, American, Asian and European guidelines: why are they different?** [A-017]
    V. Vilgrain; Clichy/FR
  - **Diagnosis of HCC, LI-RADS 2017: why we need it?** [A-018]
    C.B. Sirlin; San Diego, CA/US
  - **Atypical appearance of HCC and mimics: how to solve the challenging cases** [A-019]
    J.M. Lee; Seoul/KR
  - **Panel discussion: At the plateau of the learning curve: how do experts reason?**

**SF 4  Gadolinium deposition: is it harmful?**

- **Wednesday, February 28, 16:00–17:30, Room G**
  - **Chairperson’s introduction** [A-136]
    P.M. Parizel; Antwerp/BE
  - **Gadolinium deposition in the brain: from preclinical studies to clinical implications** [A-137]
    R.J. McDonald; Rochester, MN/US
  - **Assessing tissue integrity in the presence of gadolinium deposition in the brain** [A-138]
    C. Olchowy; Wroclaw/PL
  - **Clinical recommendations in consideration of the EMA’s pharmacovigilance and risk assessment committee recommendation for suspension of linear agents** [A-139]
    V. Runge; Berne/CH
  - **Panel discussion: Strategies for the future**

**SF 5  Cystic pancreatic lesions: how to differentiate, how to manage?**

- **Thursday, March 1, 08:30–10:00, Room D**
  - **Chairperson’s introduction** [A-219]
    C. Matos; Lisbon/PT
  - **Diagnostic accuracy of non-invasive imaging modalities for characterising cystic pancreatic lesions** [A-220]
    N. Kartalis; Stockholm/SE
  - **The evolving role of pathology: can we improve patient stratification?** [A-221]
    P. Demeter; Brussels/BE
  - **When not to operate and when to operate an incidental cystic pancreatic lesion** [A-222]
    M. Del Chiaro; Stockholm/SE
  - **Panel discussion: Are current management recommendations appropriate?**

**SF 6a  CT examination of pregnant patients: a dilemma for the radiologist and the mother**

- **Thursday, March 1, 16:00–17:30, Room O**
  - **Chairperson’s introduction** [A-308]
    V. Gershan; Skopje/MK
  - **Radiation risks vs clinical benefits** [A-309]
    M. Prokop; Nijmegen/NL
  - **How to reduce radiation dose and keep CT diagnostics** [A-310]
    M. Kortesniemi; Helsinki/FI
  - **Dosimetry methods available** [A-311]
    J. Damilakis; Iraklion/GR
  - **Dose and risk communication to doctors and patients** [A-312]
    P. Gilligan; Dublin/IE
  - **Panel discussion: CT during pregnancy: what are the suggested actions for patient dose management?**

This session is part of the EuroSafe Imaging campaign.
SPECIAL FOCUS SESSIONS

1 March Thursday, March 1, 16:00–17:30, Room E1
SF 8b My three top tips for breast imaging [LEVEL II]
» Chairperson's introduction [A-324]
M.H. Fuchsjäger; Graz/AT
» Screening with tomosynthesis [A-325]
S. Zackrisson; Malmö/SE
» Automated breast ultrasound [A-326]
R.M. Mann; Nijmegen/NL
» Complex cystic and solid lesions [A-327]
P. Kapetas; Vienna/AT
» Questions and discussion
» Imaging the axilla [A-328]
F. Kilburn-Toppin; Cambridge/UK
» Contrast-enhanced spectral mammography [A-329]
E.M. Fallenberg; Berlin/DE
» Stereotactic-guided biopsy [A-330]
E.J. Cornford; Cheltenham/UK
» Questions and discussion
» US-guided biopsy [A-331]
A. Athanasiou; Athens/GR
» MRI-guided biopsy [A-332]
G. Esen; Istanbul/TR
» Treatment response and therapy monitoring [A-333]
C. Van Ongeval; Leuven/BE
» Post-therapy evaluation [A-334]
J. Camps Herrero; Valencia/ES
» Questions and discussion

1 March Thursday, March 1, 16:00–17:30, Room G
SF 8c The ten-minute abdominal MRI: make the dream come true! [LEVEL III]
» Chairperson's introduction [A-349]
N. Papanikolaou; Lisbon/PT
» Liver [A-350]
T.C. Lauenstein; Essen/DE
» Pancreas [A-351]
N. Kartalis; Stockholm/SE
» Ovaries [A-352]
E. Sala; Cambridge/UK
» Panel discussion: MRI technological advances: impact on radiologist routine

2 March Friday, March 2, 08:30–10:00, Studio 2018
SF 9a Focal treatment of prostate cancer [LEVEL II]
» Chairperson's introduction [A-395]
H.-P. Schlemmer; Heidelberg/DE
» Focal treatment of prostate cancer: opportunities, challenges and indications [A-396]
R. Sanchez-Salas; Paris/FR
» Imaging of prostate cancer: how accurately can prostate cancer be localised? [A-397]
C. Allen; London/UK
» Image-guided focal treatment using high-intensity ultrasound (HIFU) [A-398]
S. Crouzet; Lyon/FR
» Image-guided focal treatment using irreversible electroporation (IRE) [A-399]
F. Colletti; Berlin/DE
» Panel discussion: Can focal therapy already be recommended to prostate cancer patients?

2 March Friday, March 2, 08:30–10:00, Room K
SF 9b Radiographers in preclinical imaging research
» Chairpersons' introduction
C. Buissink; Groningen/NL [A-422]
N. Grenier; Bordeaux/FR [A-423]
» Radiographers in preclinical research: challenges and chances [A-424]
J.-P. Dillenseger; Strasbourg/FR
» Preclinical evaluation of PET tracers [A-425]
M. Zeilinger; Wiener Neustadt/AT
» SPECT/CT [A-426]
S. Heskamp; Nijmegen/NL
» Small animal imaging studies [A-427]
M. Zeilinger; Wiener Neustadt/AT
» Panel discussion: Is there a role for radiographers in preclinical imaging research?

2 March Friday, March 2, 12:30–13:30, Sky High Stage
SF 10 Artificial intelligence (AI) applications [LEVEL I]
» Chairperson's introduction [A-990]
A. Brady; Cork/IR
» Imaging biobanks [A-991]
B. Gibaud; Rennes/FR
» Big data and structured reporting [A-992]
D. Pinto dos Santos; Cologne/DE
» Data control in the era of AI: man or machine? [A-993]
P.M.A. van Ooijen; Groningen/NL
» Discussion
### SF 12a  My three top tips for abdominal imaging

- **Chairperson’s introduction** [A-518] D.J.M. Tolan; Leeds/UK
- **Postoperative abdomen** [A-519] D.J.M. Tolan; Leeds/UK
- **Appendicitis** [A-520] J.B.C.M. Puylaert; The Hague/NL
- **Bile duct stones** [A-521] J.A. Guthrie; Leeds/UK
- **Questions and discussion**
- **Dilated pancreatic duct** [A-522] R. Manfredi; Rome/IT
- **Liver biopsy** [A-523] V. Vilgrain; Clichy/FR
- **Bowel ischaemia** [A-524] M. Zins; Paris/FR
- **Questions and discussion**
- **Colon polyp** [A-525] F. Iafrate; Rome/IT
- **Acute pancreatitis** [A-526] W. Schima; Vienna/AT
- **Crohn’s disease** [A-527] J. Rimola; Barcelona/ES
- **Liver metastases follow-up** [A-528] Y. Menu; Paris/FR
- **Questions and discussion**

### SF 12b  Imaging of the brain in preterm infants

- **Chairperson’s introduction** [A-536] P.C. Maly Sundgren; Lund/SE
- **The role of cerebral ultrasound** [A-537] M.I. Argyropoulou; Ioannina/GR
- **The role of cerebral MRI: morphology and beyond** [A-538] F.M. Trulzi; Milan/IT
- **Panel discussion: Can we afford the extensive screening programmes proposed today?**

### SF 12c  Head and neck emergencies

- **Chairperson’s introduction** [A-540] R. Kohler; Sion/CH
- **What is broken?** [A-541] E. Loney; Darlington/UK
- **It is red and swollen . . .** [A-542] M. Becker; Geneva/CH
- **It is bleeding . . .** [A-543] D.-A. Varoquaux; Marseille/FR
- **Panel discussion: Is the radiologist an essential component of the emergency team?**

### SF 12d  Radiographers’ challenge: informing patients about radiation risk

**Moderator:** J.N. Vassileva; Vienna/AT

- **Chairperson’s introduction:** The European BSS (Basic Safety Standards) Directive and current legal requirements  [A-577] S. Geers-van Gemeren; Utrecht/NL
- **So whose role is it? What different professionals can and should do**  [A-578] G. Paulo; Coimbra/PT
- **What do patients want to hear and need to be told?**  [A-579] J. Portelli; Msida/MT
- **How to effectively communicate radiation risks**  [A-580] L.R. O’Hora; Dublin/IE
- **Panel discussion: Speaking a common language: how best to work together to inform patients**

This session is part of the EuroSafe Imaging campaign.

### SF 12e  Memorable cases in cardiovascular imaging: how to avoid common mistakes

- **Chairperson’s introduction** [A-596] K. Nikolaou; Tübingen/DE
- **Coronary fistula mimicking a cystic paracardial tumour**  [A-597] C. Loewe; Vienna/AT
- **Right ventricular myocarditis diagnosed with CMR: the great imitator**  [A-598] M. Francone; Rome/IT
- **Congenital elastic band of the aortic valve: a ‘multimodality’ diagnosis**  [A-599] K. Pagonidis; Iraklion/GR
- **Dyspnea with an abnormal right ventricle: role of MR imaging**  [A-600] A. Jacquier; Marseille/FR
- **Misleading CMR LGE artefact in cardiomyopathies**  [A-601] M. Gutberlet; Leipzig/DE
- **Hypertrabeculation vs non-compaction of the left ventricle: treat or don’t touch?**  [A-602] K. Gruszczynska; Katowice/PL
SF 13a  Chest imaging of cystic fibrosis: from infants to adults

- Chairperson’s introduction [A-608]
  M.O. Wielpütz; Heidelberg/DE
- X-ray: is there still a value in CF? [A-609]
  C. Owens; London/UK
- CT: information content vs dose? [A-610]
  P. Ciet; Rotterdam/NL
- MRI: value of routine MRI? [A-611]
  F. Doellinger; Berlin/DE
- Panel discussion: X-ray, CT or MRI, or a combination?

SF 13b  Paediatric MRI: can we make gadolinium superfluous?

- Chairperson’s introduction [A-648]
  M. Alison; Paris/FR
- Safety issues of intravenous gadolinium in children [A-649]
  F.E. Avni; Lille/FR
- The role of intravenous gadolinium in paediatric oncology [A-650]
  P.D. Humphries; London/UK
- Assessment of musculoskeletal disorders: when is intravenous gadolinium necessary? [A-651]
  M. Maas; Amsterdam/NL
- Brain imaging: when is intravenous gadolinium necessary? [A-652]
  K. Karli Oguz; Ankara/TR
- Panel discussion: How can we reduce our use of intravenous gadolinium in children?

SF 13c  Drug elution or drug illusion in vascular disease

- Chairperson’s introduction [A-669]
  R.W. Günther; Berlin/DE
- Drug-eluting balloons and stents, technology and biological interaction: lessons learned from the coronaries [A-670]
  F.X. Kleber; Berlin/DE
- Drug-eluting balloons and stents in femoropopliteal and crural lesions: pro [A-671]
  F. Fanelli; Rome/IT
- Drug-eluting balloons and stents in femoropopliteal and crural lesions: contra [A-672]
  J.A. Reekers; Amsterdam/NL
- Effect of drug-eluting balloons and stents in haemodialysis access lesions: where is the evidence? [A-673]
  K. Katsanos; Patras/GR
- Panel discussion: Scientific evidence and consequences for daily practice
### SPECIAL FOCUS SESSIONS

#### SF 15c  My three top tips for neuroimaging
- **Chairperson’s introduction** [A-756]
  J. Van Goethem; Antwerp/BE
- **Leukodystrophies** [A-757]
  B. Ertl-Wagner; Munich/DE
- **Hydrocephalus** [A-758]
  S. Kumar; Singapore/SG
- **Acute ischaemic stroke** [A-759]
  P.M. Parizel; Antwerp/BE
- **Low back pain** [A-760]
  M. Muto; Naples/IT
- **Questions and discussion**
- **Movement disorders** [A-761]
  T.A. Yousry; London/UK
- **Dementia** [A-762]
  S. Haller; Carouge/CH
- **Multiple sclerosis** [A-763]
  A. Rovira-Cañellas; Barcelona/ES
- **Questions and discussion**
- **Non-enhancing brain tumours** [A-764]
  M. Smits; Rotterdam/NL
- **Ring-enhancing brain lesions** [A-765]
  M.M. Thurnher; Vienna/AT
- **Assessment of tumour response/progression** [A-766]
  P.C. Maly Sundgren; Lund/SE
- **Questions and discussion**

#### SF 16  Placental imaging: how, when and why?
- **Chairperson’s introduction** [A-813]
  M. Weston; Leeds/UK
- **Modern MRI of the placenta** [A-814]
  N. Siauve; Colombes/FR
- **Placental abnormalities, timing of imaging, methods and diagnosis** [A-815]
  G. Masselli; Rome/IT
- **Abnormally invasive placenta: vascular anatomy and interventional radiology approaches to management** [A-816]
  C. Hammond; Leeds/UK
- **Panel discussion: Is MR scan now a prerequisite for the modern management of placental problems?**

#### SF 17a  New treatments for musculoskeletal tumours
- **Chairperson’s introduction:**
  What is changing? [A-892]
  J.L. Bloem; Leiden/NL
- **New treatment paradigms in orthopaedic oncology** [A-893]
  M.A.J. van de Sande; Leiden/NL
- **Multimodality imaging in treating and monitoring bone sarcoma** [A-894]
  M.-A. Weber; Rostock/DE
- **Multimodality imaging in treatment and surveillance of soft tissue sarcoma** [A-895]
  C. Messiou; London/UK
- **Panel discussion: Increasing quality of life in sarcoma patients without decreasing survival. What is needed from an imaging perspective to allow and support this?**

#### SF 17b  Abdominal emergencies: friends and enemies
- **Chairperson’s introduction** [A-900]
  I. Arkhipova; Moscow/RU
- **Abdominal vascular emergencies: no time to lose** [A-901]
  V.E. Sinitsyn; Moscow/RU
- **When to call the interventional radiologist and when to call the surgeon?** [A-902]
  K.K. Pyra; Lublin/PL
- **Closed loop obstruction: a challenging diagnosis** [A-903]
  M. Zins; Paris/FR
- **Expected and unexpected emergencies of abdominal viscera: radiology before surgery?** [A-904]
  C. Stoupis; Männedorf/CH
- **Life teaches us case by case** [A-905]
  M.-L. Riibak; Tallinn/EE
- **Panel discussion: Every imaging sign could matter!**
PROFESSIONAL CHALLENGES SESSIONS

The idea of these sessions is to communicate and exchange information on professional issues related to radiology, such as training and education, research networking, radiological management and professional developments.

90-minute sessions; introduction by one chairperson; three to four lecturers; panel discussion.

Places are allocated on a first-come, first-served basis.
**PROFESSIONAL CHALLENGES SESSIONS**

**Wednesday, February 28, 16:00–17:30, Room E2**

**PC 4  Mass casualties**  
**LEVEL III**

» Chairperson's introduction  [A-120]
M. Scaglione; Castel Volturno/IT

» Mass casualty incidents: the London framework for planning  [A-121]
S. Vaidya; London/UK

» Lesson learned from the Paris attacks  [A-122]
P.A. Grenier; Paris/FR

» Postmortem imaging of migrant victims drowned in the Mediterranean Sea  [A-123]
G. Lo Re; Palermo/IT

» High-end CT imaging in forensic medicine: experience after recent Brussels terror attacks  [A-124]
W. Develter; Leuven/BE

» Panel discussion: How to be prepared accordingly?

**Friday, March 2, 08:30–10:00, Room M 1**

**PC 9  How can radiologists expand their role in peripheral vascular intervention?**  
**LEVEL II**

» Chairperson's introduction  [A-428]
R. Iezzi; Rome/IT

» How to improve your clinical knowledge  [A-429]
C.W. Kopp; Vienna/AT

» How to improve your diagnostic skills  [A-430]
T. Leiner; Utrecht/NL

» How to improve your relationship with the vascular surgeon  [A-431]
C. Ferrer; Rome/IT

» How to improve your technical/procedural skills  [A-432]
K. Katsanos; Patras/GR

» Panel discussion: Are we ready to be more of a clinician rather than an operator?

**Saturday, March 3, 08:30–10:00, Room K**

**PC 13  Closing the gap between education and clinical practice for radiographers**

» Chairpersons' introduction  
K.G. Vikestad; Oslo/NO  [A-657]
M. Raissaki; Iraklion/GR  [A-658]

» Education vs clinical practice  [A-659]
A. Bjørnstad; Oslo/NO

» How can new teaching methods be implemented?  [A-660]
E. Wolters van der Weij; Groningen/NL

» Tools for success: academic and clinical practice working together  [A-661]
L.A. Rainford; Dublin/IE

» Panel discussion: What is the motivation for change?

**Saturday, March 3, 14:00–15:30, Room B**

**PC 15  Artificial intelligence and big data in medical imaging**  
**LEVEL II**

» Chairperson's introduction  [A-733]
W.J. Niessen; Rotterdam/NL

» IT infrastructure, data sharing methods and data analysis aspects  [A-734]
A. Alberich-Bayarri; Valencia/ES

» Machine learning in the biomedical domain: challenges and opportunities  [A-735]
M. de Bruijne; Rotterdam/NL

» How will AI change radiology  [A-736]
K.J. Dreyer; Boston, MA/US
MULTIDISCIPLINARY SESSIONS

The concept of these sessions is to promote a multidisciplinary approach to detection and treatment, integrating radiologists and other clinicians to share their expertise.

Places are allocated on a first-come, first-served basis.
MULTIDISCIPLINARY SESSIONS

**Wednesday, February 28, 16:00–17:30, Room F2**

**MS 4** The heart team: coronary imaging and treatment

- **Chairperson’s introduction** [A-128]
  E. Mershina; Moscow/RU
- **Non-invasive cardiac imaging** [A-129]
  V.E. Sinitsyn; Moscow/RU
- **Interventional treatment/percutaneous** [A-130]
  A. Osiev; Moscow/RU
- **The role of coronary imaging in the coronary artery bypass and valve surgery** [A-131]
  K. Mershin; Moscow/RU
- **Multidisciplinary case presentation and discussion** [A-132]
  Y. Ashikhmin; Moscow/RU

**Saturday, March 3, 16:00–17:30, Room E2**

**MS 16** Psychoradiology: a blend of molecular, functional and structural imaging with a taste of psychology

- **Chairperson’s introduction** [A-827]
  B. Ertl-Wagner; Munich/DE
- **A psychiatrist’s view on neuroimaging** [A-828]
  F. Padberg; Munich/DE
- **Advanced imaging techniques: their role in neuropsychiatric disorders** [A-829]
  S. Stöcklein; Munich/DE
- **Can images predict psychiatric diagnosis and treatment response?** [A-830]
  N. Koutsouleris; Munich/DE
- **Neuroimaging and neuromodulation: where are we heading** [A-831]
  D. Keeser; Munich/DE
- **Interdisciplinary case discussion**

**Sunday, March 4, 08:30–10:00, Room M 4**

**MS 17** The polytrauma patient

- **Chairperson’s introduction** [A-935]
  M. Brink; Nijmegen/NL
- **Guidelines and game changers: the radiologist’s perspective** [A-936]
  M. Brink; Nijmegen/NL
- **The primary survey: talking ABC** [A-937]
  J. Peters; Nijmegen/NL
- **The secondary survey: from head to toe** [A-938]
  M. Holla; Nijmegen/NL
- **The neuroradiologist’s perspective** [A-939]
  F.J.A. Meijer; Nijmegen/NL
- **Multidisciplinary case presentation and discussion**

= Interactive session with electronic voting/self assessment
EUROPEAN EXCELLENCE IN EDUCATION (E³)

The E³ programme emphasises the importance of lifelong learning.

It covers the entire range of educational issues, from undergraduate medical education to subspecialised continuing professional development.

For the fourth time at ECR 2018, the E³ programme is structured according to the different levels defined by the European Training Curriculum for Radiology.

The E³ programme consists of the following five branches, which reflect the different levels of education in radiology, as well as the different stages of an individual’s professional career:

- Rising Stars Programme
- European Diploma Prep Sessions
- The Beauty of Basic Knowledge
- ECR Academies
- ECR Master Classes
European Diploma in Radiology

Prove your excellence in radiology at the end of your training.

Take the EDiR examination and obtain a certificate of knowledge endorsed by the ESR and the UEMS.

For further information go to www.myebr.org or contact us at diploma@myebr.org.
E³ RISING STARS PROGRAMME

The Rising Stars Programme is designed especially for residents, students, radiographers and trainee radiographers.

It consists of Basic Sessions, Student Sessions, Joint Sessions with ESOR (European School of Radiology), Case-Based Diagnosis Training sessions, EFRS Radiographers’ Basic Session and the Radiology Trainees Forum Programme including the RTF Highlighted Lectures and the RTF Quiz.
**E3 – RISING STARS PROGRAMME**

**BASIC SESSIONS**

Special sessions suitable for residents, students, radiographers and radiographers-in-training

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**28 Feb Wednesday, February 28, 08:30–10:00, Room F1**

**BS 1** Head and neck: Inflammation, tumour or something else? **LEVEL 1**

Moderator: B. Verbist; Leiden/NL

- Sinuses [A-023]
  - R. Maroldi; Brescia/IT

- Thyroid and parathyroid [A-024]
  - H. Imhof; Vienna/AT

- Salivary glands [A-025]
  - S.J. Golding; Oxford/UK

- Lymph nodes [A-026]
  - S.S. Özbek; Izmir/TR

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**28 Feb Wednesday, February 28, 10:30–12:00, Room F1**

**BS 2** Gastrointestinal: ‘the gut’ **LEVEL 1**

Moderator: B. Marincek; Kilchberg/CH

- Oesophagus [A-063]
  - S. Romano; Naples/IT

- Stomach [A-064]
  - M. Laniado; Dresden/DE

- Small bowel [A-065]
  - N. Papanikolaou; Lisbon/PT

- Colon [A-066]
  - R.G.H. Beets-Tan; Amsterdam/NL

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**28 Feb Wednesday, February 28, 14:00–15:30, Room F1**

**BS 3** Neurologic emergencies **LEVEL 1**

Moderator: N. Chidambaranathan; Chennai/IN

- Brain injury [A-080]
  - J. Wałęcki; Warsaw/PL

- Subarachnoid haemorrhage [A-081]
  - C. Calli; Izmir/TR

- Ischaemic stroke [A-082]
  - Z. Merhemic; Sarajevo/BA

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**28 Feb Wednesday, February 28, 16:00–17:30, Room F1**

**BS 4** Thoracic emergencies **LEVEL 1**

Moderator: K. Malagari; Athens/GR

- Acute aortic syndrome [A-125]
  - T. Jargiello; Lublin/PL

- Pulmonary embolism [A-126]
  - C. Loewe; Vienna/AT

- Acute coronary syndrome [A-127]
  - R.M.M. Hinzpeter; Zurich/CH

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**1 March Thursday, March 1, 08:30–10:00, Room F1**

**BS 5** Musculoskeletal: bones and soft tissues **LEVEL 1**

Moderator: D.P. Patkar; Mumbai/IN

- Bone marrow diseases [A-212]
  - K. Verstraete; Ghent/BE

- Soft tissue tumours [A-213]
  - V.N. Cassar-Pullicino; Oswestry/UK

- Bone tumours [A-214]
  - J.L. Bloem; Leiden/NL

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**2 March Friday, March 2, 08:30–10:00, Room F1**

**BS 6** Image-guided therapies in oncology **LEVEL 1**

Moderator: V. Bérczi; Budapest/HU

- Kidney [A-411]
  - O. Akhan; Ankara/TR

- Lungs [A-412]
  - M. Bezzi; Rome/IT

- Bones [A-413]
  - A. Gangi; Strasbourg/FR

- Liver [A-414]
  - J.I. Bilbao; Pamplona/ES
E³ – RISING STARS PROGRAMME

JOINT SESSIONS
OF THE ESR AND ESOR
(European School of Radiology)

1 March Thursday, March 1, 10:30–12:00, Room F1
ESR/ESOR 1 Radiologic anatomy: lower extremities

Moderator: U. Aydingoz; Ankara/TR
- Knee [A-254] M. Klontzas; London/UK
- Ankle [A-255] F. Smithuis; Amsterdam/NL

2 March Thursday, March 1, 16:00–17:30, Room F1
ESR/ESOR 2 Radiologic anatomy: abdomen

Moderator: S. Gourtsoyianni; Athens/GR
- Liver [A-339] G. Brancatelli; Palermo/IT
- Biliary tree [A-340] O. Benjaminov; Petach Tikva/IL
- Pancreas [A-341] M. Dioguardi Burgio; Clichy/FR

3 March Friday, March 2, 16:00–17:30, Room F1
ESR/ESOR 3 Radiologic anatomy: neuro

Moderator: M.A. Lucic; Sremmska Kamenica/RS
- Cortical anatomy and primary functional areas [A-561] T.A. Yousry; London/UK
- The basal ganglia of the brain revisited [A-563] D. Zlatareva; Sofia/BG

4 March Sunday, March 4, 08:30–10:00, Room K
BR 3 Planning your career

Chairperson's introduction: What employers are looking for from new graduates [A-927] S. Huber; Munich/DE
The dos and don'ts of preparing your curriculum vitae [A-928] E. Kelly; Galway/IE
Radiography: your passport to travel [A-929] R. Caroço; London/UK
Planning your professional development [A-930] A. Wareing; Aberdeen/UK
Panel discussion: My best career advice

EFRS RADIOGRAPHERS’ BASIC SESSIONS
(European Federation of Radiographer Societies)

2 March Friday, March 2, 16:00–17:30, Room L 8
BR 1 Radiography research: a how to guide

Chairperson’s introduction: Why is radiography research important [A-548] M. Hardy; Bradford/UK
How to avoid ethical issues [A-549] B.T. Andersson; Lund/SE
How to critically appraise a research article [A-550] B. Kraus; Vienna/AT
How to write a good scientific abstract [A-551] R. Decoster; Brussels/BE
How to produce a high-quality scientific or educational poster [A-552] L.A. Rainford; Dublin/IE
Panel discussion: Ask the experts

3 March Saturday, March 3, 08:30–10:00, Room L 8
BR 2 Radiation protection from A to Z

Chairperson’s introduction: The radiographers’ role in radiation protection [A-628] D. Catania; Milan/IT
The importance of justification [A-630] D. Katsifarakis; Athens/GR
The latest optimisation techniques in conventional radiography [A-631] P.H. Hogg; Salford/UK
The radiographers’ role in benefit-risk communication [A-632] J. Portelli; Msida/MT
Panel discussion: Teamwork in radiation protection
This session is part of the EuroSafe Imaging campaign.

4 March Sunday, March 4, 08:30–10:00, Room K
BR 3 Planning your career

Chairperson’s introduction: What employers are looking for from new graduates [A-927] S. Huber; Munich/DE
The dos and don’ts of preparing your curriculum vitae [A-928] E. Kelly; Galway/IE
Radiography: your passport to travel [A-929] R. Caroço; London/UK
Planning your professional development [A-930] A. Wareing; Aberdeen/UK
Panel discussion: My best career advice
E³ – RISING STARS PROGRAMME

STUDENT SESSIONS

Students will present their work

1 March
Thursday, March 1, 14:00–15:30, Room X

S 1 
My scientific paper in the field of dose optimization in imaging & My scientific paper in the field of Doppler ultrasound

Moderator: P. Vock; Spiegel/CH

» Comparative analysis of quantitative positron emission tomography imaging and diffusion-weighted magnetic resonance imaging parameters in lung adenocarcinoma
N. Andelic; Novi Sad/RS

» Motion capture based respiratory gating for neonatal thoracic CT
R. Burhan; London/UK

» The association between the image acquisition time and the quantitative and qualitative parameters of PET/CT with 18-fluorodeoxyglucose (F-FDG) images
G. Visockyte; Vilnius/LT

» Virtual Monochromatic Spectral Images vs Single-Energy Images with and without Iterative Metal Artifact Reduction for CT-guided needle biopsy: impact on image quality
J. Heim; Schwetzingen/DE

» Assessment of liver fibrosis by ultrasound elastography and contrast-enhanced ultrasound: a randomised prospective animal study
T. Ghi; Chengdu/CN

» Brain cortex ontogenesis in rats after prenatal Doppler scan
V. Makukhina; Krasnodar/RU

» Has implementation of the British Thyroid Association’s 2014 Guidelines reduced thyroid nodule sampling?
H.G. Sheppard; London/UK

» Grayscale and colour Doppler ultrasound evaluation of carotid artery intima-media complex
C. Cesário Jordão; Figueira da Foz/PT

2 March
Friday, March 2, 10:30–12:00, Room X

S 2 
My scientific paper in the field of neuroimaging

Moderator: D. Zlatareva; Sofia/BG

» Systematic review of the organisational impact on the clinical outcomes for endovascular treated stroke patients
L. Détraz; Saint Herblain/FR

» Assessment of white matter hyperintensities burden in adult patients with tetralogy of Fallot: a pilot study
L. Melazzini; San Donato Milanese/IT

» Corpus callosum growth in complex congenital heart disease
L.F. Saccaro; Pisa/IT

» Signal intensity changes in post-Gd contrast MRI of paediatric brain: when do they appear and at which site the most?
R. Pitura; Riga/LV

» Circle of Willis morphological variants and artery diameters on 3D time-of-flight MR angiograms in a Polish population
M.M. Wilczek; Borówiec/PL

» Morphologic changes in Parkinson’s disease motor subtypes
G. Jurkevičiūtė; Kaunas/LT

» Incidence of hyperdensities in computer tomography after interventional stroke therapy related to the chosen treatment
L. Kutsch; Düsseldorf/DE

» Functional magnetic resonance imaging with seed-based analysis as an application for assessment of neuronal activity in the patients with fragile X syndrome
Y.M. Rymareva; Novosibirsk/RU

» Neuroimaging and blood flow monitoring in patients with gunshot and shrapnel wounds of the brain
V. Herasymenko; Kramatorsk/UA
E³ – RISING STARS PROGRAMME

STUDENT SESSIONS

Students will present their work

Saturday, March 3, 08:30–10:00, Room X

S 3  Student Session 3
My scientific paper in the field of musculoskeletal imaging

Moderator: M. Klontzas; London/UK

» Preventive vertebroplasty approach to reduce post vertebroplasty new onset fractures
  G. Muto; Naples/IT

» Fast pain relief after MRgFUS treatment for pain palliation of bone metastases: a one-month survey
  C. Gasperini; Bologna/IT

» How is the fat fraction, bone mineral density and the severity of compression fracture of the vertebrae related? ¹H MRS study
  A. Ivantsova; Moscow/RU

» Increased psoas muscle area on computed tomography is associated with improved long-term survival in patients undergoing transcatheter aortic valve replacement
  F.M. Troschel; Münster/DE

» Detection of prosthetic joint infections using ⁹⁹mTc-antigranulocyte antibodies
  J. Saponjski; Belgrade/RS

» Effect of Charcot arthroplasty in magnetic resonance angiography
  M.B. Ceker, Aydin/TR

» Accuracy of estimation of bone mineral density with different x-ray methods: phantom study
  F. Petriaikin; Moscow/RU

» The power of PET-CT in tumour staging
  D. Sipos; Pécs/HU

Saturday, March 3, 14:00–15:30, Room X

S 4  Student Session 4
My educational or social project at my university

Moderator: L. Bonomo; Rome/IT

» Team-based learning: a teaching strategy applied in the area of imagology
  R.H. Murashita Fujiki; Sorocaba/BR

» Standardising cranial CT reading for medical students: an educational project
  C. Trejo Gallego; Murcia/ES

» Radiographer situation by Hungarian perspective
  D. Sipos; Pécs/HU

» Utilisation, indication and sonographic outcome of antenatal ultrasound at Huruma District Hospital, Tanzania from 2014 to 2016
  H.T. Tarimo; Moshi/TZ

» Will I become a radiologist? A European survey about students' interest in Radiology
  I.A. Mirea; Bucharest/RO

» Radiological anatomy: impression of the recently admitted student in medical graduation
  M. Ettinger Mendes; Salvador/BR

» COE & JOICE: building a congress for students from zero to hero
  C. Urtasun Iriarte; Pamplona/ES
E³ – RISING STARS PROGRAMME

RADIOLOGY TRAINEES FORUM PROGRAMME

**March 1**
Thursday, March 1, 12:30–13:30, Room B

**RTF Quiz**

**Moderators:** J. Cáceres; Barcelona/ES
J. Vilar; Valencia/ES

**March 3**
Saturday, March 3, 10:30–12:00, Room O

**TF Highlighted Lectures**

**Moderators:** Z. Snoj; Ljubljana/SI
T. Teneva; Varna/BG

- **Routine cartilage evaluation and novel approaches** [A-689]
V. Salapura; Ljubljana/SI
- **Non-occlusive mesenteric ischaemia:**
**CT diagnosis and signs of reperfusion** [A-690]
M.A. Mazzei; Siena/IT
- **Imaging of paediatric gastrointestinal emergencies** [A-691]
D. Baleva; Mistelbach/AT

CASE-BASED DIAGNOSIS TRAINING

Special programme for residents and general radiologists

**March 4**
Sunday, March 4, 13:00–14:00, Room E1

**CB 1 Case-Based Diagnosis Training - Part 1**

**Level:**

**Moderators:** K.M. Friedrich; Vienna/AT
S. Robinson; Vienna/AT

» **Liver** [A-962]
L. Martí-Bonmatí; Valencia/ES

» **Neuro** [A-963]
D. Prayer; Vienna/AT

» **Maxillofacial** [A-964]
S. Robinson; Vienna/AT

» **Genitourinary** [A-966]
M. Toepker; Vienna/AT

**March 4**
Sunday, March 4, 14:00–14:30, Room E1

**CB Case-Based Diagnosis Training - Interlude**

**Level:**

**Moderators:**

» **Normal variant or disease?** [A-969]
W. Drahanowsky; Vienna/AT

**March 4**
Sunday, March 4, 14:30–15:30, Room E1

**CB 2 Case-Based Diagnosis Training - Part 2**

**Level:**

**Moderators:** K.M. Friedrich; Vienna/AT
S. Robinson; Vienna/AT

» **Head and neck** [A-974]
C. Czerny; Vienna/AT

» **Chest** [A-975]
H. Prosch; Vienna/AT

» **Spine** [A-976]
K.M. Friedrich; Vienna/AT

» **Gastrointestinal** [A-977]
W. Schima; Vienna/AT

» **Breast** [A-978]
M.H. Fuchsjaeger; Graz/AT
The European Diploma Prep Sessions aim to prepare prospective candidates for the European Diploma in Radiology (EDiR).

They are also suitable for residents who want an overview of the various topics relevant to imaging and for those preparing for their national board examinations.

The content of the programme reflects Level I and Level II European Training Curriculum (ETC) learning objectives across a two-year cycle. The sessions are held in close cooperation with the European Board of Radiology (EBR).

Each of the six sessions is led by three lecturers and moderated by one chairman.
**E3 – EUROPEAN DIPLOMA PREP SESSIONS**

**Saturday, March 3, 08:30–10:00, Room F1**

**E3 1323 Cardiac and vascular**  
Chairperson’s introduction  
R. Vliegenthart; Groningen/NL

A. Cardiovascular imaging: the basics  
M. Gutberlet; Leipzig/DE

B. Cardiovascular imaging: valves, endocardium and aorta  
C. Loewe; Vienna/AT

C. Cardiovascular imaging: myocardium and pericardium  
J. Bogaert; Leuven/BE

**Saturday, March 3, 10:30–12:00, Room F1**

**E3 1423 Head and neck**  
Chairperson’s introduction  
M.G. Mack; Munich/DE

A. Temporal bone and skull base  
A. Trojanowska; Lublin/PL

B. Nose, paranasal sinuses and nasopharynx  
C. Czerny; Vienna/AT

C. Oral cavity, oro- and hypopharynx and larynx  
M. Becker; Geneva/CH

**Saturday, March 3, 14:00–15:30, Room F1**

**E3 1523 Gynaecological and obstetrics**  
Chairperson’s introduction  
K. Kinkel; Chêne-Bougeries/CH

A. Imaging of the uterus  
R. Kubik-Huch; Baden/CH

B. Disorders of the adnexa  
T.M. Cunha; Lisbon/PT

C. Fundamentals of foetal imaging  
D. Prayer; Vienna/AT

**Saturday, March 3, 16:00–17:30, Room F1**

**E3 1623 Urogenital**  
Chairperson’s introduction  
R.H. Oyen; Leuven/BE

A. Renal and adrenal imaging  
N. Grenier; Bordeaux/FR

B. Imaging of the ureter and bladder  
M.N. Özmen; Ankara/TR

C. Prostate imaging  
H.C. Thoeny; Berne/CH

**Sunday, March 4, 10:30–12:00, Room F1**

**E3 1823 Paediatric**  
Chairperson’s introduction  
V. Donoghue; Dublin/IE

A. Paediatric neuro imaging  
M.J. Argyropoulou; Ioannina/GR

B. Paediatric chest imaging  
C. Owens; London/UK

C. Paediatric abdominal imaging  
S.G.F. Robben; Maastricht/NL

**Sunday, March 4, 14:00–15:30, Room F1**

**E3 1923 Interventional**  
Chairperson’s introduction  
T. Struffert; Erlangen/DE

A. Basic principles of angiography and image-guided interventions  
T.K. Helmberger; Munich/DE

B. Image-guided interventions in oncology  
J.J. Bilbao; Pamplona/ES

C. Vascular interventions  
J.A. Reekers; Amsterdam/NL
The Beauty of Basic Knowledge programmes focus on knowledge essential to the daily practice of radiology. The format of these sessions reflects the tradition of conventional teaching sessions, in which experienced teachers share their insights into a topic of particular relevance with a group of attendees.

A Beauty of Basic Knowledge session either consists of one 55-minute lecture (plus 5 minutes of discussion) or two 30-minutes lectures. The teaching format is usually case-based, and features some interaction with the attendees.

The content of the sessions is mostly tied to the Level I+II European Training Curriculum (ETC) learning objectives. The Beauty of Basic Knowledge sessions are suited to residents and board-certified radiologists who want to refresh their knowledge of basic topics in imaging and image-guided therapy.
E³ – THE BEAUTY OF BASIC KNOWLEDGE

CARDIOVASCULAR AND INTERVENTIONAL RADIOLOGY

28 Feb
Wednesday, February 28, 12:30–13:30, Room C

E³ 24A  No time to lose: aortic dissection - revisited
Moderator: M. Krokidis; Cambridge/UK
» Acute diagnosis and imaging in aortic dissection [A-077]
  R. Iezzi; Rome/IT
» Endovascular treatment in aortic dissection [A-078]
  J.P. Schäfer; Kiel/DE

1 March
Thursday, March 1, 12:30–13:30, Room C

E³ 24B  Every step counts: imaging and treatment of peripheral arterial disease
Moderator: C. Loewe; Vienna/AT
» State-of-the-art: non-invasive imaging of peripheral arteries [A-278]
  T. Leiner; Utrecht/NL
» Endovascular treatment in peripheral arterial disease [A-279]
  M. Das; Duisburg/DE

2 March
Friday, March 2, 12:30–13:30, Room C

E³ 24C  Open and closed: the role of radiology in management of valvular heart disease
Moderator: M. Gardarsdottir; Reykjavik/IS
» How to approach valvular heart disease using MRI [A-483]
  A. Redheuil; Paris/FR
» What to measure prior to transcatheter aortic valve implantation (TAVI) [A-484]
  R. Salgado; Antwerp/BE

3 March
Saturday, March 3, 12:30–13:30, Room C

E³ 24D  CT of the heart made easy
Moderator: C. Loewe; Vienna/AT
» Cardiovascular risk estimation made easy: CA-scoring [A-718]
  R. Vliegenthart; Groningen/NL
» Non-invasive coronary (CT) angiography made easy [A-719]
  F. Bamberg; Tübingen/DE

4 March
Sunday, March 4, 12:30–13:30, Room C

E³ 24E  The heart of the matter: imaging the myocardium
Moderator: T. Yalynska; Kiev/UA
» MR in ischaemic cardiomyopathies [A-959]
  F. Cademartini; Rotterdam/NL
» MR in non-ischaemic cardiomyopathies [A-960]
  C. Peebles; Southampton/UK

A SURVIVAL GUIDE TO MUSCULOSKELETAL IMAGING

28 Feb
Wednesday, February 28, 12:30–13:30, Room D

E³ 25A  Degenerative disorders
   A. Cotten; Lille/FR

1 March
Thursday, March 1, 12:30–13:30, Room D

E³ 25B  Chronic trauma: spectrum of bone response
   A.H. Karantanas; Iraklion/GR

2 March
Friday, March 2, 12:30–13:30, Room D

E³ 25C  Bone tumours
   K. Wörtler; Munich/DE

3 March
Saturday, March 3, 12:30–13:30, Room D

E³ 25D  Acute trauma: patterns in the peripheral skeleton
   J. Teh; Oxford/UK

4 March
Sunday, March 4, 12:30–13:30, Room D

E³ 25E  Infective/inflammatory disorders
   F.M.H.M. Vanhoenacker; Antwerp/BE
The ECR Academies consist of a series of four to six sessions relevant to a particular area of radiology. This may be a classic organ-based field or a technically oriented area of another field related to radiology, such as management.

Each ECR Academy spans several days, in which the different facets of the area in question are covered by experts in the field. An ECR Academy is a coherent course in which the different sessions complement one another in order to reflect the entirety of the field.

The ECR Academies are particularly suited to general radiologists or radiologists with a subspecialisation.
### CHEST IMAGING

#### Wednesday, February 28, 08:30–10:00, Room M 4

**E3 118** Lung cancer in the era of molecular oncology and immune therapy  
**Chairperson's introduction**  
H. Prosch; Vienna/AT

- A. Lung adenocarcinomas with EGFR mutations  
  M. Lederlin; Rennes/FR

- B. ALK-rearranged lung adenocarcinomas  
  M. Silva; Parma/IT

- C. PD-L1 positive lung tumours  
  O.L. Sedlaczek; Heidelberg/DE

#### Wednesday, February 28, 10:30–12:00, Room M 4

**E3 218** CT of vascular pulmonary diseases  
**Chairperson's introduction**  
J.D. Dodd; Dublin/IE

- A. CT imaging of pulmonary hypertension  
  N.J. Screaton; Cambridge/UK

- B. Evaluating the pulmonary vasculitis  
  E. Castañoer; Sabadell/ES

- C. Rendu-Osler disease  
  S.D. Qanadli; Lausanne/CH

#### Wednesday, February 28, 14:00–15:30, Room M 4

**E3 318** MR imaging of the lungs  
**Chairperson's introduction**  
E.J.R. van Beek; Edinburgh/UK

- A. Diagnosing pulmonary embolism  
  M.-P. Revel; Paris/FR

- B. Evaluating lung neoplasms  
  J. Dinkel; Munich/DE

- C. Evaluating the airways  
  G. Dournes; Bordeaux/FR

#### Thursday, March 1, 10:30–12:00, Room M 4

**E3 618** The heart between the lungs  
**Chairperson's introduction**  
J.E. Wildberger; Maastricht/NL

- A. Cardiomyopathies  
  D.J. Murphy; London/UK

- B. Coronary artery disease  
  M. Williams; Edinburgh/UK

- C. Fat and calcium in the heart  
  F. Pontana; Lille/FR

#### Friday, March 2, 08:30–10:00, Room M 5

**E3 918** Updates on lung cancer management  
**Chairperson's introduction**  
A.R. Larici; Rome/IT

- A. Lung cancer screening  
  M.A. Heuvelmans; Groningen/NL

- B. Lung nodule management  
  A.A. Bankier; Boston, MA/US

- C. Lung cancer staging  
  G. Aviram; Tel Aviv/IL

= Interactive introduction with electronic voting/self assessment
### Scientific Programme

**E³ – ECR ACADEMIES**

**STATE-OF-THE-ART AND ADVANCED MR IMAGING OF THE MUSCULOSKELETAL SYSTEM**

**Thursday, March 1, 14:00–15:30, Room M 4**

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<th>E³ 719</th>
<th><strong>Shoulder</strong></th>
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<tr>
<td><strong>Chairperson’s introduction</strong></td>
<td>[A-288] A.H. Karantanas; Iraklion/GR</td>
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<td>B. Chronic pain</td>
<td>[A-290] P. Omoumi; Lausanne/CH</td>
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**Thursday, March 1, 16:00–17:30, Room M 4**

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<th>E³ 819</th>
<th><strong>Lower extremity</strong></th>
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<td><strong>Chairperson’s introduction</strong></td>
<td>[A-368] C.W.A Pfirrmann; Zurich/CH</td>
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**Friday, March 2, 08:30–10:00, Room M 4**

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<th>E³ 919</th>
<th><strong>Upper extremity</strong></th>
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<td><strong>Chairperson’s introduction</strong></td>
<td>[A-443] M.C. De Jonge; Amsterdam/NL</td>
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**Friday, March 2, 10:30–12:00, Room M 4**

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<tr>
<th>E³ 1019</th>
<th><strong>Knee</strong></th>
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<tr>
<td><strong>Chairperson’s introduction</strong></td>
<td>[A-466] J. Kramer; Linz/AT</td>
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<tr>
<td>A. Post-traumatic</td>
<td>[A-467] A.P. Parkar; Bergen/NO</td>
</tr>
<tr>
<td>B. Chronic pain</td>
<td>[A-468] P. Van Dyck; Antwerp/BE</td>
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<tr>
<td>C. Postoperative</td>
<td>[A-469] P.M. Jungmann; Zurich/CH</td>
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**Friday, March 2, 14:00–15:30, Room M 4**

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<tr>
<th>E³ 1119</th>
<th><strong>Small joints</strong></th>
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<tr>
<td><strong>Chairperson’s introduction</strong></td>
<td>[A-511] M. Zanetti; Zurich/CH</td>
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<tr>
<td>B. Forefoot and midfoot</td>
<td>[A-513] N. Mamisch-Saupe; Zurich/CH</td>
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<tr>
<td>C. Temporomandibular joint</td>
<td>[A-514] G. Andreisek; Münsterlingen/CH</td>
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|= Interactive introduction with electronic voting/self assessment|
**UPDATE ON HEPATOBILIARY IMAGING**

**Wednesday, February 28, 14:00–15:30, Room M 5**

**E3 320** Diffuse liver disease

» Chairperson’s introduction [A-087]
  C. Triantopoulou; Athens/GR

A. Assessment and quantification of fat in NAFLD [A-088]
  M. Ronot; Clichy/FR

B. Congenital diffuse liver diseases and iron overload [A-089]
  M.M. França; Porto/PT

C. Diagnosis and staging of liver fibrosis [A-090]
  L. Martí-Bonmatí; Valencia/ES

**Wednesday, February 28, 16:00–17:30, Room M 5**

**E3 420** Advanced MR techniques and imaging biomarkers

» Chairperson’s introduction [A-164]
  D.-M. Koh; Sutton/UK

A. Diffusion-weighted imaging [A-165]
  N. Papanikolaou; Lisbon/PT

B. MR and US elastography [A-166]
  D.J. Lomas; Cambridge/UK

C. MR contrast agents in liver imaging [A-167]
  M. Karcaaltincaba; Ankara/TR

**Thursday, March 1, 08:30–10:00, Room M 5**

**E3 520** Imaging of HCC

» Chairperson’s introduction [A-241]
  A. Palkó; Szeged/HU

A. CT or MRI for diagnosis and follow-up? [A-242]
  G. Brancatelli; Palermo/IT

B. Early HCC and well-differentiated HCC [A-243]
  C. Ayuso; Barcelona/ES

C. Mimickers and pitfalls [A-244]
  M. Karcaaltincaba; Ankara/TR

**Thursday, March 1, 10:30–12:00, Room M 5**

**E3 620** Characterisation of focal liver lesions

» Chairperson’s introduction [A-260]
  C. Stoupis; Mannedorf/CH

A. Hypervascular lesions [A-261]
  R. Manfredi; Rome/IT

B. Fat-containing lesions [A-262]
  O. Benjaminov; Petach Tikva/IL

C. Fibrotic lesions [A-263]
  V. Vilgrain; Clichy/FR

**Thursday, March 1, 14:00–15:30, Room M 5**

**E3 720** Personalised medicine in liver tumours

» Chairperson’s introduction [A-292]
  B.J. Op de Beeck; Antwerp/BE

A. Focal liver lesions in oncology patient [A-293]
  F. Caseiro Alves; Coimbra/PT

B. Treatment options and strategies for liver tumours [A-294]
  T.J. Helmberger; Munich/DE

C. Assessment of response to treatment [A-295]
  V.J. Goh; London/UK

**Thursday, March 1, 16:00–17:30, Room M 5**

**E3 820** Liver and bile duct pathologies

» Chairperson’s introduction [A-372]
  M. Zins; Paris/FR

A. Inflammatory and infectious disease [A-373]
  A. Arora; Worthing/UK

B. Cholangiocarcinoma: diagnosing and staging [A-374]
  C. Matos; Lisbon/PT

C. Gallbladder pathologies [A-375]
  R. Maksimović; Belgrade/RS

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### E³ – ECR ACADEMIES

#### INTERACTIVE TEACHING SESSIONS FOR YOUNG (AND NOT SO YOUNG) RADIOLOGISTS

#### 28 Feb

**Wednesday, February 28, 08:30–10:00, Room A**

**E³ 121** Emergency radiology I

- **A. Acute aortic syndrome** [A-001]
  H. Alkadhi; Zurich/CH
- **B. Abdominal trauma** [A-002]
  R. Basilico; Chieti/IT

*This session is part of the EuroSafe Imaging campaign.*

**28 Feb**

**Wednesday, February 28, 10:30–12:00, Room A**

**E³ 221** Musculoskeletal radiology: inflammation

- **A. Inflammatory and infections in the soft tissues** [A-061]
  S. Martin; Palma de Mallorca/ES
- **B. Arthropathies** [A-062]
  U. Aydingoz; Ankara/TR

#### 1 March

**Thursday, March 1, 08:30–10:00, Room A**

**E³ 521** Imaging of the skull base

- **A. Non-tumoural pathology of the temporal bone** [A-168]
  B. Ozgen Mocan; Ankara/TR
- **B. Tumours of the skull base** [A-169]
  T. Beale; London/UK

**1 March**

**Thursday, March 1, 10:30–12:00, Room A**

**E³ 621** Basic breast imaging

- **A. Calcifications in mammography** [A-245]
  C.S. Balleyguier; Villejuif/FR
- **B. Asymmetry and architectural distortion** [A-246]
  L.J. Pina Insausti; Pamplona/ES

**1 March**

**Thursday, March 1, 14:00–15:30, Room A**

**E³ 721** Gastrointestinal radiology

- **A. Inflammatory bowel disease** [A-281]
  J. Rimola; Barcelona/ES
- **B. Rectal cancer staging: key findings** [A-282]
  G. Brown; Sutton/UK

**2 March**

**Friday, March 2, 08:30–10:00, Room A**

**E³ 921** Emergency radiology II

- **A. Urinary system trauma** [A-379]
  V. Logager; Copenhagen/DK
- **B. Non-traumatic urinary tract emergencies** [A-380]
  G. Masselli; Rome/IT

**2 March**

**Friday, March 2, 16:00–17:30, Room A**

**E³ 1221** Imaging of the chest

- **A. Fibrosing lung diseases** [A-516]
  F. Molinari; Lille/FR
- **B. Pleural disease** [A-517]
  C. Beigelman; Lausanne/CH

**3 March**

**Saturday, March 3, 08:30–10:00, Room A**

**E³ 1321** Oncologic imaging

- **A. Lung cancer: key signs in the new TNM** [A-603]
  A.R. Larici; Rome/IT
- **B. Incidental findings in oncologic patients** [A-604]
  M.-P. Revel; Paris/FR

**3 March**

**Saturday, March 3, 10:30–12:00, Room A**

**E³ 1421** Brain tumours

- **A. Paediatric brain tumours** [A-682]
  M.I. Argyropoulou; Ioannina/GR
- **B. Adult brain tumours** [A-683]
  P.C. Maly Sundgren; Lund/SE

= Interactive session with electronic voting/self assessment
### E3 – ECR ACADEMIES

#### INTERACTIVE TEACHING SESSIONS FOR YOUNG (AND NOT SO YOUNG) RADIOLOGISTS

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<tr>
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<tbody>
<tr>
<td>3 Mar</td>
<td>14:00–15:30</td>
<td>A</td>
<td>Paediatric radiology for the general radiologist</td>
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<td>A. Fractures in children [A-731] K.J. Johnson; Birmingham/UK</td>
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<td>B. Typical MRI applications in paediatric musculoskeletal imaging [A-732] K. Rosendahl; Bergen/NO</td>
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<td>3 Mar</td>
<td>16:00–17:30</td>
<td>A</td>
<td>Errare humanum est</td>
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<td>A. Errors in chest radiograph [A-805] J. Cáceres; Barcelona/ES</td>
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<tr>
<td>4 Mar</td>
<td>08:30–10:00</td>
<td>A</td>
<td>Cardiac imaging</td>
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<td>A. Grown-ups with congenital heart disease [A-874] A. Taylor; London/UK</td>
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<td>B. Imaging cardiac valves [A-875] R. Salgado; Antwerp/BE</td>
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<td>4 Mar</td>
<td>10:30–12:00</td>
<td>A</td>
<td>Advances in musculoskeletal techniques: whole-body MR</td>
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<td>A. Oncologic application [A-944] F.E. Lecouvet; Brussels/BE</td>
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<td>B. Non-oncologic applications [A-945] M. Faruch; Toulouse/FR</td>
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<td>4 Mar</td>
<td>14:00–15:30</td>
<td>A</td>
<td>Imaging of abdominal tumours</td>
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<td>A. Liver tumours [A-967] T. Denecke; Berlin/DE</td>
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<td>B. Pancreatic tumours [A-968] C. Matos; Lisbon/PT</td>
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#### TIPS AND TRICKS IN PANCREATIC AND GI TRACT IMAGING

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<tr>
<td>3 Mar</td>
<td>08:30–10:00</td>
<td>M 4</td>
<td>New challenges of pancreatitis</td>
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<td>Chairperson’s introduction [A-674] G. Zamboni; Verona/IT</td>
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<td>A. Understanding the Atlanta 2012 classification of acute pancreatitis [A-675] W. Schima; Vienna/AT</td>
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<td>B. Autoimmune pancreatitis and its relatives [A-676] G. Morana; Treviso/IT</td>
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<td>C. Tough clinical cases of cystic pancreatic lesions [A-677] M.A. Bali; Sutton/UK</td>
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<td>A. Staging adenocarcinoma [A-704] N. Kartalis; Stockholm/SE</td>
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<td>B. Neuroendocrine tumours [A-705] R. Manfredi; Rome/IT</td>
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<td>C. Tough clinical cases [A-706] T.C. Lauenstein; Essen/DE</td>
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<td>A. MRI of the anal canal: from normal anatomy to local tumour staging [A-794] C. Hoeffel; Reims/FR</td>
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<td>C. My tough cases [A-796] F. Maccioni; Rome/IT</td>
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<td>3 Mar</td>
<td>16:00–17:30</td>
<td>M 4</td>
<td>Peritoneum and mesentery</td>
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<td>Chairperson’s introduction [A-866] A. Ba-Ssalamah; Vienna/AT</td>
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<td>A. Understanding primary tumours [A-867] C. Dromain; Lausanne/CH</td>
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<td>C. From misty mesentery to mesenteritis [A-869] G.A. Krombach; Giessen/DE</td>
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|= Interactive session with electronic voting/self assessment
|= Interactive introduction with electronic voting/self assessment
The ECR Master Classes focus on continuous professional development and lifelong learning.

The classes are designed for subspecialised radiologists seeking cutting-edge information in their particular fields of interest. They are held by experts in the field and reflect state-of-the-art knowledge, as well as emerging trends.

The ECR Master Classes are offered in cooperation with each of the following subspecialty societies: CIRSE (one on vascular and one on interventional radiology), ESCR, ESER, ESGAR, ESHNR, ESMOFIR, ESNR, ESOI, ESPR, ESSR, ESTI, ESUR, EUSOBI.

Places are allocated on a first-come, first-served basis.
**Scientific Programme**

**ECR 2018**

**Final Programme**

**E3 – ECR MASTER CLASSES**

**Wednesday, February 28, 08:30–10:00, Room F2**

**Oncologic Imaging**

**E3 126**

Novelties in oncologic imaging [LEVEL II]

**Moderator:** C.J. Zech; Basle/CH

**A. Imaging and response assessment of immune-related therapies** [A-027]

P. Brader; Graz/AT

**B. Radiomics: the role of imaging** [A-028]

S. Rizzo; Milan/IT

**C. Imaging-guided liver interventions in oncology** [A-029]

B. Gebauer; Berlin/DE

**Wednesday, February 28, 16:00–17:30, Room M 2**

**Paediatric**

**E3 426**

Juvenile idiopathic arthritis (JIA) [LEVEL II]

**Moderator:** K. Rosendahl; Bergen/NO

**A. Conventional radiography, still a helpful method?** [A-152]

S.C. Shelmerdine; London/UK

**B. Ultrasound for detecting and grading of inflammation in JIA** [A-153]

L. Tanturri de Horatio; Rome/IT

**C. MRI and role of contrast in the assessment of synovitis** [A-154]

L.-S. Ording Müller; Oslo/NO

**Thursday, March 1, 08:30–10:00, Room M 2**

**Musculoskeletal**

**E3 526a**

State-of-the-art imaging of postoperative joints [LEVEL II]

**Moderator:** M.F. Reiser; Munich/DE

**A. Postoperative shoulder** [A-232]

C.W.A Pfirrmann; Zurich/CH

**B. Postoperative knee** [A-233]

E.H.G. Oei; Rotterdam/NL

**C. Postoperative ankle and foot** [A-234]

M.J. Ereno Ealo; Galdacano/ES

**Thursday, March 1, 08:30–10:00, Room M 4**

**Vascular**

**E3 526b**

TEVAR/EVAR: where we are and where we are going [LEVEL II]

**Moderator:** F. Fanelli; Rome/IT

**A. TEVAR** [A-238]

H. Rousseau; Toulouse/FR

**B. EVAR** [A-239]

E. Brountzos; Athens/GR

**C. Post-EVG complication** [A-240]

R. Uberoi; Oxford/UK

**Friday, March 2, 08:30–10:00, Room M 2**

**Head and Neck**

**E3 926**

Distant metastases of head and neck cancer [LEVEL III]

**Moderator:** [A-433]

P.-Y. Marcy; Ollioules/FR

**A. Incidence and prognosis of synchronous cancer or distant metastases from head and neck tumours** [A-434]

A.D. King; Hong Kong/CN

**B. Is morphologic imaging enough to stage patients with head and neck tumours before therapy?** [A-435]

S. Rohde; Dortmund/DE

**C. Is functional imaging necessary to detect distant metastases in head and neck cancers?** [A-436]

R. Maroldi; Brescia/IT

**Friday, March 2, 16:00–17:30, Room X**

**Abdominal and Gastrointestinal**

**E3 1226**

Dual-energy CT of the abdomen: the time is now [LEVEL III]

**Moderator:** P. Vock; Berne/CH

**A. Basic principles and different approaches** [A-533]

L.S. Guimarães; Toronto, ON/CA

**B. Applications for genitourinary system** [A-534]

H. Ringl; Vienna/AT

**C. Applications for abdominal organs** [A-535]

M. Karcaaltincaba; Ankara/TR

**Saturday, March 3, 08:30–10:00, Room O**

**Cardiac**

**E3 1326a**

Cardiac MRI: from sequence to bedside [LEVEL III]

**Moderator:** [A-617]

L. Natale; Rome/IT

**A. 4D flow imaging: how and when can it help?** [A-618]

A.A. Azarine; Paris/FR

**B. Spectroscopy: implications of myocardial metabolism?** [A-619]

H.J. Lamb; Leiden/NL

**C. Feature tracking: what to conclude from strain and torsion?** [A-620]

J. Lotz; Göttingen/DE

**Panel discussion: Is it time to include these MRI techniques in routine practice?**

= Interactive session with electronic voting/self assessment
E³ – ECR MASTER CLASSES

Saturday, March 3, 08:30–10:00, Room M 2

Neuro
E³ 1526b Stroke: emergent large vessel occlusion (ELVO) [LEVEL II]

Moderator: M. Pavia; Brescia/IT
A. Selecting ELVO patients for endovascular therapy [A-666]
T. van der Zijden; Antwerp/BE
B. Advanced thrombectomy techniques [A-667]
O. Jansen; Kiel/DE
C. Is endovascular thrombectomy and medical therapy better than medical therapy alone? [A-668]
S. Bisdas; London/UK

Saturday, March 3, 14:00–15:30, Room C

Chest
E³ 1526a Patterns of pulmonary toxicity [LEVEL II]

Moderator: J.E. Roos; Lucerne/CH
A. Drug-induced lung disease [A-737]
C.M. Schaefer-Prokop; Amersfoort/NL
B. Smoking-related lung disease [A-738]
S.R. Desai; London/UK
C. Inhalation lung injury beyond smoking [A-739]
J.A. Verschakelen; Leuven/BE

Saturday, March 3, 14:00–15:30, Studio 2018

Genitourinary
E³ 1526b Update on functional genitourinary MRI [LEVEL II]

Moderator: M. Studniarek; Gdansk/PL
A. Kidney [A-749]
N. Grenier; Bordeaux/FR
B. Prostate [A-750]
G.M. Villeirs; Ghent/BE
C. Uterus [A-751]
E. Sala; Cambridge/UK

Saturday, March 3, 16:00–17:30, Room M 2

Interventional Radiology
E³ 1626a Interventional radiology in the venous system: vessel and eye opening [LEVEL II]

Moderator: C. Binkert; Winterthur/CH
A. Varicose vein [A-858]
L. Ouzukurt; Istanbul/TR
B. Lower limb acute deep vein thrombosis [A-859]
J. Kettenbach; St. Pölten/AT
C. Lower limb chronic deep vein occlusion [A-860]
R. de Graaf; Maastricht/NL

Saturday, March 3, 16:00–17:30, Room M 3

Molecular Imaging
E³ 1626b Quantitative imaging in oncology [LEVEL II]

» Chairperson’s introduction [A-861]
J. O’Connor; Manchester/UK
A. Intra- and interindividual tumour heterogeneity and the impact for cancer diagnostics [A-862]
M. Eisenblätter; Münster/DE
B. Quantitative image biomarkers for targeted tumour therapies [A-863]
R. García Figueiras; Santiago de Compostela/ES
C. Requirements for quantitative data extraction and analysis [A-864]
H.K. Hahn; Bremen/DE
D. Imaging heterogeneity and genomic variability in ovarian cancer [A-865]
E. Sala; Cambridge/UK

» Panel discussion: What can we quantify and why is it essential?

Sunday, March 4, 08:30–10:00, Room E1

Breast
E³ 1726a The high-risk patient enigma [LEVEL III]

Moderator: F. Kilburn-Toppin; Cambridge/UK
A. Lesions with an elevated risk for breast cancer [A-906]
G. Forrai; Budapest/HU
B. Value of breast MRI. Rate of underestimation and impact on treatment decision: is breast MRI increasing the number of high-risk lesions? [A-907]
R.M. Mann; Nijmegen/NL
C. Can surgery be avoided? [A-908]
S.J. Vinnicombe; Dundee/UK

Sunday, March 4, 08:30–10:00, Room M 5

Emergency Radiology
E³ 1726b Emergencies following tumour therapy [LEVEL III]

» Chairperson’s introduction: The role of imaging in the early detection of complications in oncologic treated patients [A-940]
D.R. Kool; Amsterdam/NL
A. Neuro [A-941]
C. Calli; Izmir/TR
B. Chest [A-942]
H. Prosch; Vienna/AT
C. Abdomen [A-943]
R. Basilico; Chieti/IT

» Panel discussion: What is the impact of complications findings on the further management of oncologic patients?

= Interactive session with electronic voting/self assessment
Accreditation Council in Imaging

Contributing to a unified accreditation system in all European countries.

CME QUICK AND EASY.

For further information go to www.myehr.org or contact us at accreditation@myehr.org.
This year, the Transatlantic Course of the ESR and RSNA (Radiological Society of North America) focuses on ‘Sports Imaging’.

Places for all courses are allocated on a first-come, first-served basis.

Please note that you can only take part in electronic voting via your own device (smartphone, tablet, laptop) by connecting to the WiFi network of the lecture room you are in. Once connected, you will be automatically directed to the voting website. No app required.
<table>
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<tr>
<th>Day</th>
<th>Date</th>
<th>Time</th>
<th>Room</th>
<th>Session Title</th>
<th>Level</th>
<th>Moderators</th>
<th>Presenters</th>
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<tr>
<td></td>
<td>March 3</td>
<td>08:30-10:00</td>
<td>M 5</td>
<td>TC 1328 Upper extremity sports injuries</td>
<td>I</td>
<td>L.W. Bancroft; A.J. Grainger</td>
<td>L. Steinbach; C.W.A. Pfirrmann</td>
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<td>A. Shoulder injuries in the throwing athlete [A-678]</td>
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<td>B. Soft tissue wrist injury in the athlete [A-679]</td>
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<td>C. Interactive case discussion</td>
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<td></td>
<td>March 3</td>
<td>10:30-12:00</td>
<td>M 5</td>
<td>TC 1428 Lower extremity sports injuries</td>
<td>II</td>
<td>L.W. Bancroft; A.J. Grainger</td>
<td>T.T. Miller; A.J. Grainger</td>
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<td>A. Sports-related injuries of the knee: what does the orthopaedic surgeon need to know? [A-707]</td>
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<td>B. Multimodality imaging of foot and ankle injuries in the athlete [A-708]</td>
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<td>C. Interactive case discussion</td>
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<td></td>
<td>March 3</td>
<td>14:00-15:30</td>
<td>M 5</td>
<td>TC 1528 Musculoskeletal interventional procedures</td>
<td>III</td>
<td>L.W. Bancroft; A.J. Grainger</td>
<td>P. Peetrons; A.J. Grainger</td>
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<td>A. Diagnostic and therapeutic injections in the athlete: pearls and pitfalls [A-797]</td>
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<td>B. Injectable, percutaneous tendon fenestration and tenotomy: clinical outcomes and current evidence [A-798]</td>
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<td>C. Interactive case discussion</td>
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<td></td>
<td>March 3</td>
<td>16:00-17:30</td>
<td>M 5</td>
<td>TC 1628 Postoperative imaging of sports injuries</td>
<td>III</td>
<td>L.W. Bancroft; A.J. Grainger</td>
<td>L.W. Bancroft; C. Weidekamm</td>
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<td>A. Postoperative shoulder MRI after instability surgery [A-870]</td>
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<td>B. ACL reconstruction and cartilage repair [A-871]</td>
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<td>C. Interactive case discussion</td>
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= Interactive session with electronic voting/self assessment
The Pros & Cons Sessions will examine controversial topics in a series of moderated sessions. The sessions will be split into one interactive and one non-interactive part.

1 March
Thursday, March 1, 08:30-10:00, Room E1
PS 527  Do we need dynamic contrast enhancement (DCE) in prostate mpMRI?  
» Chairpersons’ introduction  
H.-P. Schlemmer; Heidelberg/DE  [A-204] 
J.J. Fütterer; Nijmegen/NL  [A-205]  
A. Yes we do!  [A-206]  
G.M. Villeirs; Ghent/BE  
B. No we don’t!  [A-207]  
H. Hricak; New York, NY/US  
» Discussion

2 March
Friday, March 2, 16:00-17:30, Room M 4
PS 1227  Gadolinium: image wisely  
Moderators: P.M. Parizel; Antwerp/BE  
A. Rovira-Cañellas; Barcelona/ES  
A. Intracranial gadolinium deposition: update and perspectives  [A-591]  
H.A. Rowley; Madison, WI/US
B. Do we need gadolinium in imaging MS? Pros and cons  
C. Lukas; Bochum/DE  [A-592]  
W. Van Hecke; Antwerp/BE  [A-593]  
C. Do we need gadolinium in imaging vestibular schwannomas? Pros and cons  
B. Verbist; Leiden/NL  [A-594]  
F.B. Pizzini; Verona/IT  [A-595]  
» Discussion on the pros and cons

= Interactive session with electronic voting/self assessment
THE VOICE OF EPOS

PICK UP THE MICROPHONE and be a Star

JOIN US FOR 107 SESSIONS ON FOUR STAGES IN AND AROUND THE ECR ONLINE & EPOS LOUNGE (1st LEVEL) AND THE RADIOGRAPHERS LOUNGE (FOYER K)

myESR.org/epos
The Voice of EPOS™ will again offer a platform for poster authors to present their work in moderated poster sessions to an international audience at ECR 2018.

To strengthen the exchange within the communities and serve a multilingual and international audience, there will be sessions dedicated to a multitude of languages and countries.

Presentations will take place on three stages in the ECR Online & EPOS Lounge from Wednesday to Sunday, and will also be broadcast online via the ECR Live streaming service and recorded for ECR Online.

NEW: ECR 2018 will feature an additional fourth stage dedicated especially to radiographers in the Radiographers Lounge in Foyer K.

Apart from special topic sessions such as Professional Issues and Practice, Education and Training, Image Quality, and Patient Experience, some of the radiographer sessions will also be held and moderated in the presenters’ native languages.
THE VOICE OF EPOS
Stage 1 - EPOS Lounge

28 Feb  Wednesday, February 28, 09:00–10:00
VoE 1  Cardiac
Moderator: B. Mansouri; Algiers/DZ

28 Feb  Wednesday, February 28, 10:00–11:00
VoE 2  Polish
Moderator: T. Popiela; Krakow/PL

28 Feb  Wednesday, February 28, 11:00–12:00
VoE 3  Neuro
Moderator: C. Calli; Izmir/TR

28 Feb  Wednesday, February 28, 12:00–13:00
VoE 4  Russian
Moderator: E. Mershina; Moscow/RU

28 Feb  Wednesday, February 28, 13:00–14:00
VoE 5  Interventional
Moderator: I. Bargellini; Pisa/IT

28 Feb  Wednesday, February 28, 14:00–15:00
VoE 6  Italian
Moderator: I. Bargellini; Pisa/IT

28 Feb  Wednesday, February 28, 15:00–16:00
VoE 7  Chest
Moderator: M. Toepker; Vienna/AT

1 March  Thursday, March 1, 09:00–10:00
VoE 8  Paediatric
Moderator: S. Deftereos; Alexandroupolis/GR

1 March  Thursday, March 1, 10:00–11:00
VoE 9  Italian
Moderator: G. Zamboni; Verona/IT

1 March  Thursday, March 1, 11:00–12:00
VoE 10  Genitourinary
Moderator: T. El Diasty; Mansoura/EG

1 March  Thursday, March 1, 12:00–13:00
VoE 11  Arabic (Egypt)
Moderator: T. El Diasty; Mansoura/EG

1 March  Thursday, March 1, 13:00–14:00
VoE 12  Radioprotection/Radiation Dose
Moderator: J.T. Heverhagen; Berne/CH

1 March  Thursday, March 1, 14:00–15:00
VoE 13  Latin America (Portuguese)
Moderator: V.F. Muglia; Ribeirao Preto/BR

1 March  Thursday, March 1, 15:00–16:00
VoE 14  Head and Neck
Moderator: D. Haba; Iasi/RO
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<td>09:00–10:00</td>
<td>VoE 15 Pediatric</td>
<td>E. Blumfield; New York, NY/US</td>
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<td>Friday, 2</td>
<td>10:00–11:00</td>
<td>VoE 16 Japanese</td>
<td>Y.O. Tanaka; Tokyo/JP</td>
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<td>Friday, 2</td>
<td>11:00–12:00</td>
<td>VoE 17 Computer Applications</td>
<td>E. Kotter; Freiburg/DE</td>
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<td>Friday, 2</td>
<td>12:00–13:00</td>
<td>VoE 18 Korean</td>
<td>J.B. Seo; Seoul/KR</td>
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<td>Friday, 2</td>
<td>13:00–14:00</td>
<td>VoE 19 Musculoskeletal</td>
<td>J.L. del Cura Rodriguez; Bilbao/ES</td>
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<td>Friday, 2</td>
<td>14:00–15:00</td>
<td>VoE 20 French</td>
<td>S. Nougaret; St. Clement de Riviere/FR</td>
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<td>Friday, 2</td>
<td>15:00–16:00</td>
<td>VoE 21 Breast</td>
<td>P. Wunderlich; Radebeul/DE</td>
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<td>Saturday, 3</td>
<td>09:00–10:00</td>
<td>VoE 22 Oncology</td>
<td>S. Freeman; Cambridge/UK</td>
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<td>Saturday, 3</td>
<td>10:00–11:00</td>
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<td>A. Mahnken; Marburg/DE</td>
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<td>Saturday, 3</td>
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<td>VoE 24 EuroSafe Imaging</td>
<td>G. Frija; Paris/FR</td>
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<td>VoE 25 Spain</td>
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<td>Saturday, 3</td>
<td>13:00–14:00</td>
<td>VoE 26 Interventional</td>
<td>T. El Diasty; Mansoura/EG</td>
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<td>Saturday, 3</td>
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<td>VoE 27 Latin America (Spanish)</td>
<td>P. Tapia Puente Arnao; Lima/PE</td>
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<td>Sunday, 4</td>
<td>09:00–10:00</td>
<td>VoE 28 Emergency</td>
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<td>Sunday, 4</td>
<td>10:00–11:00</td>
<td>VoE 29 Head and Neck</td>
<td>M. Palm; Maastricht/NL</td>
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<td>Sunday, 4</td>
<td>11:00–12:00</td>
<td>VoE 30 Chest</td>
<td>L. Ebner; Berne/CH</td>
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THE VOICE OF EPOS
Stage 2 - EPOS Lounge

28 Feb  Wednesday, February 28, 09:00–10:00
VoE 31  Vascular
Moderator: S. Deftereos; Alexandroupolis/GR

28 Feb  Wednesday, February 28, 10:00–11:00
VoE 32  Paediatric
Moderator: B. Ahuja; Agra/IN

28 Feb  Wednesday, February 28, 11:00–12:00
VoE 33  Greek
Moderator: G. Kapsas; Alexandroupolis/GR

28 Feb  Wednesday, February 28, 12:00–13:00
VoE 34  Chinese
Moderator: V. Chong; Singapore/SG

28 Feb  Wednesday, February 28, 13:00–14:00
VoE 35  Italian
Moderator: A. Barile; L’Aquila/IT

28 Feb  Wednesday, February 28, 14:00–15:00
VoE 36  Computer Applications
Moderator: D. Wormanns; Berlin/DE

28 Feb  Wednesday, February 28, 15:00–16:00
VoE 37  Latin America (Spanish)
Moderator: M.A. Pinochet; Santiago/CL

1 March  Thursday, March 1, 09:00–10:00
VoE 38  Neuro
Moderator: G. Kapsas; Alexandroupolis/GR

1 March  Thursday, March 1, 10:00–11:00
VoE 39  Physics in Radiology
Moderator: J.T. Heverhagen; Berne/CH

1 March  Thursday, March 1, 11:00–12:00
VoE 40  German
Moderator: P. Wunderlich; Radebeul/DE

1 March  Thursday, March 1, 12:00–13:00
VoE 41  Molecular Imaging
Moderator: F. Frauscher; Innsbruck/AT

1 March  Thursday, March 1, 13:00–14:00
VoE 42  Chinese
Moderator: V. Chong; Singapore/SG

1 March  Thursday, March 1, 14:00–15:00
VoE 43  Interventional
Moderator: T. Popiela; Krakow/PL

1 March  Thursday, March 1, 15:00–16:00
VoE 44  Turkish
Moderator: C. Calli; Izmir/TR
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<td>VoE 45 Genitourinary</td>
<td>F. Frauscher; Innsbruck/AT</td>
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<td>2 Mar</td>
<td>Fri, 10:00–11:00</td>
<td>VoE 46 Oncology</td>
<td>S. Nougaret; St. Clement de Riviere/FR</td>
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<td>2 Mar</td>
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<td>VoE 47 Arabic (N. Africa)</td>
<td>B. Mansouri; Algiers/DZ</td>
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<td>2 Mar</td>
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<td>VoE 48 Radioprotection/Radiation Dose</td>
<td>D. Tack; Braine-L’Alleud/BE</td>
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<td>2 Mar</td>
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<td>VoE 49 Latin America (Spanish)</td>
<td>M.A. Pinochet; Santiago/CL</td>
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<td>VoE 50 Emergency</td>
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<td>3 Mar</td>
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<td>VoE 52 Physics in Radiology</td>
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<td>VoE 53 Cardiac</td>
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<td>3 Mar</td>
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<td>VoE 54 Nordic</td>
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<td>3 Mar</td>
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<td>S. Delorme; Heidelberg/DE</td>
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<td>VoE 58 Vascular</td>
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<td>4 Mar</td>
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<td>VoE 59 Chest</td>
<td>S. Delorme; Heidelberg/DE</td>
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<td>4 Mar</td>
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<td>VoE 60 Genitourinary</td>
<td>L. Pallwein-Prettner; Steyr/AT</td>
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THE VOICE OF EPOS
Stage 3 - EPOS Lounge

28 Feb
Wednesday, February 28, 09:00–10:00
VoE 61 Spain
Moderator: A. Rovira-Canellas; Barcelona/ES

28 Feb
Wednesday, February 28, 10:00–11:00
VoE 62 Musculoskeletal
Moderator: A. Barile; L’Aquila/IT

28 Feb
Wednesday, February 28, 11:00–12:00
VoE 63 Japanese
Moderator: Y.O. Tanaka; Tokyo/JP

28 Feb
Wednesday, February 28, 12:00–13:00
VoE 64 Neuro
Moderator: P. Sijens; Groningen/NL

28 Feb
Wednesday, February 28, 13:00–14:00
VoE 65 Arabic (Middle East)
Moderator: D. Husseiny Salama; Cairo/EG

28 Feb
Wednesday, February 28, 14:00–15:00
VoE 66 Musculoskeletal
Moderator: E. Blumfield; New York, NY/US

28 Feb
Wednesday, February 28, 15:00–16:00
VoE 67 Romanian
Moderator: I.G. Lupescu; Bucharest/RO

1 March
Thursday, March 1, 09:00–10:00
VoE 68 Korean
Moderator: J.M. Goo; Seoul/KR

1 March
Thursday, March 1, 10:00–11:00
VoE 69 Breast
Moderator: P. Sijens; Groningen/NL

1 March
Thursday, March 1, 11:00–12:00
VoE 70 Japanese
Moderator: T. Aoki; Kitakyushu/JP

1 March
Thursday, March 1, 12:00–13:00
VoE 71 Abdominal Viscera
Moderator: E. Kotter; Freiburg/DE

1 March
Thursday, March 1, 13:00–14:00
VoE 72 Russian
Moderator: M. Vishnyakova; Moscow/RU

1 March
Thursday, March 1, 14:00–15:00
VoE 73 Musculoskeletal
Moderator: J.L. del Cura Rodriguez; Bilbao/ES

1 March
Thursday, March 1, 15:00–16:00
VoE 74 India
Moderator: B. Ahuja; Agra/IN
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<td>VoE 75 Japanese</td>
<td>Japanese</td>
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<td>VoE 76 Emergency</td>
<td>Emergency</td>
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<td>VoE 77 Latin America (Portuguese)</td>
<td>Latin America (Portuguese)</td>
<td>V.F. Muglia; Ribeirao Preto/BR</td>
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<td>VoE 78 Abdominal Viscera</td>
<td>Abdominal Viscera</td>
<td>S. Freeman; Cambridge/UK</td>
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<td>VoE 79 Korean</td>
<td>Korean</td>
<td>J.M. Goo; Seoul/KR</td>
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<td>14:00–15:00</td>
<td>VoE 80 GI Tract</td>
<td>GI Tract</td>
<td>M. Torkzad; Godalming/UK</td>
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<td><strong>2 Mar</strong></td>
<td><strong>Friday, March 2</strong></td>
<td>VoE 81 Spain</td>
<td>Spain</td>
<td>G. Bastarrika Aleman; Pamplona/ES</td>
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<td><strong>3 Mar</strong></td>
<td><strong>Saturday, March 3</strong></td>
<td>VoE 82 Latin America (Spanish)</td>
<td>Latin America (Spanish)</td>
<td>P. Tapia Puente Arnao; Lima/PE</td>
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<td>10:00–11:00</td>
<td>VoE 83 Neuro</td>
<td>Neuro</td>
<td>D. Haba; Iasi/RO</td>
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<td>11:00–12:00</td>
<td>VoE 84 Portugal</td>
<td>Portugal</td>
<td>M.L. Biscoito; Lisbon/PT</td>
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<td>12:00–13:00</td>
<td>VoE 85 Head and Neck</td>
<td>Head and Neck</td>
<td>M. Palm; Maastricht/NL</td>
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<td>13:00–14:00</td>
<td>VoE 86 Portugal</td>
<td>Portugal</td>
<td>M.L. Biscoito; Lisbon/PT</td>
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<tr>
<td></td>
<td>14:00–15:00</td>
<td>VoE 87 Breast</td>
<td>Breast</td>
<td>E. Fleury; Sao Paulo/BR</td>
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<td><strong>3 Mar</strong></td>
<td><strong>Saturday, March 3</strong></td>
<td>VoE 88 Chest</td>
<td>Chest</td>
<td>M. Toepker; Vienna/AT</td>
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<td><strong>4 Mar</strong></td>
<td><strong>Sunday, March 4</strong></td>
<td>VoE 89 Abdominal Viscera</td>
<td>Abdominal Viscera</td>
<td>I.G. Lupescu; Bucharest/RO</td>
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<td></td>
<td>10:00–11:00</td>
<td>VoE 90 Cardiac</td>
<td>Cardiac</td>
<td>M. Toepker; Vienna/AT</td>
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## THE VOICE OF EPOS - RADIOGRAPHERS

### Stage 4 - Foyer K

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<td>Feb 28</td>
<td>Wednesday, February 28, 10:00–11:00</td>
<td>VoE 91 Professional issues &amp; practice</td>
<td>Thursday, March 1, 13:00–14:00</td>
<td>VoE 100 Korean</td>
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<td>Moderator: A. England; Manchester/UK</td>
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<td>Moderator: B. Na; Seoul/KR</td>
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<td>Feb 28</td>
<td>Wednesday, February 28, 11:00–12:00</td>
<td>VoE 92 Radiological modalities</td>
<td>Thursday, March 1, 14:00–15:00</td>
<td>VoE 101 Education and training</td>
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<td>Moderator: F. Zarb; Msida/MT</td>
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<td>Moderator: S. Foley; Dublin/IE</td>
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<td>Feb 28</td>
<td>Wednesday, February 28, 12:00–13:00</td>
<td>VoE 93 MRI</td>
<td>Thursday, March 1, 15:00–16:00</td>
<td>VoE 102 Italian</td>
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<td>Moderator: D. Catania; Milano/IT</td>
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<td>Feb 28</td>
<td>Wednesday, February 28, 13:00–14:00</td>
<td>VoE 94 Japanese</td>
<td>Friday, March 2, 10:00–11:00</td>
<td>VoE 103 Patient experience &amp; safety</td>
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<td>Moderator: F. Washizuka; Tokyo/JP</td>
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<td>Moderator: J. Santos; Coimbra/PT</td>
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<tr>
<td>Feb 28</td>
<td>Wednesday, February 28, 14:00–15:00</td>
<td>VoE 95 Research</td>
<td>Friday, March 2, 11:00–12:00</td>
<td>VoE 104 Professional issues &amp; practice</td>
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<td>Moderator: L. Lanca; Lisbon/PT</td>
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<td>Feb 28</td>
<td>Wednesday, February 28, 15:00–16:00</td>
<td>VoE 96 Portugal</td>
<td>Friday, March 2, 12:00–13:00</td>
<td>VoE 105 Japanese</td>
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<td>Moderator: L.P.V. Ribeiro; Parchal/PT</td>
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<td>March 1</td>
<td>Thursday, March 1, 10:00–11:00</td>
<td>VoE 97 CT</td>
<td>Friday, March 2, 13:00–14:00</td>
<td>VoE 106 Radiation protection</td>
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<td>Moderator: L.P.V. Ribeiro; Parchal/PT</td>
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<td>March 1</td>
<td>Thursday, March 1, 11:00–12:00</td>
<td>VoE 98 Nordic</td>
<td>Friday, March 2, 14:00–15:00</td>
<td>VoE 107 Portugal</td>
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<td>Moderator: G.G. Waade; Oslo/NO</td>
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<td>Moderator: L. Lanca; Lisbon/PT</td>
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<td>Thursday, March 1, 12:00–13:00</td>
<td>VoE 99 Professional issues &amp; practice</td>
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<td>Moderator: J.M. Grehan; Dublin/IE</td>
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Refresher Courses, as the name suggests, aim to refresh knowledge, reviewing and updating the more basic subjects for those who have not kept up to speed with certain developments, or who just need a reminder – something of interest not only to young radiologists but also experienced doctors.

The length of each course is 90 minutes (classic Refresher Course: three parts of 30 minutes each, including the introduction and time for discussion; integrated Refresher Course: three parts of 23 minutes each, leaving enough time for the introduction by the chairpersons and the panel discussion).

The course will be given by two or three lecturers and led by one or two moderator(s) on a defined subject of clinical imaging, imaging technique, interventional radiology and related subjects.

Accepted papers for oral presentation are presented in the Scientific Sessions.

Places are allocated on a first-come, first-served basis.

The authors of the best scientific papers will be presented with a certificate and given free ECR 2018 registration.

The award will be assigned to the best paper presentation of each topic based on the evaluation by session moderators and subcommittee members. Selection criteria comprise quality of presentation, scientific content and overall impression of the performance.

The award winners will be informed after the congress and will be published on the ESR website.
**REFRESHER COURSES / SCIENTIFIC SESSIONS**

### Abdominal and Gastrointestinal

#### February 28

**Wednesday, February 28, 08:30–10:00, Room B**

**RC 101  GI bleeding: how to solve the problem?**

- **Chairperson’s introduction**  [A-003]
  S. Wirth; Munich/DE
- **A. Acute GI bleeding**  [A-004]
  G.H. Mostbeck; Vienna/AT
- **B. Occult and overt GI bleeding: the role of radiology**  [A-005]
  J. Brito; Portimão/PT
- **C. When is the interventional radiologist needed?**  [A-006]
  D.K. Tsetis; Iraklion/GR

- **Panel discussion: Guidelines for management of GI bleeding and real life: why are they different?**

#### February 28

**Wednesday, February 28, 10:30–12:00, Room B**

**SS 201a  Multiparametric liver imaging**  [B-0001 – B-0010]

- **Moderators:**  A. Filippone; Chieti/IT
  S. Ichikawa; Chuo-shi, Yamanashi/JP

- **Keynote Lecture**  [K-01]
  D. Regge; Turin/IT

#### February 28

**Wednesday, February 28, 14:00–15:30, Room B**

**SS 301a  Detection and staging of HCC**  [B-0190 – B-0200]

- **Moderators:**  T. Denecke; Berlin/DE
  G. D’Ippolito; Sao Paulo/BR

#### February 28

**Wednesday, February 28, 16:00–17:30, Room B**

**RC 401  Imaging of the complicated postoperative abdomen**

- **Chairperson’s introduction**  [A-095]
  C.J. Zech; Basle/CH
- **A. Liver**  [A-096]
  C. Ayuso; Barcelona/ES
- **B. Pancreas**  [A-097]
  R.M. Gore; Evanston, IL/US
- **C. Bowel**  [A-098]
  D.J.M. Tolan; Leeds/UK

- **Panel discussion: Tips and tricks for my routine clinical practice**

#### March 1

**Thursday, March 1, 10:30–12:00, Room B**

**SS 601a  Innovations in hepatobiliary imaging**  [B-0422 – B-0432]

- **Moderators:**  B. Kaltenbach; Frankfurt a. Main/DE
  J.M. Lee; Seoul/KR

#### March 1

**Thursday, March 1, 10:30–12:00, Room F2**

**SS 601b  Colorectal imaging: CTC and beyond**  [B-0519 – B-0528]

- **Moderators:**  V. Cappendijk; ’s Hertogenbosch/NL
  D. Ramos-Andrade; Coimbra/PT

- **Keynote Lecture**  [K-11]
  T. Mang; Vienna/AT

#### March 1

**Thursday, March 1, 14:00–15:30, Room B**

**SS 701a  New developments in MRI of the liver**  [B-0601 – B-0611]

- **Moderators:**  T. Bader; Vienna/AT
  I.L. Gubskiy; Moscow/RU

#### March 1

**Thursday, March 1, 14:00–15:30, Room F2**

**SS 701b  Solving challenges in upper GI imaging**  [B-0708 – B-0718]

- **Moderators:**  M. Radzina; Riga/LV
  S. Schmidt Kobbe; Lausanne/CH
**Abdominal and Gastrointestinal Sessions**

**Friday, March 2, 08:30–10:00, Room B**
**RC 901** Imaging of benign liver lesions: still difficult?  
» Chairperson's introduction  
L. Martí-Bonmatí; Valencia/ES  
A. Hepatic cysts: always simple?  
I. Santiago; Lisbon/PT  
B. Liver haemangiomas and mimickers  
P.R. Ros; Cleveland, OH/US  
C. FNH or adenoma?  
A. Ba-Ssalamah; Vienna/AT  
» Panel discussion: What imaging strategy for my routine clinical practice?

**Friday, March 2, 10:30–12:00, Room A**
**SS 1001a** Advances in hepatobiliary CT and MRI  
[B-0834 – B-0844]  
Moderators: F. Agnello; Palermo/IT  
B.I. Choi; Seoul/KR

**Friday, March 2, 10:30–12:00, Room C**
**SS 1001b** Rectal cancer: old problems, new tools  
[B-0846 – B-0855]  
Moderators: L. Curvo-Semedo; Coimbra/PT  
A. Plumb; London/UK

**Saturday, March 3, 08:30–10:00, Room B**
**RC 1301** Difficult challenges in imaging the acute abdomen  
Moderator: S.K. Puri; New Delhi/IN  
A. Perforation of the GI tract  
V. Maniatis; Aabenraa/DK  
B. Bowel obstruction  
A.J.B.S. Madureira; Porto/PT  
C. Acute biliary conditions  
C.D. Becker; Geneva/CH

**Saturday, March 3, 16:00–17:30, Room B**
**RC 1601** Tumour response assessment in abdominal imaging  
Moderator: S.M. Ertürk; Istanbul/TR  
A. Colorectal liver metastases  
S.K. Venkatesh; Rochester, MN/US  
B. Rectal carcinoma  
M.J. Lahaye; Amsterdam/NL  
C. Pancreatic adenocarcinoma  
M. Zins; Paris/FR

**Sunday, March 4, 08:30–10:00, Room B**
**RC 1701** Abdominal MRI: from standard to advanced protocols  
» Chairperson's introduction  
F. Caseiro Alves; Coimbra/PT  
A. Suspected pancreatic tumour  
R. Manfredi; Rome/IT  
B. Inflammatory bowel disease  
S.A. Taylor; London/UK  
C. Pelvic floor disorder  
D. Weishaupt; Zurich/CH  
» Panel discussion: How to create an efficient MR protocol in abdominal disease

**Sunday, March 4, 10:30–12:00, Room C**
**SS 1801** Liver: beyond morphology  
[B-1315 – B-1325]  
Moderators: P.A. Bonaffini; Monza/IT  
N. Elmas; Izmir/TR

**Sunday, March 4, 14:00–15:30, Room B**
**SS 1901a** New development in CT of the liver  
[B-1506 – B-1516]  
Moderators: H. Ringl; Vienna/AT  
G. Tardaguila de la Fuente; Vigo/ES

**Sunday, March 4, 14:00–15:30, Room C**
**SS 1901b** Imaging of cystic and solid pancreatic lesions  
[B-1517 – B-1527]  
Moderators: N.N.  
N.N.

**Sunday, March 4, 14:00–15:30, Room X**
**SS 1901c** Inflammatory bowel disease: what next?  
[B-1528 – B-1538]  
Moderators: S. Kinner; Essen/DE  
N.N.
Breast

28 Feb Wednesday, February 28, 10:30–12:00, Room E1
SS 202a Digital breast tomosynthesis (DBT) [B-0076 - B-0085]
Moderators: S. Zackrisson; Malmö/SE, N.N.
Keynote Lecture [K-03] G. Forrai; Budapest/HU

28 Feb Wednesday, February 28, 10:30–12:00, Room F2
SS 202b Challenging topics in breast imaging [B-0097 - B-0107]
Moderators: A. Frigerio; Turin/IT, J. Tanner; Cambridge/UK

28 Feb Wednesday, February 28, 14:00–15:30, Room E1
SS 302 Breast ultrasound [B-0266 - B-0276]
Moderators: G. Esen; Istanbul/TR, M.A. Marino; Messina/IT

1 March Thursday, March 1, 08:30–10:00, Room C
RC 502 New mammography: tomosynthesis and future techniques [A-174]
Chairperson’s introduction [A-174] E.M. Fallenberg; Berlin/DE
Should we abandon 2D mammography? [A-175] S. Zackrisson; Malmö/SE
Clinical validation of tomosynthesis and results in the last 10 years: where do we stand? [A-176] P. Skaane; Oslo/NO
The future of mammography: my predictions [A-177] E. Giannotti; Nottingham/UK
Panel discussion: Mammography and/or tomosynthesis: where will we stand in 10 years?

1 March Thursday, March 1, 10:30–12:00, Room E1
SS 602 Breast MR/PET and PET/CT [B-0497 - B-0507]
Moderators: I.-A. Gheonea; Craiova/RO, C.K. Kuhl; Aachen/DE

1 March Thursday, March 1, 14:00–15:30, Room E1
SS 702 Breast screening [B-0675 - B-0685]
Moderators: C. Colin; Pierre-Benite/FR, N.A. Healy; Dublin/IE

2 March Friday, March 2, 08:30–10:00, Room E1
RC 902 Minimally-invasive local treatment of breast cancer: the time is now [A-404]
Chairperson’s introduction [A-116] F.J. Gilbert; Cambridge/UK
Screening with mammography only [A-117] R.M. Pijnappel; Utrecht/NL
Screening with mammography and ultrasound [A-118] T.H. Helbich; Vienna/AT
Screening with tomosynthesis [A-119] U. Bick; Berlin/DE
Panel discussion: How can we overcome resistance of clinical partner specialties to refer eligible women to radiology?

2 March Friday, March 2, 10:30–12:00, Room E1
SS 1002 Breast MRI [B-0910 - B-0919]
Moderators: G. Forrai; Budapest/HU, F. Kilburn-Toppin; Cambridge/UK

2 March Friday, March 2, 16:00–17:30, Room E1
RC 1202 MRI for early detection, staging and management of breast cancer [A-553]
Preoperative staging with MRI: did the MIPA trial solve all issues? [A-554] F. Sardanelli; San Donato Milanese/IT
Screening with abbreviated protocols [A-556] C.K. Kuhl; Aachen/DE
Panel discussion: Why are some recommendations not adopted and how can we change practice?
REFRESHER COURSES / SCIENTIFIC SESSIONS

**Cardiac**

**Wednesday, February 28, 10:30–12:00, Room M 1**

**SS 203** All about TAVI: pre- and post-procedural assessment

Moderators: C. Herzog; Munich/DE
N.N.

» Keynote Lecture [K-04]
M. Gardarsdottir; Reykjavik/IS

**Wednesday, February 28, 14:00–15:30, Room M 1**

**SS 303** Cardiac imaging in metabolic disease

Moderators: A. de Roos; Leiden/NL
E. Pershina; Moscow/RU

**March 1, Thursday, 08:30–10:00, Room N**

**RC 503** From diagnosis to prognosis: how does cardiac imaging affect patient outcome?

Moderator: U. Reiter; Graz/AT

A. In myocarditis [A-193]
M. Francone; Rome/IT

B. In non-ischaemic cardiomyopathy [A-194]
A. Jacquier; Marseille/FR

C. In coronary artery disease [A-195]
R. Salgado; Antwerp/BE

**March 1, Thursday, 10:30–12:00, Room M 1**

**SS 603** Update on large trials, registry and adverse event assessment

Moderators: C.D. Claussen; Tübingen/DE
P. Toia; Palermo/IT

**March 1, Thursday, 14:00–15:30, Room M 1**

**SS 703** New CT protocols to assess coronary artery and myocardium

Moderators: F. Francone; Rome/IT
C.L. Schlett; Heidelberg/DE

**March 3, Saturday, 08:30–10:00, Room E1**

**RC 1302** Rethinking ductal carcinoma in situ (DCIS)

Moderator: C. Van Ongeval; Leuven/BE

A. New radiologic-pathologic knowledge on DCIS [A-633]
A. Frigerio; Turin/IT

B. Diagnosing DCIS [A-634]
S. Schrading; Aachen/DE

C. Reducing overtreatment of DCIS [A-635]
M.G. Wallis; Cambridge/UK

**March 3, Saturday, 10:30–12:00, Room E1**

**SS 1402a** B3 lesions

[B-1086 – B-1096]

Moderators: P. Clauser; Vienna/AT
V. Lehotska; Bratislava/SK

**March 4, Sunday, 08:30–10:00, Room E1**

**SS 1802a** Image-guided biopsy/treatment

[B-1388 – B-1398]

Moderators: G. Ivanac; Zagreb/HR
S. Perez Rodrigo; Madrid/ES

**March 4, Sunday, 10:30–12:00, Room F2**

**SS 1802b** Contrast-enhanced mammography and phase-contrast CT

[B-1409 – B-1419]

Moderators: O. Abeyakoon; Cambridge/UK
A. Vourtsis; Athens/GR

**March 4, Sunday, 14:00–15:30, Room F2**

**SS 1902a** Risk-based screening

[B-1604 – B-1614]

Moderators: L.A. Carbonaro; San Donato Milanese/IT
D. Dijlas-Ivanovic; Sremska Kamenica/RS

**March 4, Sunday, 14:00–15:30, Room G**

**SS 1902b** AI and CAD in breast imaging

[B-1627 – B-1636]

Moderators: J. van Zeist; Nijmegen/NL
S.J. Vinnicombe; Dundee/UK

**March 3, Saturday, 10:30–12:00, Room E1**

**SS 1402b** DWI of the breast

[B-1108 – B-1118]

Moderators: P.A.T. Baltzer; Vienna/AT
I. Thomassin-Naggara; Paris/FR

**March 4, Sunday, 10:30–12:00, Room F2**

**SS 1802a** Image-guided biopsy/treatment

[B-1388 – B-1398]

Moderators: G. Ivanac; Zagreb/HR
S. Perez Rodrigo; Madrid/ES

**March 4, Sunday, 10:30–12:00, Room F2**

**SS 1802a** Contrast-enhanced mammography and phase-contrast CT

[B-1409 – B-1419]

Moderators: O. Abeyakoon; Cambridge/UK
A. Vourtsis; Athens/GR

**March 4, Sunday, 14:00–15:30, Room F2**

**SS 1902a** Risk-based screening

[B-1604 – B-1614]

Moderators: L.A. Carbonaro; San Donato Milanese/IT
D. Dijlas-Ivanovic; Sremska Kamenica/RS

**March 4, Sunday, 14:00–15:30, Room G**

**SS 1902b** AI and CAD in breast imaging

[B-1627 – B-1636]

Moderators: J. van Zeist; Nijmegen/NL
S.J. Vinnicombe; Dundee/UK

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**SS 1402a** B3 lesions

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**SS 1902b** AI and CAD in breast imaging

[B-1627 – B-1636]

Moderators: J. van Zeist; Nijmegen/NL
S.J. Vinnicombe; Dundee/UK
REFRESHER COURSES / SCIENTIFIC SESSIONS

Cardiac

2 March  
**Friday, March 2, 08:30–10:00, Room N**

**RC 903** Novel ways to characterise myocardial tissue: T1 and T2 mapping  
**Moderator:** L.P. Lawler; Dublin/IE

A. **T1 mapping: technical considerations**  
M.R. Makowski; Berlin/DE

B. **T2 mapping: technical considerations**  
C. Tessa; Lido di Camaiore/IT

C. **Clinical use of T1 and T2 mapping**  
J. Bremerich; Basle/CH

2 March  
**Friday, March 2, 10:30–12:00, Room M 1**

**SS 1003** Myocardial tissue characterisation: mapping, texture analysis and spectral CT  
**[B-0973 – B-0983]**

**Moderators:** L. Musayeva; Baku/AZ  
O. Stukalova; Moscow/RU

3 March  
**Saturday, March 3, 10:30–12:00, Room M 1**

**SS 1403** Myocardial MRI: perfusion, tissue tracking and fibrosis  
**[B-1151 – B-1160]**

**Moderators:** F. Secchi; Milan/IT  
E.J.R. van Beek; Edinburgh/UK

» **Keynote Lecture**  
R. Vliegenthart; Groningen/NL

» **Chairperson's introduction**  
A. **MRI**  
J. Bogaert; Leuven/BE

B. **Hybrid imaging**  
O. Ratib; Geneva/CH

C. **CT**  
F. Bamberg; Tübingen/DE

» **Panel discussion: What imaging test in which patient?**

3 March  
**Saturday, March 3, 14:00–15:30, Room M 1**

**SS 1503** Children and 3D printing  
**[B-1222 – B-1232]**

**Moderators:** G. Bastarrika; Pamplona/ES  
T. Yalynska; Kiev/UA

3 March  
**Saturday, March 3, 16:00–17:30, Room N**

**RC 1603** Coronary CT angiography: how to start practice, perform and evaluate the exam?  
**LEVEL I**

**Moderator:** M. Hrabak Paar; Zagreb/HR

A. **Beautiful cases from clinical practice: coronary arteries**  
S. Feger; Berlin/DE

B. **Staff training and technical requirements**  
S. Harden; Southampton/UK

C. **Beautiful cases from clinical practice: stents and bypasses**  
G. Bastarrika; Pamplona/ES

4 March  
**Sunday, March 4, 10:30–12:00, Room M 1**

**SS 1803** Deep learning in coronary and myocardium CT  
**[B-1453 – B-1463]**

**Moderators:** V.E. Sinitsyn; Moscow/RU  
N.N.

4 March  
**Sunday, March 4, 14:00–15:30, Room M 1**

**SS 1903** Cardiac imaging: from diagnosis to prognosis  
**[B-1648 – B-1658]**

**Moderators:** F. Cademartiri; Rotterdam/NL  
B. Dubourg; Rouen/FR
Chest

**Thursday, March 1, 14:00-15:30, Room O**

**SS 704** CT dose reduction: technique and applications in chest

*LEVEL II*

Moderators: J. Biederer; Groß-Gerau/DE
A. Nair; London/UK

» Keynote Lecture [K-13]
D. Tack; Baudour/BE

**Thursday, March 1, 16:00-17:30, Room C**

**RC 804** Chronic obstructive pulmonary disease (COPD)

*LEVEL II*

» Chairperson's introduction [A-304]
K. Irion; Manchester/UK

A. CT phenotyping and visual assessment [A-305]
P.A. Grenier; Paris/FR

B. Quantitative imaging biomarkers [A-306]
J.B. Seo; Seoul/KR

C. Is there a role for MRI? [A-307]
B.J. Jobst; Heidelberg/DE

» Panel discussion: How is imaging currently used in COPD patient management?

**Wednesday, February 28, 08:30-10:00, Room C**

**RC 104** When and how to use perfusion imaging in pulmonary vascular and airway disease?

*LEVEL II*

Moderator: C.J. Herold; Vienna/AT

A. CT [A-007]
M. Rémy-Jardin; Lille/FR

B. MRI [A-008]
M.O. Wielpütz; Heidelberg/DE

C. Nuclear medicine and hybrid imaging [A-009]
E.J.R. van Beek; Edinburgh/UK

**Wednesday, February 28, 10:30-12:00, Room O**

**SS 204** COPD and infiltrative lung diseases

*LEVEL II*

[B-0043 – B-0053]

Moderators: P.A. Grenier; Paris/FR
C. Romei; Pisa/IT

**Wednesday, February 28, 14:00-15:30, Room O**

**SS 304** Quantitative CT: a new diagnostic and functional tool

[B-0233 – B-0243]

Moderators: B. Ghaye; Brussels/BE
M. Occhipinti; Florence/IT

**Wednesday, February 28, 16:00-17:30, Room C**

**RC 404** CT - patterns in chest radiology: back to basics and beyond

*LEVEL II*

» Chairperson's introduction [A-099]
M.A. Mazzei; Siena/IT

A. Secondary pulmonary lobule anatomy: essential to tackle with the nodular pattern

[A-100]
T. Frauenfelder; Zurich/CH

B. Linear and reticular pattern [A-101]
F. Molinari; Lille/FR

C. Ground glass opacities (GGO) and consolidation [A-102]
J. Vogel-Clausen; Hannover/DE

» Panel discussion: Is it always easy to detect a pattern? Tips for success

**Thursday, March 1, 10:30-12:00, Room O**

**SS 604** Optimisation of CT angiography: from single - to dual-energy CT

[B-0454 – B-0464]

Moderators: R.W. Bauer; St. Gallen/CH
T.R.C. Johnson; Munich/DE

**Thursday, March 1, 16:00-17:30, Room O**

**SS 604** Optimisation of CT angiography: from single - to dual-energy CT

[B-0454 – B-0464]

Moderators: R.W. Bauer; St. Gallen/CH
T.R.C. Johnson; Munich/DE

Feb 28

**Wednesday, February 28, 08:30-10:00, Room C**

**RC 104** When and how to use perfusion imaging in pulmonary vascular and airway disease?"
**Scientific Programme**

**REFRESHER COURSES / SCIENTIFIC SESSIONS**

### Chest

#### Sunday, March 4, 08:30–10:00, Room C

**RC 1704**  
**Thoracic manifestations of systemic disease**

**Moderator:** A. Chodorowska; Wroclaw/PL

A. **Systemic sclerosis**  
N. Sverzellati; Parma/IT

B. **Granulomatosis and polyangiitis**  
S. Bayraktaroglu; Izmir/TR

C. **Early manifestations in children and young adults**  
M.P. García-Peña; Barcelona/ES

#### Sunday, March 4, 10:30–12:00, Room O

**SS 1804**  
**Bronchopulmonary diseases: new trends in CT and MR**

**Moderators:** J. Ley-Zaporozhan; Munich/DE  
N.N.

#### Sunday, March 4, 14:00–15:30, Room O

**SS 1904a**  
**Pulmonary vessels**

**Moderators:** F. Pontana; Lille/FR  
J. Vlahos; London/UK

#### Sunday, March 4, 14:00–15:30, Studio 2018

**SS 1904b**  
**MRI in chest oncology**

**Moderators:** J. Broncano; Cordoba/ES  
J. Ley-Zaporozhan; Munich/DE

### Imaging Informatics

#### Wednesday, February 28, 08:30–10:00, Room M 2

**RC 105**  
**Everything you need to know about 3D post-processing**

**» Chairperson’s introduction**  
E. Sorantin; Graz/AT

A. **3D post-processing in 2018**

A. Alberich-Bayarri; Valencia/ES

B. **Making better use of your 3D package: tips and tricks**

P.M.A. van Ooijen; Groningen/NL

C. **Interpretation of 3D processing results: from image to volume reading**

T. Frauenfelder; Zurich/CH

**» Panel discussion: Will we still look at 2D images in 10 years’ time?**

#### Wednesday, February 28, 10:30–12:00, Room M 5

**SS 205**  
**Process improvement and patient communication**

**» Process improvement and patient communication**

M. Fatehi; Tehran/IR  
A. Trianni; Udine/IT

#### Thursday, March 1, 10:30–12:00, Studio 2018

**SS 605**  
**Radiomics and deep learning**

**» Radiomics and deep learning**

A. Alberich-Bayarri; Valencia/ES  
W.H. Sommer; Munich/DE

#### Thursday, March 1, 16:00–17:30, Room M 2

**RC 805**  
**Daily use of mobile devices in radiology**

**» Chairperson’s introduction**  
O. Ratib; Geneva/CH

A. **What did mobile devices change in radiology education?**

E. Kotter; Freiburg/DE

B. **Is it appropriate to read a study on a smartphone or a tablet?**

N.H. Strickland; London/UK

C. **Security and ethical issues of mobile device technology**

E.R. Ranschaert; Mol/BE

**» Panel discussion: Can mobile technology supplement stationary technology in radiology?**
REFRESHER COURSES / SCIENTIFIC SESSIONS

Imaging Informatics

Molecular Imaging

4 March  Sunday, March 4, 10:30–12:00, Room L 8
SS 1805  Deep learning
          (B-1378 – B-1387)
Moderators: J. Fernandez-Bayó; Sabadell/ES
N.N.
» Keynote Lecture [K-28]
  W. Kim; Los Angeles, CA/US

4 March  Sunday, March 4, 14:00–15:30, Room L 8
SS 1905  Structured reporting and CAD
          (B-1582 – B-1592)
Moderators: E. Neri; Pisa/IT
N. Pyatigorskaya; Paris/FR

28 Feb  Wednesday, February 28, 08:30–10:00, Room M 5
RC 106  Merging the best: hybrid imaging
LEVEL II
Moderator: G. Antoch; Düsseldorf/DE
A. Hybrid imaging with SPECT/CT [A-058]
  A. Scarsbrook; Leeds/UK
B. Hybrid imaging with MR/PET [A-059]
  F.M.A. Kiessling; Aachen/DE
C. Hyperpolarised MRI [A-060]
  F.A. Gallagher; Cambridge/UK

28 Feb  Wednesday, February 28, 16:00–17:30, Room M 3
RC 406  Molecular imaging in oncology  LEVEL II
» Chairperson’s introduction [A-155]
  K. Nikolaou; Tübingen/DE
A. Imaging of hypoxia [A-156]
  V.J. Goh; London/UK
B. Imaging of proliferation [A-157]
  A. Kjaer; Copenhagen/DK
C. Imaging of metabolism [A-158]
  C. Nanni; Bologna/IT
D. Biomarker imaging with MR [A-159]
  M.E. Mayerhöfer; Vienna/AT
» Panel discussion: The pros and cons of molecular imaging in oncology

2 March  Friday, March 2, 10:30–12:00, Room M 3
SS 1006  Molecular imaging of biology and pathology
          (B-0984 – B-0994)
Moderators: A. Esposito; Milan/IT
F.M.A. Kiessling; Aachen/DE

3 March  Saturday, March 3, 10:30–12:00, Room M 3
SS 1406  Contrast agents and molecular imaging
          (B-1171 – B-1180)
Moderators: F.A. Gallagher; Cambridge/UK
L. Umutlu; Essen/DE
» Keynote Lecture [K-23]
  F.A. Gallagher; Cambridge/UK
Education in partnership

| Target groups | - Trainees  
|               | - Radiologists |
| Formats       | - Courses  
|               | - EDiR preparation courses  
|               | - Professorships  
|               | - Tutorials  
|               | - Scholarships  
|               | - Fellowships |
| Location      | - Worldwide |
| Methods       | - Face-to-Face  
|               | - Online |

Learn more about **ESOR activities** here!

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REFRESHER COURSES / SCIENTIFIC SESSIONS
Genitourinary

**Wednesday, February 28, 10:30–12:00, Room N**

**SS 207** Urinary tract tumours  
(B-0054 – B-0064)

Moderators: M. D’Anastasi; Msida/MT  
S. Hanna; Cairo/EG

**Wednesday, February 28, 14:00–15:30, Room N**

**SS 307** Prostate cancer diagnosis  
(B-0244 – B-0254)

Moderators: A. Guerra; Lisbon/PT  
N.N.

**Friday, March 2, 10:30–12:00, Room N**

**SS 1007** Renal and adrenal imaging  
(B-0877 – B-0887)

Moderators: G. Aringhieri; Pisa/IT  
J. Belfield; Liverpool/UK

**Friday, March 2, 16:00–17:30, Studio 2018**

**RC 1207** MRI for gynaecologic imaging: how I do it  
LEVEL II

» Chairperson’s introduction  
A. Basics of patient preparation and T2W-imaging  
N.M. deSouza; Sutton/UK

B. Contrast agents  
R.A. Kubik-Huch; Baden/CH

C. Diffusion and ADC  
R. Forstner; Salzburg/AT

» Panel discussion: Multiparametric MRI of the female pelvis: should it replace tailored protocols?

**Saturday, March 3, 08:30–10:00, Studio 2018**

**RC 1307** Management of incidental findings in the genitourinary tract  
LEVEL II

Moderator: R.H. Oyen; Leuven/BE

A. Adrenals  
L.E. Derchi; Genoa/IT

B. Kidneys  
H.C. Thoeny; Berne/CH

C. Adnexa  
C.S. Balleyguier; Villejuif/FR

**Friday, March 2, 14:00–15:30, Room N**

**SS 207** Urinary tract tumours  
(B-0054 – B-0064)

Moderators: M. D’Anastasi; Msida/MT  
S. Hanna; Cairo/EG

**Friday, March 2, 16:00–17:30, Studio 2018**

**RC 1207** MRI for gynaecologic imaging: how I do it  
LEVEL II

» Chairperson’s introduction  
A. Basics of patient preparation and T2W-imaging  
N.M. deSouza; Sutton/UK

B. Contrast agents  
R.A. Kubik-Huch; Baden/CH

C. Diffusion and ADC  
R. Forstner; Salzburg/AT

» Panel discussion: Multiparametric MRI of the female pelvis: should it replace tailored protocols?

**Saturday, March 3, 08:30–10:00, Studio 2018**

**RC 1307** Management of incidental findings in the genitourinary tract  
LEVEL II

Moderator: R.H. Oyen; Leuven/BE

A. Adrenals  
L.E. Derchi; Genoa/IT

B. Kidneys  
H.C. Thoeny; Berne/CH

C. Adnexa  
C.S. Balleyguier; Villejuif/FR

**Saturday, March 3, 10:30–12:00, Room N**

**SS 1407** Prostate cancer staging and active surveillance  
(B-1064 – B-1074)

Moderators: F. Cornud; Paris/FR  
M. de Rooij; Nijmegen/NL
**REFRESHER COURSES / SCIENTIFIC SESSIONS**

### Head and Neck

- **Wednesday, February 28, 08:30–10:00, Room N**
  - **RC 108** Differential diagnoses you don’t want to miss
    - Moderator: M.R. Eriksen; Stavanger/NO
      - V. Chong; Singapore/SG
    - B. Differential diagnoses of the jaw masses [A-014]
      - C. Czerny; Vienna/AT
    - C. Differential diagnoses of soft tissue masses [A-015]
      - D. Farina; Brescia/IT

- **Wednesday, February 28, 10:30–12:00, Room L 8**
  - **SS 208** Advanced MRI techniques in head and neck imaging
    - [B-0065 – B-0075]
    - Moderators: G.C.T.E. Garcia; Villejuif/FR
    - L. Oleaga Zufiría; Barcelona/ES

- **Wednesday, February 28, 14:00–15:30, Room L 8**
  - **SS 308** Temporal bone, temporomandibular joint and maxillofacial imaging
    - [B-0255 – B-0265]
    - Moderators: U. Lamot; Ljubljana/SI
    - B. Ozgen Mocan; Ankara/TR

- **Wednesday, February 28, 16:00–17:30, Room N**
  - **RC 408** Pathways for tumour spread
    - Moderator: J. Huyskens; Antwerp/BE
    - A. Pathways for oral cavity and oropharynx tumour spread [A-110]
      - A. Borges; Lisbon/PT
    - B. Pathways for nasopharyngeal tumour spread including perineural spread [A-111]
      - M. Lell; Nuremberg/DE
    - C. Pathway for laryngeal and hypopharyngeal tumour spread [A-112]
      - R. Kohler; Sion/CH

### Genitourinary

- **Sunday, March 4, 08:30–10:00, Studio 2018**
  - **RC 1707** Imaging strategies in renal tumours
    - » Chairperson’s introduction [A-896]
      - C. Nicolau, Barcelona/ES
    - A. Imaging methods, CT and MRI: the best out of two [A-897]
      - M.A. Cova; Trieste/IT
    - B. Differential diagnosis of renal masses [A-898]
      - N. Grenier; Bordeaux/FR
    - C. Staging and organ-preserving strategies [A-899]
      - P. Asbach; Berlin/DE
    - » Panel discussion: How to implement an optimal renal imaging protocol?

- **Sunday, March 4, 10:30–12:00, Room N**
  - **SS 1807a** Prostate imaging reporting and data system (PI-RADS)
    - [B-1357 – B-1366]
    - Moderators: B.K. Barth; Zurich/CH
    - J.C. Vilanova; Girona/ES
    - » Keynote Lecture [K-27]
      - J. Venancio; Lisbon/PT

- **Sunday, March 4, 10:30–12:00, Room M 4**
  - **SS 1807b** Contrast media, urography and stone disease
    - [B-1464 – B-1474]
    - Moderators: C. Roy; Strasbourg/FR
    - A.J. van der Molen; Leiden/NL

- **Sunday, March 4, 14:00–15:30, Room N**
  - **SS 1907a** Prostate biopsy and (post-)intervention
    - [B-1560 – B-1570]
    - Moderators: A. Baur; Berlin/DE
    - V. Panebianco; Rome/IT

- **Sunday, March 4, 14:00–15:30, Room M 4**
  - **SS 1907b** Genital and obstetric imaging
    - [B-1659 – B-1669]
    - Moderators: B. Ahuja; Agra/IN
    - F. Giganti; London/UK

- **March 1, 10:30–12:00, Room L 8**
  - **SS 608** Head and neck ultrasonography
    - [B-0487 – B-0496]
    - Moderators: N. Chidambaranathan; Chennai/IN
    - K. Markiet; Gdansk/PL
    - » Keynote Lecture [K-10]
      - G. Madani; London/UK
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**Head and Neck Interventional Radiology**
INTerventional Radiology

**1 March**

**Thursday, March 1, 10:30–12:00, Room Z**

**SS 609** Special image guidance in interventions  
[B-0443 – B-0453]

**Moderators:** M. Tsitskari; Athens/GR  
R. Uberoi; Oxford/UK

**1 March**

**Thursday, March 1, 14:00–15:30, Room Z**

**SS 709** Non-liver ablation  
[B-0622 – B-0632]

**Moderators:** D. Ilic; Novi Sad/RS  
N.N.

**1 March**

**Thursday, March 1, 16:00–17:30, Room M 3**

**RC 809** Percutaneous interventional procedures: a practical guide  
LEVEL I

**» Chairperson’s introduction**  
[A-364]  
R. Iezzi; Rome/IT

**A. How to safely perform US-guided procedures**  
[A-365]  
D. Akinci; Ankara/TR

**B. How to safely perform CT-guided procedures**  
[A-366]  
R. García Marcos; Valencia/ES

**C. Post-procedure follow-up and complication management**  
[A-367]  
M. Seidensticker; Munich/DE

**» Panel discussion:** Tips and tricks for choosing your first cases. Controversial case-based review of approaches to difficult lesions

*This session is part of the EuroSafe Imaging campaign.*

**2 March**

**Friday, March 2, 10:30–12:00, Room Z**

**SS 1009** Vascular interventions: intra- and extracranial  
[B-0856 – B-0866]

**Moderators:** C. Binkert; Winterthur/CH  
N.N.

**2 March**

**Friday, March 2, 16:00–17:30, Room M 3**

**RC 1209** Pulmonary embolism: a joint challenge for diagnostic and interventional radiology!  
LEVEL I

**» Chairperson’s introduction**  
[A-587]  
A.G. Ryan; Waterford City/IE

**A. Imaging algorithm for pulmonary embolism**  
[B-588]  
B. Ghaye; Brussels/BE

**B. What is new in the recently published guidelines for pulmonary embolism treatment?**  
[A-589]  
R. Uberoi; Oxford/UK

**C. Updates on the endovascular treatment of massive and submassive pulmonary embolism**  
[A-590]  
S.C. Spiliopoulos; Athens/GR

**» Panel discussion:** Appropriate diagnosis and risk stratification in the management of acute massive and acute submassive pulmonary embolism

**3 March**

**Saturday, March 3, 10:30–12:00, Room Z**

**SS 1409** Embolisation techniques for liver tumours  
[B-1053 – B-1063]

**Moderators:** J.I. Bilbao; Pamplona/ES  
M. Dioguardi Burgio; Clichy/FR

**3 March**

**Saturday, March 3, 14:00–15:30, Room Z**

**SS 1509** Liver, lung and thyroid ablation  
[B-1201 – B-1211]

**Moderators:** F. Collettini; Berlin/DE  
K.A. Hausegger; Klagenfurt/AT

**3 March**

**Saturday, March 3, 16:00–17:30, Room Z**

**SS 1809** Bone and spine interventions  
[B-1336 – B-1345]

**Moderators:** V. Chianca; Naples/IT  
B.A. Radeleff; Hof/DE

**» Keynote Lecture**  
[K-26]  
A.D. Kelekis; Athens/GR

**4 March**

**Sunday, March 4, 10:30–12:00, Room Z**

**SS 1909** Urogenital interventions  
[B-1539 – B-1548]

**Moderators:** S. Bongiovanni; Cuneo/IT  
J. Kettenbach; St. Pölten/AT

**» Keynote Lecture**  
[K-30]  
T.J. Kroencke; Augsburg/DE
REFRESHER COURSES / SCIENTIFIC SESSIONS
Musculoskeletal

**February 28**

**Room C**

**RC 110**

**MRI of articular cartilage and bone: areas of imaging confusion and practical solutions**

**Moderator:** O. Papakonstantinou; Athens/GR

**A. Bone oedema syndromes and avascular necrosis**

B. Vande Berg; Brussels/BE

**B. Osteochondral injury, subchondral fractures and traumatic bone oedema: what is important and how do I describe it**

F.W. Roemer; Erlangen/DE

**C. Rheumatoid arthritis**

I. Sudol-Szopińska; Warsaw/PL

**February 28**

**Room D**

**SS 210**

**Musculoskeletal tumour imaging**

**Moderators:**

R. Arkun; Izmir/TR

B. Henninger; Innsbruck/AT

**February 28**

**Room D**

**SS 310**

**Joint imaging**

**Moderators:**

M. Tzalonikou; Athens/GR

B. Vande Berg; Brussels/BE

**February 28**

**Room D**

**RC 410**

**Bone, joint and soft tissue infection**

**Moderator:** T. Kaya; Eskisehir/TR

**A. Osteomyelitis**

K. Verstraete; Ghent/BE

**B. Septic arthritis**

M. Zanetti; Zurich/CH

**C. Pyomyositis and other soft tissue infections**

D.J. Wilson; Oxford/UK

**March 1**

**Room C**

**SS 610a**

**Spine imaging**

**[B-0433 – B-0442]**

**Moderators:**

M. Epermane; Riga/LV

A. Loizides; Innsbruck/AT

**» Keynote Lecture**

I.-M. Noebauer-Huhmann; Vienna/AT

**Room D**

**SS 610b**

**Bone trauma**

**[B-0529 – B-0539]**

**Moderators:**

A. Barile; L’Aquila/IT

R. Miron Mombiela; Valencia/ES

**Room C**

**SS 710a**

**Muscle and nerve**

**[B-0612 – B-0621]**

**Moderators:**

H. Gruber; Innsbruck/AT

H. Platzgummer; Vienna/AT

**» Keynote Lecture**

M. Reijnierse; Leiden/NL

**Room D**

**SS 710b**

**Ankle and foot**

**[B-0719 – B-0729]**

**Moderators:**

M. Zanetti; Zurich/CH

N.N.

**Room D**

**RC 810**

**Musculoskeletal ultrasound in the management of sports injuries**

**Moderator:** M. Reijnierse; Leiden/NL

**A. Ultrasound of ankle injuries: technique and diagnosis**

C. Martinoli; Genoa/IT

**B. Ultrasound of the hip and knee: what is it good for and what are its limitations?**

A. Klauser; Innsbruck/AT

**C. Ultrasound-guided intervention in the athlete: indications and techniques**

H. Guerin; Paris/FR

**Room D**

**SS 210**

**Musculoskeletal tumour imaging**

**[B-0108 – B-0118]**

**Moderators:**

R. Arkun; Izmir/TR

B. Henninger; Innsbruck/AT

**Room D**

**SS 310**

**Joint imaging**

**[B-0299 – B-0309]**

**Moderators:**

M. Tzalonikou; Athens/GR

B. Vande Berg; Brussels/BE

**Room D**

**RC 410**

**Bone, joint and soft tissue infection**

**Moderator:** T. Kaya; Eskisehir/TR

**A. Osteomyelitis**

K. Verstraete; Ghent/BE

**B. Septic arthritis**

M. Zanetti; Zurich/CH

**C. Pyomyositis and other soft tissue infections**

D.J. Wilson; Oxford/UK

**Room D**

**SS 610a**

**Spine imaging**

**[B-0433 – B-0442]**

**Moderators:**

M. Epermane; Riga/LV

A. Loizides; Innsbruck/AT

**» Keynote Lecture**

I.-M. Noebauer-Huhmann; Vienna/AT

**Room D**

**SS 610b**

**Bone trauma**

**[B-0529 – B-0539]**

**Moderators:**

A. Barile; L’Aquila/IT

R. Miron Mombiela; Valencia/ES

**Room C**

**SS 710a**

**Muscle and nerve**

**[B-0612 – B-0621]**

**Moderators:**

H. Gruber; Innsbruck/AT

H. Platzgummer; Vienna/AT

**» Keynote Lecture**

M. Reijnierse; Leiden/NL

**Room D**

**SS 710b**

**Ankle and foot**

**[B-0719 – B-0729]**

**Moderators:**

M. Zanetti; Zurich/CH

N.N.

**Room D**

**RC 810**

**Musculoskeletal ultrasound in the management of sports injuries**

**Moderator:** M. Reijnierse; Leiden/NL

**A. Ultrasound of ankle injuries: technique and diagnosis**

C. Martinoli; Genoa/IT

**B. Ultrasound of the hip and knee: what is it good for and what are its limitations?**

A. Klauser; Innsbruck/AT

**C. Ultrasound-guided intervention in the athlete: indications and techniques**

H. Guerin; Paris/FR
REFRESHER COURSES / SCIENTIFIC SESSIONS

Musculoskeletal

**2 March**

**Friday, March 2, 08:30–10:00, Room D**

**RC 910 Imaging the hip and thigh**  
*Level II*

**Moderator:** M. Klontzas; London/UK

A. *Femoroacetabular impingement: what is it, how do I image it and does it matter?*  
[R-A-415]  
R. Sutter; Zurich/CH

B. *Groin pain in the athlete: what causes it and what does imaging contribute?*  
[A-416]  
P. Robinson; Leeds/UK

C. *Muscle injury of the hip and thigh*  
[A-417]  
M.-A. Weber; Rostock/DE

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**2 March**

**Friday, March 2, 10:30–12:00, Room D**

**SS 1010 Shoulder imaging and intervention**  
*[B-0951 – B-0961]*

**Moderators:** J.-L. Drapé; Paris/FR  
N.N.

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**2 March**

**Friday, March 2, 16:00–17:30, Room D**

**RC 1210 Shoulder MRI: mastering technique and making my report relevant**  
*Level II*

» Chairperson's introduction  
[B-A-568]  
I. Boric; Zabok/HR

A. *The normal MRI: techniques and anatomy*  
[A-569]  
E. Llopis; Valencia/ES

B. *Rotator cuff tears: what are they and what do they look like?*  
[A-570]  
K.-F. Kreitner; Mainz/DE

C. *Patterns of instability: what does the MRI show?*  
[A-571]  
A.J. Grainger; Leeds/UK

» Panel discussion: How are the indications for MR arthrography of the shoulder changing?

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**3 March**

**Saturday, March 3, 10:30–12:00, Room D**

**SS 1410 Advanced imaging techniques, algorithms and measurements**  
*[B-1119 – B-1128]*

**Moderators:** M. Froeling; Utrecht/NL  
J. Hodler; Zurich/CH

» *Keynote Lecture*  
[K-20]  
C. Weidekamm; Vienna/AT

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**3 March**

**Saturday, March 3, 16:00–17:30, Room D**

**RC 1610 The radiological investigation of musculoskeletal tumours**  
*Level II*

» Chairperson's introduction  
[A-B-840]  
F.M.H.M. Vanhoenacker; Antwerp/BE

A. *Radiographs and ultrasound*  
[A-841]  
L.M. Sconfienza; Milan/IT

B. *MRI and whole-body MRI*  
[A-842]  
S.L.J. James; Birmingham/UK

C. *CT and hybrid imaging*  
[A-843]  
T. Bäuerle; Erlangen/DE

» Panel discussion: Guidelines for and the role of imaging techniques in the management of musculoskeletal tumours

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**4 March**

**Sunday, March 4, 08:30–10:00, Room D**

**RC 1710 MR imaging of the knee**  
*Level II*

**Moderator:** M. Tzalonikou; Athens/GR

A. *Cruclate ligaments: what to know and do*  
[A-920]  
A. Alcalá-Galiano; Madrid/ES

B. *Meniscal tears: obvious and subtle*  
[A-921]  
P. Omoumi; Lausanne/CH

C. *Looking around the corners: posteromedial and posterolateral*  
[A-922]  
U. Aydingoz; Ankara/TR

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**4 March**

**Sunday, March 4, 10:30–12:00, Room D**

**SS 1810 Hip and knee**  
*[B-1420 – B-1430]*

**Moderators:** M. Fernandez Hernando; Santander/ES  
M. Shahabpour; Brussels/BE

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**4 March**

**Sunday, March 4, 14:00–15:30, Room D**

**SS 1910 Chronic inflammatory diseases**  
*[B-1615 – B-1625]*

**Moderators:** E. Inarejos; Esplugues de Llobregat/ES  
I. Sudol-Szopińska; Warsaw/PL
Neuro

**Wednesday, February 28, 08:30–10:00, Room E2**

**RC 111** The degenerative cervical spine  
**LEVEL II**

**Moderator:** A. Cianfoni; Lugano/CH

A. Degenerative uncovertebral and facet disease  
J. Van Goethem; Antwerp/BE

B. Cervical spinal stenosis and cervical spondylotic myelopathy  
A. S. Gersing; Munich/DE

C. The postoperative cervical spine  
I. Herrera; Madrid/ES

**Wednesday, February 28, 10:30–12:00, Room E2**

**SS 211** Brain tumour: advanced imaging techniques  
**(B-0086 – B-0096)**

**Moderators:** M. M. Thurnher; Vienna/AT  
N. N.

**Wednesday, February 28, 14:00–15:30, Room E2**

**SS 311** Neuroinflammation and neuroinfection  
**(B-0277 – B-0287)**

**Moderators:** A. Rovira-Cañellas; Barcelona/ES  
R. Woitek; Vienna/AT

**Thursday, March 1, 10:30–12:00, Room E2**

**SS 611** Stroke: diagnosis and intervention  
**(B-0508 – B-0518)**

**Moderators:** P. Mordasini; Berne/CH  
T. Struffert; Erlangen/DE

**Thursday, March 1, 14:00–15:30, Studio 2018**

**SS 711a** Psychiatric disorders  
**(B-0653 – B-0663)**

**Moderators:** E. Lotan; Tel-Aviv/IL  
T. A. Yousry; London/UK

**Thursday, March 1, 14:00–15:30, Room E2**

**SS 711b** Vascular imaging  
**(B-0686 – B-0696)**

**Moderators:** S. Squarza; Milan/IT  
P. Vilela; Almada/PT

**Thursday, March 1, 16:00–17:30, Room E2**

**RC 811** State-of-the-art paediatric neuroradiology  
**LEVEL II**

» Chairperson’s introduction  
C. Amarnath; Chennai/IN

A. Imaging myelin maturation disorders  
N. Wolf; Amsterdam/NL

B. Imaging of developmental disorders  
B. Ertl-Wagner; Munich/DE

C. Imaging in paediatric neuro-oncology  
E. Vázquez; Barcelona/ES

» Panel discussion: Ask the expert: what is relevant for my own daily clinical practice?
REFRESHER COURSES / SCIENTIFIC SESSIONS

**Neuro**

**Friday, March 2, 16:00-17:30, Room E2**

**RC 1211** Inflammatory and infectious CNS pathology

» Chairperson’s introduction [A-557]
E.T. Tall; Ankara/TR
A. Autoimmune encephalitis [A-558]
P. Demaerele; Leuven/BE
B. Infectious encephalitis [A-559]
K.D. Kurz; Stavanger/NO
C. Inflammatory and infectious myelitis [A-560]
M.M. Thurnher; Vienna/AT

» Panel discussion: Ask the expert: Is imaging the key diagnostic modality for an early and specific diagnosis of infectious diseases, leading to a better functional outcome?

**Saturday, March 3, 08:30-10:00, Room E2**

**RC 1311** Altered mental state

» Chairperson’s introduction [A-636]
M.A. van Buchem; Leiden/NL
A. Patterns of referrals [A-637]
N.N.
B. Imaging in altered mental state [A-638]
A.J. Bastos-Leite; Porto/PT
C. MRI in the diagnosis of Alzheimer’s disease [A-639]
A. Krainik; Grenoble/FR

» Panel discussion: Ask the expert: How can I standardise my image reading and reporting in order to support the clinical process in cognitively impaired patients?

**Saturday, March 3, 10:30-12:00, Room C**

**SS 1411a** Neurodegeneration/dementia

[B-1032 - B-1041]

Moderators: E. Gangemi; Rome/IT
M.F. Vasco Aragão; Recife, PE/BR

» Keynote Lecture [K-19]
M.F. Vasco Aragão; Recife, PE/BR

**Saturday, March 3, 10:30-12:00, Room E2**

**SS 1411b** Peripheral nerve and spine

[B-1097 - B-1107]

Moderators: C. Lukas; Bochum/DE
M.I. Vargas; Geneva/CH

**Saturday, March 3, 14:00-15:30, Room M 2**

**SS 1511** Movement disorders and neurodegeneration

[B-1233 - B-1243]

Moderators: P. Demaerele; Leuven/BE
M. Vernooij; Rotterdam/NL

**Sunday, March 4, 08:30-10:00, Room E2**

**RC 1711** Diffuse low-grade gliomas: new things you should know

**LEVEL III**

Moderator: F.W. Cartes-Zumelzu; Innsbruck/AT

A. Molecular basis for classification, treatment and predicting outcome in low-grade gliomas [A-909]
N.N.

B. Imaging patterns suggestive of different (molecular) subtypes of low-grade gliomas [A-910]
M. Smits; Rotterdam/NL

C. Advanced imaging in low-grade gliomas [A-911]
N. Bulakbasi; Mersin/TR

**Sunday, March 4, 10:30-12:00, Room E2**

**SS 1811a** Epilepsy

[B-1399 - B-1408]

Moderators: E. Achten; Ghent/BE
A.M. Casado Lopez; Madrid/ES

» Keynote Lecture [K-29]
L. Stenberg; Lund/SE

**Sunday, March 4, 10:30-12:00, Room M 5**

**SS 1811b** Paediatric and adult brain tumours

[B-1475 - B-1485]

Moderators: K. Dolic; Split/HR
M. Smits; Rotterdam/NL

**Sunday, March 4, 14:00-15:30, Room E2**

**SS 1911a** Trauma and encephalopathies

[B-1593 - B-1603]

Moderators: A.S. Gersing; Munich/DE
D. Goldsher; Haifa/IL

**Sunday, March 4, 14:00-15:30, Room M 5**

**SS 1911b** Quantitative imaging techniques

[B-1670 - B-1680]

Moderators: O. Fösleitner; Vienna/AT
I. Tsougos; Larissa/GR
**REFRESHER COURSES / SCIENTIFIC SESSIONS**

**Paediatric**

### Wednesday, February 28

**RC 112** Paediatric musculoskeletal imaging

**Moderator:** A.C. Offiah; Sheffield/UK

A. How to distinguish normal variants from pathology on musculoskeletal MRI in children [A-010]

D. Avenarius; Tromsø/NO

B. MRI of the temporomandibular joints: findings that can mimic arthritis [A-011]

T. von Kalle; Stuttgart/DE

C. Skeletal trauma in children [A-012]

I. Barber; Esplugues de Llobregat/ES

### Wednesday, February 28

**SS 212** Neuro imaging in paediatrics [B-0151 – B-0161]

**Moderators:** S.M. Aukland; Bergen/NO

N.N.

### Wednesday, February 28

**SS 312** Musculoskeletal and child abuse [B-0341 – B-0351]

**Moderators:** A. Bartoloni; Rome/IT

R.R. van Rijn; Amsterdam/NL

### Wednesday, February 28

**RC 412** Vascular and interventional radiology in children

**Moderator:** E. Alexopoulou; Athens/GR


A. Barnacle; London/UK

B. Vascular malformations: diagnosis and interventions [A-108]

M. Beeres; Frankfurt a. Main/DE

C. Percutaneous treatment of osteoid osteoma [A-109]

D. Filippiadis; Athens/GR

### Thursday, March 1

**RC 512** Imaging in abdominal emergencies: an (evidence-based) update

**Moderator:** C.E. de Lange; Oslo/NO

A. The acute abdomen in neonates [A-190]

S. Stafrace; Doha/QA

B. The acute abdomen in young children [A-191]

A.D. Calder; London/UK

C. Polytrauma: differences between adult and paediatric protocols [A-192]

M. Raissaki; Iraklion/GR

### Thursday, March 1

**SS 612** Paediatric abdominal imaging [B-0573 – B-0583]

**Moderators:** K. Iliadis; Brighton/UK

D. Kljucevsek; Ljubljana/SL

### Thursday, March 1

**SS 712** Paediatric chest [B-0763 – B-0773]

**Moderators:** G. Balázs; Budapest/HU

T.R. Semple; London/UK

### Friday, March 2

**RC 912** Dose reduction: tips and tricks

**Moderator:** C. Granata; Genoa/IT

A. Dose reduction in paediatric CT [A-389]

D. Aadnevik; Bergen/NO

B. Diagnostic reference levels in paediatric imaging: international recommendations [A-390]

R. Seuri; Helsinki/FI

C. The impact of dose management systems [A-391]

L.A. Rainford; Dublin/IE

This session is part of the EuroSafe Imaging campaign.

### Saturday, March 3

**SS 1412** Foetal and neonatal imaging [B-1161 – B-1170]

**Moderators:** F.E. Avni; Lille/FR

D. Piotrowska-Kownacka; Warsaw/PL

» Keynote Lecture [K-22]

D. Prayer; Vienna/AT

### Sunday, March 4

**RC 1712** Understanding paediatric neuroradiology

**Moderator:** E. Vázquez; Barcelona/ES

A. Imaging of the premature brain [A-889]

S.M. Aukland; Bergen/NO

B. Abusive head trauma: the role of CT and MRI [A-890]

R.R. van Rijn; Amsterdam/NL

C. Imaging in hypoxic-ischaemic injury and hypothermia: an update [A-891]

F.M. Triulzi; Milan/IT
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**Wednesday, February 28, 08:30–10:00, Room G**

**RC 113 Single-dual-multi-energy CT**

- **Chairperson’s introduction** [A-033]
  - A. Torresin; Milan/IT
- **A. Basics of dual- and multi-energy CT** [A-034]
  - K. Persinakis; Iraklion/GR
- **B. Photon counting detectors in diagnostic CT** [A-035]
  - A. Altman; Haifa/IL
- **C. Clinical need of multi-energy CT** [A-036]
  - S.T. Schindera; Aarau/CH

- **Panel discussion: Are there sufficient benefits of this technique?**

**Wednesday, February 28, 10:30–12:00, Room G**

**SS 213 Optimisation in clinical radiology practice**

(B-0119 – B-0129)

- **Moderators:** E. Samara; Sion/CH
  - W. Stiller; Heidelberg/DE

**Wednesday, February 28, 14:00–15:30, Room G**

**SS 313 Dose management and diagnostic reference levels**

(B-0310 – B-0319)

- **Moderators:** H. Bosmans; Leuven/BE
  - R. Villa; Monza/IT

- **Keynote Lecture** [K-06]
  - V. Tsapaki; Athens/GR

**Thursday, March 1, 10:30–12:00, Room G**

**SS 613 Innovations in medical imaging**

(B-0540 – B-0550)

- **Moderators:** M. Kortesniemi; Helsinki/FI
  - G. Sommer; Basle/CH

**Thursday, March 1, 14:00–15:30, Room G**

**SS 713 Quantitative imaging and neural networks**

(B-0730 – B-0740)

- **Moderators:** C. Cavedon; Verona/IT
  - M.J. Willemink; Stanford, CA/US

**Saturday, March 3, 08:30–10:00, Room G**

**RC 1313 Motion artefacts and their management in medical imaging**

- **Chairperson’s introduction** [A-653]
  - T. Beyer; Vienna/AT
- **A. Managing motion in CT: conventional approaches and motion compensating techniques** [A-654]
  - M. Kachelrieß; Heidelberg/DE
- **B. Managing motion in cone-beam CT (CBCT): conventional approaches and motion compensating techniques** [A-655]
  - P. Paysan; Baden-Dättwil/CH
- **C. Motion compensation in MR and PET imaging** [A-656]
  - C. Kolbitsch; Berlin/DE

- **Panel discussion: How to optimise motion management in different imaging modalities?**

**Saturday, March 3, 10:30–12:00, Room G**

**SS 1413 Image quality evaluation and optimisation in CT**

(B-1129 – B-1139)

- **Moderators:** I. Hernandez-Giron; Leiden/NL
  - O. Rampado; Turin/IT

**Saturday, March 3, 14:00–15:30, Room G**

**RC 1513 Dose reduction and image quality implications of iterative image reconstruction in CT**

- **Chairperson’s introduction** [A-782]
  - K.N. Bolstad; Bergen/NO
- **A. Basics of iterative image reconstruction in CT** [A-783]
  - M. Kortesniemi; Helsinki/FI
- **B. Iterative image reconstruction in clinical practice (dos and don’ts)** [A-784]
  - H. Alkadhi; Zurich/CH
- **C. Image quality assessment of iterative reconstruction: pitfalls and future directions** [A-785]
  - E. Samei; Durham, NC/US

- **Panel discussion: How low can we go?**

This session is part of the EuroSafe Imaging campaign.
REFRESHER COURSES / SCIENTIFIC SESSIONS

Physics in Medical Imaging

Saturday, March 3, 16:00-17:30, Room G

RC 1613 Demystifying MRI: things you always wanted to know
Level III

Moderator: I. Seimenis; Alexandropolis/GR
A. Basic MR: the building blocks of pulse sequences [A-844]
D.G. Norris; Nijmegen/NL
B. MR imaging basic concepts: how to turn signals into images [A-845]
D.J. Lurie; Aberdeen/UK
G. Hagberg; Tübingen/DE

Sunday, March 4, 08:30-10:00, Room G

RC 1713 Patient-specific dosimetry

Moderator: I. Seimenis; Alexandropolis/GR
A. Breast dosimetry [A-923]
I. Sechopoulos; Nijmegen/NL
B. Patient dosimetry in CT and CBCT [A-925]
S. Edyvean; London/UK
C. Patient dose in fluoroscopy and interventional [A-926]
A. Trianni; Udine/IT

Panel discussion: The future of patient-specific dosimetry
This session is part of the EuroSafe Imaging campaign.

Sunday, March 4, 10:30-12:00, Room G

SS 1813 Developments in volumetric imaging
[B-1431 – B-1441]

Moderator: K.N. Bolstad; Bergen/NO
D.J. Lurie; Aberdeen/UK

Radiographers

Wednesday, February 28, 08:30-10:00, Room K

RC 114 Forensic imaging

Chairpersons’ introduction
J. McNulty; Dublin/IE [A-037]
R.R. van Rijn; Amsterdam/NL [A-038]
A. Disaster victim identification [A-039]
J. Kroll; Maastricht/NL
B. The role of CT angiography in forensic imaging [A-040]
A. Dominguez; Lausanne/CH
C. The importance of the radiographer’s role in forensic imaging [A-041]
A.L. Brookes; London/UK

Panel discussion: Developing a service/getting involved in forensic imaging

Wednesday, February 28, 10:30-12:00, Room K

SS 214 Optimising mammography
[B-0130 – B-0140]

Moderators: M. Marolt Music; Ljubljana/SI
D. O’Leary; Newcastle/UK

Wednesday, February 28, 14:00-15:30, Room K

SS 314 Balancing dose and image quality in CT
[B-0320 – B-0329]

Moderators: S.D. Mørup; Odense/DK
N.N.

Keynote Lecture [K-07]
J. Santos; Coimbra/PT

Wednesday, February 28, 16:00-17:30, Room K

RC 414 Maximising outputs from research

Chairpersons’ introduction
F. Zarb; Msida/MT [A-140]
M. Raissaki; Iraklion/GR [A-141]
A. Designing robust research projects [A-142]
L.A. Rainford; Dublin/IE
B. Collaborating across Europe [A-143]
G. Paulo; Coimbra/PT
C. Winning research grants [A-144]
C. Malamateniou; London/UK

Panel discussion: How to avoid strategic mistakes in research?
1 March
Thursday, March 1, 08:30–10:00, Room K
RC 514 Successful paediatric imaging

» Chairpersons’ introduction: Paediatrics:
more than just ‘small adults’
V. Syrgiamiotis; Athens/GR [A-223]
N. Mitresas; Skopje/MK [A-224]
A. Imaging the uncooperative child and children
with disabilities [A-225]
C. Simcock; London/UK
B. Suspected non-accidental injury:
best practice and advice [A-226]
B.R. Mussmann; Odense/DK
C. Reducing the need for sedation and anaesthesia
in MRI: the role of play therapy and other
practices [A-227]
J. Gårdling; Lund/SE
» Panel discussion: How to avoid mistakes and to learn
from working with paediatrics?

1 March
Thursday, March 1, 10:30–12:00, Room K
SS 614 Fine tuning MRI practice
[B-0591 – B-0594]
Moderators: J. Castillo; Msida/MT
C. Catalano; Rome/IT

1 March
Thursday, March 1, 14:00–15:30, Room K
SS 714 Optimising radiographic practice
[B-0741 – B-0751]
Moderators: M. O’Connor; Dublin/IE
S. Savolainen; Helsinki/FI

1 March
Thursday, March 1, 16:00–17:30, Room K
RC 814 Contrast media in imaging

Moderators: L. Popovic; Belgrade/RS
M.-F. Bellin; Le Kremlin-Bicêtre/FR
A. Contrast-enhanced ultrasound:
principles and applications [A-353]
G. Johnson; Manchester/UK
B. Radiotracers in PET/RNI [A-354]
P. Laverman; Nijmegen/NL
C. How safe really are gadolinium agents? [A-355]
A. Cradock; Dublin/IE

2 March
Friday, March 2, 10:30–12:00, Room K
SS 1014 Quality issues in ultrasound and CT
[B-0962 – B-0972]
Moderators: O.P. Bansal; New Delhi/IN
A. England; Salford/UK

3 March
Saturday, March 3, 10:30–12:00, Room K
SS 1414 Radiography education
[B-1140 – B-1150]
Moderators: K. Knapp; Exeter/UK
D. Miletić; Rijeka/HR

3 March
Saturday, March 3, 16:00–17:30, Room K
RC 1614 Optimising computed
tomography

» Chairpersons’ introduction
U. Nikupaavo; Helsinki/FI [A-847]
I.G. Lupesch; Bucharest/RO [A-848]
A. Optimising access to CT in stroke [A-849]
G. Ioannidis; Larissa/GR
B. Optimising radiation dose and image quality [A-850]
R. Booij; Rotterdam/NL
C. Optimising contrast delivery with MDCT [A-851]
A. Svensson; Stockholm/SE
» Panel discussion: How to create an optimisation
team in CT?
This session is part of the EuroSafe Imaging campaign.

4 March
Sunday, March 4, 10:30–12:00, Room K
SS 1814 Quality improvement in radiography
[B-1442 – B-1452]
Moderators: J. Grehan; Dublin/IE
N.N.

4 March
Sunday, March 4, 14:00–15:30, Room K
SS 1914 Professional issues in radiography
[B-1637 – B-1647]
Moderators: S.O. Schönberg; Mannheim/DE
N.H. Woznitza; London/UK
## Vascular

### Wednesday, February 28, 08:30–10:00, Room M 1

**RC 115** Peripheral vascular malformations: what every radiologist should know  
**LEVEL II**

- **Chairperson’s introduction**  
  J.A. Reekers; Amsterdam/NL
- **The diagnostic assessment**  
  M. Köcher; Olomouc/CZ
- **Percutaneous or endovascular treatment: when and how?**  
  B. Peynircioglu; Ankara/TR
- **Paediatric vascular malformations: diagnosis and treatment**  
  A. Barnacle; London/UK

- **Panel discussion:** How could we improve diagnosis and optimise the results of our interventions?

### Wednesday, February 28, 10:30–12:00, Room X

**SS 215** The large vessels of the chest  
**LEVEL I**

**Moderators:** P.M. Kitrou; Patras/GR  
M. Prokop; Nijmegen/NL

### Wednesday, February 28, 14:00–15:30, Room X

**SS 315** Carotid and plaque imaging  
**LEVEL II**

**Moderators:** D. Bos; Rotterdam/NL  
R.W. Günther; Berlin/DE

### Thursday, March 1, 16:00–17:30, Room M 1

**RC 815** Post-treatment evaluation: what every radiologist should know  
**LEVEL II**

- **Chairperson’s introduction**  
  P. Haage; Wuppertal/DE
- **Thoracic aorta**  
  T. Leiner; Utrecht/NL
- **Abdominal aorta**  
  C. Loewe; Vienna/AT
- **Peripheral arterial disease**  
  M. Anzidei; Rome/IT

- **Panel discussion:** How to optimise post-treatment imaging: getting proper diagnosis without performing too many examinations

### Saturday, March 3, 08:30–10:00, Room M 1

**RC 1315** US and vascular disease: a perfect match  
**LEVEL I**

- **Chairperson’s introduction**  
  T. Jargiello; Lublin/PL
- **Abdominal aorta**  
  D.A. Clevert; Munich/DE
- **Upper and lower limb: arterial district**  
  B. Brkljačić; Zagreb/HR
- **Upper and lower limb: venous district**  
  H. Hoppe; Berne/CH

- **Panel discussion:** When do we need additional imaging and which modality is best suited for the scenario?

### Saturday, March 3, 10:30–12:00, Room X

**SS 1415** Peripheral arteries/arteritis  
**LEVEL I**

**Moderators:** E. Dósa; Budapest/HU  
C. Herzog; Munich/DE

### Sunday, March 4, 10:30–12:00, Room X

**SS 1815** Pulmonary circulation and venous imaging  
**LEVEL II**

**Moderators:** N.J. Screaton; Cambridge/UK  
W.H. Sommer; Munich/DE

- **Keynote Lecture**  
  N.J. Screaton; Cambridge/UK
Wednesday, February 28, 10:30–12:00, Room M 3

**SS 216** Colorectal cancer revisited  
(B-0162 – B-0172)

*Moderators:* L.K. Blomqvist; Stockholm/SE  
A. Lebovici; Cluj-Napoca/RO

Wednesday, February 28, 14:00–15:30, Room M 3

**SS 316** Cancer radiomics: adding value in cancer  
(B-0352 – B-0361)

*Moderators:* A. Farchione; Rome/IT  
S.M. Niehues; Berlin/DE

**Keynote Lecture**  
[X-K-08]  
X. Montet; Geneva/CH

Thursday, March 1, 08:30–10:00, Room F2

**RC 516** Functional imaging in oncology beyond morphology: where are we now?  
**LEVEL III**

*Chairperson's introduction:*  
What are the problems of morphologic evaluation  
[C.D. Becker; Geneva/CH]

A. Functional MRI techniques  
[V.J. Goh; London/UK]

B. CT perfusion techniques  
[H. Schöllnast; Graz/AT]

C. Assessment by molecular imaging  
[J. Grimm; New York, NY/US]

*Panel discussion:* Where are we using functional evaluations in clinical practice?

Thursday, March 1, 10:30–12:00, Room M 3

**SS 616** Lung cancer: what's next?  
(B-0584 – B-0594)

*Moderators:* M. Sánchez; Barcelona/ES  
M. Simic; Zagreb/HR

Thursday, March 1, 14:00–15:30, Room F1

**SS 716** Advances in oncologic imaging  
(B-0697 – B-0707)

*Moderators:* E.G. Klompenhouwer; Eindhoven/NL  
N.N.

Thursday, March 1, 16:00–17:30, Room F2

**RC 816** Monitoring response: the essential guide for all radiologists  
**LEVEL II**

*Chairperson's introduction:*  
P. Brader; Graz/AT

A. RECIST made easy  
[A-343]  
A.G. Rockall; London/UK

B. PERCIST: PET response criteria  
[C.C. Cyran; Munich/DE]

C. Assessment of response using functional MR and CT imaging: the essentials  
[L.S. Fournier; Paris/FR]

*Panel discussion:* When and how will functional imaging overcome morphological assessment?

Friday, March 2, 10:30–12:00, Studio 2018

**SS 1016a** Improving practice in oncologic imaging  
(B-0888 – B-0898)

*Moderators:* T. Pfammatter; Zurich/CH  
M. Seidensticker; Munich/DE

Friday, March 2, 10:30–12:00, Room F1

**SS 1016b** Improvements in neuro-oncology imaging  
(B-0930 – B-0940)

*Moderators:* L. Hermoye; Brussels/BE  
L. Jacobi-Postma; Maastricht/NL

**Keynote Lecture**  
[X-K-08]  
X. Montet; Geneva/CH

Friday, March 2, 16:00–17:30, Room F2

**RC 1216** Cancer screening  
**LEVEL II**

*Chairperson's introduction:* Screening for cancer: lessons learned and future challenges  
[S. Törnberg; Stockholm/SE]

A. Lung cancer screening: the evidence  
[H.-U. Kauczor; Heidelberg/DE]

B. Colorectal cancer screening: what is the radiologist's role?  
[S. Halligan; London/UK]

C. Breast cancer: to screen or not to screen  
[P. Skaane; Oslo/NO]

*Panel discussion:* Cancer screening: a success story?
ONCOLOGIC IMAGING

**Saturday, March 3, 10:30–12:00, Studio 2018**

**SS 1416** Advances in oncologic imaging of the abdomen

**Moderators:** T.K. Helmberger; Munich/DE
S. Jovanovic; Belgrade/RS

**Saturday, March 3, 14:00–15:30, Room M 3**

**SS 1516** Prostate cancer: what's next?

**Moderators:** I. Blazic; Belgrade/RS
U.G. Mueller-Lisse; Munich/DE

**Sunday, March 4, 08:30–10:00, Room F2**

**RC 1716** A multidisciplinary approach to prostate cancer: can we make a difference? [LEVEL III]

» Chairperson’s introduction [A-916]
A. Baur; Berlin/DE

A. The urologist: evidence-based clinical decision making [A-917]
N. Mottet; St. Etienne/FR

B. The radiologist: evidence-based use of multiparametric MRI [A-918]
H.-P. Schlemmer; Heidelberg/DE

C. The radiation oncologist [A-919]
D. Georg; Vienna/AT

» Panel discussion: Prostate cancer: evidence-based multidisciplinary approach to imaging and treatment

**Sunday, March 4, 10:30–12:00, Studio 2018**

**SS 1816** Latest imaging of gynaecological cancers

**Moderators:** M.-L. Ribak; Tallinn/EE
A.G. Rockall; London/UK
Emergency Radiology

**Wednesday, February 28, 14:00–15:30, Room F2**

**SS 317  CT imaging in trauma**

**(B-0288 – B-0298)**

**Moderators:**
- A. Agrawal; Delhi/IN
- F.G. Mack; Munich/DE

**Friday, March 2, 10:30–12:00, Room F2**

**SS 1017  Non-traumatic emergencies**

**(B-0941 – B-0950)**

**Moderators:**
- R.M.M. Hinzpeter; Zurich/CH
- D.J.M. Tolan; Leeds/UK

**Saturday, March 3, 08:30–10:00, Room F2**

**RC 1317  Imaging of ‘foreign bodies’**

**LEVEL III**

**Chairperson’s introduction**  
M. Pezzullo; Brussels/BE

**A. Surgical and orthopaedic devices:**
are they really properly positioned?  
E. Dick; London/UK

**B. Foreign bodies in the gastrointestinal tract:**
the role of radiographs, US and CT  
J.B.C.M. Puylaert; The Hague/NL

**C. Body packing:** what to know about imaging and when should we suspect early complications?  
M.K. Scherr; Munich/DE

**Panel discussion:** Common language with clinicians: how to report ‘foreign bodies’ presence

**Saturday, March 3, 14:00–15:30, Room D**

**RC 1517  The latest update in imaging of polytrauma patients**

**LEVEL II**

**Chairperson’s introduction:**
The role of proper imaging and management in patients after severe trauma  
M. Stajgis; Poznan/PL

**A. Ultrasound: when, why and by whom?**  
P.-A. Poletti; Geneva/CH

**B. CT: is it always whole body?**  
F.H. Berger; Toronto, ON/CA

**C. Where is the proper place for MRI?**  
K. Katulska; Poznan/PL

**Panel discussion:** Summarising comprehensive guidelines, how to qualify post-traumatic patients for the proper imaging modality

**Saturday, March 3, 16:00–17:30, Room F2**

**RC 1617  Why do I miss fractures in emergency?**

**LEVEL II**

**Chairperson’s introduction**  
S. Wirth; Munich/DE

**A. Missed fractures in children**  
A.C. Offiah; Sheffield/UK

**B. Missed fractures in adults**  
A. Pinto; Naples/IT

**C. Missed musculoskeletal injuries in whole-body MDCT examinations**
T. Ruder; Whangarei/NZ

**Panel discussion:** How to reduce the rate of missed fractures most effectively and efficiently
European Training Assessment Programme

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COFFEE & TALK SESSIONS

The new and attractive ‘Coffee & Talk’ session format will take place in one of the stylish lounges at the congress venue providing an informal atmosphere.

Participants are invited to stop by and contribute to the informal discussions while sipping their coffee and tea.

The ‘Coffee & Talk’ Room is located in the EuroSafe Imaging Lounge on the 1st level.

Places are allocated on a first-come, first-served basis.
**COFFEE & TALK SESSIONS**

**Wednesday, February 28, 12:00-13:00, Coffee & Talk**

**C 1** EuroSafe Imaging meets Japan Safe Radiology

- **Chairperson's introduction and introduction to EuroSafe Imaging** [A-071]  
  G. Frija; Paris/FR

- **Introduction to Japan Radiological Society** [A-072]  
  H. Honda; Fukuoka/JP

- **Standardisation and optimisation of referral/indication (CDS) and Japan-QIBA in Japan** [A-073]  
  K. Kumamaru; Tokyo/JP

- **Report registry in Japan Safe Radiology** [A-074]  
  S. Kanazawa; Okayama/JP

- **Radiation dose management in Japan Safe Radiology** [A-075]  
  M. Hori; Osaka/JP

- **Imaging and artificial intelligence in Japan Safe Radiology** [A-076]  
  M. Jinzaki; Tokyo/JP

- **Open forum discussion**

  This session is part of the EuroSafe Imaging campaign.

**Thursday, March 1, 10:30-11:30, Coffee & Talk**

**C 3** The right test the first time: clinical decision support systems

- **Chairperson's introduction**  
  B. Brijkačić; Zagreb/HR [A-264]

- **Reducing variance and improving diagnoses** [A-266]  
  L. Donoso; Barcelona/ES

- **ESR iGuide pilot in Jönköping County in Sweden** [A-267]  
  H. Ståhlbrandt; Eksjö/SE

- **‘Trumpcare’: where does CDS stand in the USA** [A-268]  
  J.A. Brink; Boston, MA/US

- **Open forum discussion**

  This session is part of the EuroSafe Imaging campaign.

**Wednesday, February 28, 14:00-15:00, Coffee & Talk**

**C 2** The best recipes for failing as a department chair

- **Chairperson's introduction** [A-091]  
  Y. Menu; Paris/FR

- **How to carefully select the wrong words for lousy communication** [A-092]  
  J.M.L. Bosmans; Ghent/BE

- **How to fail at managing imaging subspecialists** [A-093]  
  K. Nikolaou; Tübingen/DE

- **How to securely make enemies within your clinical environment** [A-094]  
  R. Manfredi; Rome/IT

- **Open forum discussion: You know what: I am happy to be a chairman**

**Thursday, March 1, 12:00-13:00, Coffee & Talk**

**C 4** Research in radiation protection

- **Chairperson's introduction** [A-269]  
  G. Frija; Paris/FR

- **European platforms for radiation protection** [A-270]  
  W. Stiller; Heidelberg/DE

- **Introduction to the MEDIRAD project** [A-271]  
  G. Frija; Paris/FR

- **Introduction to EURAMED** [A-272]  
  C. Hoeschen; Magdeburg/DE

- **Open forum discussion**

  This session is part of the EuroSafe Imaging campaign.
**COFFEE & TALK SESSIONS**

**March 1**

**Thursday, March 1, 14:00–15:30, Coffee & Talk**

**C 5  How to be effective in undergraduate teaching of radiology**

- Chairperson's introduction [A-296]
  V. Válek; Brno/CZ
- The role of eLearning in radiology education [A-297]
  M. Dewey; Berlin/DE
- The ‘flipped classroom/flipped learning’ approach in radiology training [A-298]
  C. Nyhsen; Strasbourg/FR
- Appropriate use of imaging studies: what students should know [A-299]
  F. Kainberger; Vienna/AT
- Simulation-based teaching in interventional radiology [A-300]
  R. Iezzi; Rome/IT
- Open forum discussion:
  How new education concepts and IT tools can contribute to undergraduate teaching of radiology?
  Chairperson's conclusion [A-301]
  V. Válek; Brno/CZ

**March 1**

**Thursday, March 1, 16:00–17:00, Coffee & Talk**

**C 11  Clinical decision support: challenges to overcome**

**Moderators:**
  - D. Husseiny Salama; Cairo/EG
  - M.R. Perez; Geneva/CH

- Introduction [A-376]
  G. Frija; Paris/FR
- Structured strategies to combat the CDS challenges in Egypt [A-377]
  D. Husseiny Salama; Cairo/EG
- Challenges and solutions from NDSC [A-378]
  M. Wassink; Vienna/AT
- Open forum discussion:
  What are the pitfalls in building an imaging biobank and what will be its future benefits?

**March 2**

**Friday, March 2, 12:00–12:45, Coffee & Talk**

**C 6  ESR audit pilot project**

- Chairperson's introduction
  E.J. Adam; London/UK  [A-470]
- ESR audit pack [A-472]
  B.E. Kelly; Belfast/UK
- Pilot project among EuroSafe Imaging Stars [A-473]
  L. Bonomo; Rome/IT
- Open forum discussion
  This session is part of the EuroSafe Imaging campaign.

**March 2**

**Friday, March 2, 13:00–14:00, Coffee & Talk**

**C 7  What is an imaging biobank and how can one be built?**

**Moderators:**
  - M.H. Fuchsjäger; Graz/AT  [A-487]
  - E. Neri; Pisa/IT  [A-488]

- The basis: definition and content of an imaging biobank [A-489]
  H.-U. Kauczor; Heidelberg/DE
- Strategy/pipeline to develop an imaging biobank [A-490]
  D. Bos; Rotterdam/NL
- Data protection of imaging data [A-491]
  C.D. Becker; Geneva/CH
- Open forum discussion:
  What are the pitfalls in building an imaging biobank and what will be its future benefits?

**March 2**

**Friday, March 2, 16:45–17:30, Coffee & Talk**

**C 14  Young radiologists in Europe**

**Moderator:**
  O. Dzaye; Berlin/DE

- ‘Junge Radiologen’: establishing networking between young radiologists [A-998]
  O. Dzaye; Berlin/DE
- Communication among young radiologists: structures and possibilities [A-999]
  M. Selbach; Mainz/DE
- Network among young radiologists in Europe: presence and borderless future [A-1000]
  T.A. Auer; Berlin/DE
- Open forum discussion with Prof. Hamm:
  Voice of young radiologists in Europe
COFFEE & TALK SESSIONS

3 March  Saturday, March 3, 08:30–09:15, Coffee & Talk

C 13  Why should radiologists care about IHE (Integrating the Healthcare Enterprise)?

» Chairperson’s introduction:
  IHE at a glance  [A-994]
  P. Mildenberger; Mainz/DE

» The IHE concept for structured reporting  [A-995]
  E. Kotter; Freiburg/DE

» The IHE concept for dose exposure management  [A-996]
  A. Schroeder; Erlangen/DE

» IHE supporting eHealth: image sharing and report distribution  [A-997]
  P. Mildenberger; Mainz/DE

» Open forum discussion

3 March  Saturday, March 3, 12:00–13:00, Coffee & Talk

C 8  Radiation protection of patients and staff in fluoroscopy-guided interventions

» Chairperson’s introduction  [A-711]
  W.R. Jaschke; Innsbruck/AT

» Dose management in angio suites: the dos and don’ts  [A-712]
  E. Vaño; Madrid/ES

» Radiation protection of staff: apparel and shielding  [A-713]
  G. Bartal; Kfar-Saba/IL

» Open forum discussion

This session is part of the EuroSafe Imaging campaign.

3 March  Saturday, March 3, 13:30–14:00, Coffee & Talk

C 12  Scaling up IT infrastructure in imaging departments: learn from the 1st DIAM Stage 6 awarded hospital

Moderator: P. Mildenberger; Mainz/DE

» Setting the scene: ESR’s support in planning and implementing imaging IT  [A-730]
  B. Brkljačić; Zagreb/KR

» The Digital Imaging Adoption Model (DIAM) in brief  [A-726]
  J. Studzinski; Leipzig/DE

» IT development in radiology: how to use DIAM for strategic planning  [A-727]
  P. Mildenberger; Mainz/DE

» Our experience: King Abdulaziz Medical City Riyadh; DIAM Stage 6 Hospital  [A-1001]
  N.N.

» Handover of ESR ‘Letter of Recognition’  [A-728]
  B. Brkljačić; Zagreb/KR

» Open forum discussion

4 March  Sunday, March 4, 11:00–12:00, Coffee & Talk

C 10  EuroSafe Imaging Stars

» Chairperson’s introduction  [A-956]
  L. Bonomo; Rome/IT

» EuroSafe Imaging Stars network  [A-957]
  T. De Bondt; Antwerp/BE

» Radiation protection of patients  [A-958]
  S.J. Foley; Dublin/IE

» Open forum discussion

This session is part of the EuroSafe Imaging campaign.
In Clinical Trials in Radiology (CTiR) Sessions, scientific evidence is presented for imaging tests that will change the clinical practice of every radiologist in the future. Each of the clinical trials in radiology presented during these three sessions is accompanied by a short lecture. These lectures are given by experts in the respective field and will allow participants to better understand which clinical changes should be made based on the CTiR results.
CLINICAL TRIALS IN RADIOLOGY

Wednesday, February 28, 10:30–12:00, Sky High Stage

CT 2 | Clinical Trials in Radiology 1

Moderators: M. Dewey; Berlin/DE  R.L. Ehman; Rochester, MN/US

» A two-center phase III, randomised, controlled study of MRgFUS vs EBRT in patients with metastatic non-spinal bone disease: palliative strategy for cancer-induced bone pain  [B-0184]
A. Napoli; Rome/IT
Discussant: M. Szczerbo-Trojanowska; Lublin/PL

» Percutaneous microwave thermal ablation (MWA) for patients with malignant lung tumors: mid-term results of a prospective multicenter study (MALT study)  [B-0185]
A. Posa; Rome/IT
Discussant: F. Gleeson; Oxford/UK

» Use of electromagnetic navigation improves performances in CT-guided interventions: a multicentric, prospective and randomised clinical trial  [B-0186]
A. Mounier; Grenoble/FR
Discussant: T. Penzkofer; Berlin/DE

» Randomised clinical trial of portal vein embolisation using n-butyl-cyanoacrylate vs polyvinyl alcohol particles plus coils for liver hypertrophy before major hepatectomies  [B-0187]
J.H.M. Luz; Lisbon/PT
Discussant: K.A. Haussegger; Klagenfurt/AT

» Paclitaxel coated balloon angioplasty for the treatment of symptomatic central venous stenosis in dialysis access: results from a prospective randomised control trial  [B-0188]
P. Papadimatos; Patras/GR
Discussant: R.H. Portugaller; Graz/AT

» Comparing different thrombectomy techniques in five large-volume centres: a ‘real world’ observational study  [B-0189]
A.C. Hesse; Göttingen/DE
Discussant: H.A. Deutschmann; Graz/AT

Thursday, March 1, 10:30–12:00, Sky High Stage

CT 6 | Clinical Trials in Radiology 2

Moderators: M. Dewey; Berlin/DE  R.L. Ehman; Rochester, MN/US

» MEDIRAD EARLY-HEART study: early clinical and biological predictors of radiotherapy-induced cardiac toxicity in breast cancer  [B-0595]
M.-O. Bernier; Fontenay-aux-Roses/FR
Discussant: V.E. Sinitsyn; Moscow/RU

» Low-dose chest CT vs conventional chest xray prior to cardiac surgery: the CRICKET study  [B-0596]
R.P.J. Budde; Rotterdam/NL
Discussant: J. Bremerich; Basle/CH

» Computed tomography (CTA) vs invasive coronary angiography (ICA) in patients with atypical chest pain and suspected coronary artery disease (CAD): gender analysis of a randomised study  [B-0597]
M. Bosserdt; Berlin/DE
Discussant: R. Marano; Rome/IT

» Effect of coronary computed tomography vs invasive coronary angiography on statin adherence and serum lipid levels in patients with atypical chest pain: a randomised controlled trial  [B-0598]
L. Elzenbeck; Berlin/DE
Discussant: R. Vliegenthart; Groningen/NL

» The role of intraprostatic antibiotic injection for reducing infectious complications of transrectal ultrasound-guided biopsy  [B-0599]
F. Shobeirian; Tehran/IR
Discussant: R. Vliegenthart; Groningen/NL

» The accurate non-invasive staging of liver fibrosis using deep learning radiomics of shear wave elastography for a multicenter study  [B-0600]
H. Zhou; Beijing/CN
Discussant: D. Regge; Turin/IT
March 2
Friday, March 2, 10:30–12:00, Sky High Stage

CT 10  Clinical Trials in Radiology 3

Moderators: M. Dewey; Berlin/DE  
R.L. Ehman; Rochester, MN/US

» Breast cancer screening with tomosynthesis: 
distribution of cancer subtypes in the Malmö 
Breast Tomosynthesis Screening Trial  [B-1006]  
K.S. Johnson; Malmö/SE  
Discussant: F.J. Gilbert; Cambridge/UK

» Digital breast tomosynthesis 
vs digital mammography: 
recall rate by mammographic density, 
interim analyses  [B-1007]  
H. Aase; Bergen/NO  
Discussant: E.M. Fallenberg; Berlin/DE

» Reduction in infarct volume on CT and 
functional outcome after endovascular 
treatment for acute ischemic stroke: 
a causal mediation analysis  [B-1008]  
K. Compagne; Rotterdam/NL  
Discussant: I. Szikora; Budapest/HU

» Radiologic follow-up of the NU-AGE trial: 
body composition changes detected by dual-energy 
x-ray absorptiometry show a correlation 
with laboratory markers of inflammation  [B-1009]  
A. Bazzocchi; Bologna/IT  
Discussant: F. Bamberg; Tübingen/DE

» An international randomised controlled trial 
of two interventions for reducing doses 
for computed tomography through audit 
feedback and sharing best practices  [B-1010]  
R. Smith-Bindman; San Francisco, CA/US  
Discussant: A. Trianni; Udine/IT

» Prophylactic hydration to prevent 
contrast-induced nephropathy (AMACING): 
long-term results of a prospective, randomised, 
controlled, non-inferiority trial  [B-1011]  
E.C. Nijssen; Maastricht/NL  
Discussant: P. Aspelin; Stockholm/SE
EuroSafe Imaging Sessions
organised by ESR's flagship initiative in radiation protection

C1 EuroSafe Imaging meets Japan Safe Radiology
Wednesday, February 28, 12:00-13:00, Coffee & Talk
Chairperson: Guy Frija; Paris/FR

EU1 Euratom Basic Safety Standards Directive:
A comprehensive approach for radiation protection
Wednesday, February 28, 16:00-17:30, Room M 1
Chairpersons: Guy Frija; Paris/FR, Steve Ebdon-Jackson; Didcot/UK

C3 The right test the first time: clinical decision support systems
Thursday, March 1, 10:30-11:30, Coffee & Talk
Chairperson: Boris Brkljačić; Zagreb/HR

EU2 Strategies for dose reduction in computed tomography:
from technical concepts to clinical practice
Thursday, March 1, 10:30-12:00, Room X
Chairpersons: Wolfram Stiller; Heidelberg/DE, Reinhard W.R. Loose; Nuremberg/DE

C4 Research in radiation protection
Thursday, March 1, 12:00-13:00, Coffee & Talk
Chairperson: Guy Frija; Paris/FR

C11 Clinical decision support: challenges to overcome
Thursday, March 1, 16:00-17:00, Coffee & Talk
Moderators: Dina Husseiny Salama; Cairo/EG, Maria del Rosario Perez; Geneva/CH

C6 ESR audit pilot project
Friday, March 2, 12:00-12:45, Coffee & Talk
Chairperson: E. Jane Adam; London/UK

EU3 Clinical diagnostic reference levels for x-ray medical imaging
Friday, March 2, 14:00-15:30, Room M 1
Chairpersons: John Damilakis; Iraklion/GR, Guy Frija; Paris/FR

C8 Radiation protection of patients and staff in fluoroscopy-guided interventions
Saturday, March 3, 12:00-13:00, Coffee & Talk
Chairperson: Werner R. Jaschke; Innsbruck/AT

C10 EuroSafe Imaging Stars
Sunday, March 4, 11:00-12:00, Coffee & Talk
Chairperson: Lorenzo Bonomo; Rome/IT

eurosafeimaging.org
ECR 2018 will feature a brand new scientific session format: ‘My Thesis in 3 Minutes’. It is aimed at residents and young radiologists who would like to present their thesis results as a first author, in a dynamic and entertaining scientific session.

This special session will take place at the new presentation location, the Sky High Stage, overlooking the Austria Center from the top of the nearby Saturn Tower.

Places are allocated on a first-come, first-served basis.
» Whole-body diffusion-weighted MRI in Hodgkin Lymphoma: 3D texture analysis for early treatment response assessment  
B-0362
K.N. De Paepe1, I.F. Vieira2, F. De Keyzer3, P. Wolter2, O. Bechter2, D. Dierickx1, R. Oyen1, G. Verhoeve2, V. Vandekeyve2; London/UK, 1Leuven/BE, 2Verviers/BE

» Dynamic glucose-enhanced MRI: clinical perspectives and challenges  
B-0363
D. Paech1, P. Schuenke1, C. Köhler1, P. Bachert1, M. Ladd1, M. Bendszus1, H.-P. Schlemmer1, M. Zaiss2, A. Radbruch1; Heidelberg/DE, 2Tübingen/DE

» Compressed sensing accelerated 3D magnetic resonance cholangiopancreatography: application in pancreatic diseases  
B-0364
L. Zhu, Z.-Y. Sun, H.-D. Xue, T.-Y. Qian, Z.-Y. Jin; Beijing/CN

» Multiparametric MRI to predict response to external beam radiotherapy in locally advanced cervical cancer: comparison of MRI-volumetry, diffusion-weighted MRI and MR texture analysis  
B-0365
L.A. Mir1, L.L.G.C. Ackermans1, M.E. Nowee1, J.J. van Griethuysen1, S. Trebeschi1, W. Vogel1, M. Maas1, R.G. Beets-Tan1, D.M.J. Lambregts1; Amsterdam/NL, 2Maastricht/NL

» Is there rationale for the routine inclusion of chest CT in gastric cancer staging? Evidence from a single institution cancer registry  
B-0366
A.-H. Chen1, C.-M. Chen2; 1Taoyuan/TW, 2Taipei/TW

» MR texture analysis: potential imaging biomarker for prediction of chemotherapy response in patients with colorectal liver metastases  
B-0367
H. Zhang, T.T. Tong; Shanghai/CN

» Patterns of responses in metastatic NSCLC during immunotherapy: comparison of RECIST 1.1, irRECIST and iRECIST criteria  
B-0368

» Diagnostic value of automated breast volume sonography (ABVS) in breast cancer detection in women with different ACR types  
B-0359
M. Efremova, V.E. Gazhonova; Moscow/RU

» Prognostic significance of different MRI modalities for evaluation of neoadjuvant chemoradiation treatment of locally advanced rectal cancer  
B-0370
O. Ganvch; Kyiv/UA

» Prediction of response to transarterial radioembolisation by means of MRI-based textureanalysis as a potential radiomics tool  
B-0371
R. Reimer1, P. Reimer1, A. Mahnken1; Marburg/DE, 1Karlsruhe/DE

» Comparison of whole-body MRI (wbMRI) and bone scintigraphy in oncologic follow up  
B-0373
A. Malich1, I. Papageorgiou1, D. Kovacevic1, A. Kott1, D. Wiech1, U.K. Teichgräber2; Nordhausen/DE, 1Jena/DE

» Does second reader opinion affect pancreatic adenocarcinoma management?  
B-0374
G. Corrias1, S. Huicochea Castellanos1, V. Balachandran1, L. Saba2, L. Mannelli1; 1New York, NY/US, 2Monserrato/IT

» Prognostic impact of body composition in patients with metastasised malignant melanoma with checkpoint-inhibitor therapy  
B-0375

» Influence of Trigger-PSA and molecularactive tumour volume evaluated with 68Ga-PSMA PET/CT on detection rate and localisation of recurrence in patients with prostate cancer  
B-0376
S.S. Medina-Ornelas, F. Garcia-Perez; Mexico City/MX

» Improved detection of skeletal muscle metastases in iodine-density overlay maps and virtual monoenergetic reconstructions provided by spectral detector CT  
B-0377
S. Lennartz1, M. Le Blanc1, N. Abdullayev1, N. Grosse Hokamp1,2, D. Maintz1, J. Borggrefe1, T. Persigehl1; 1Cologne/DE, 2Cleveland, OH/US

» Efficacy of intravoxel incoherent motion MRI in discrimination of metastatic vs non-metastatic abdominal lymph nodes in hepatobiliary malignancies: a correlation study with PET-CT  
B-0378
S. Sabet, S. Server, I. Karalok, E.K. Namal, N. Inan, Y. Tokat; Istanbul/TR

» Patterns of responses in metastatic NSCLC during immunotherapy: comparison of RECIST 1.1, irRECIST and iRECIST criteria  
B-0368

» Diagnostic value of automated breast volume sonography (ABVS) in breast cancer detection in women with different ACR types  
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» Prognostic significance of different MRI modalities for evaluation of neoadjuvant chemoradiation treatment of locally advanced rectal cancer  
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O. Ganvch; Kyiv/UA

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» Comparison of whole-body MRI (wbMRI) and bone scintigraphy in oncologic follow up  
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A. Malich1, I. Papageorgiou1, D. Kovacevic1, A. Kott1, D. Wiech1, U.K. Teichgräber2; Nordhausen/DE, 1Jena/DE

» Does second reader opinion affect pancreatic adenocarcinoma management?  
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» Prognostic impact of body composition in patients with metastasised malignant melanoma with checkpoint-inhibitor therapy  
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» Prognostic significance of different MRI modalities for evaluation of neoadjuvant chemoradiation treatment of locally advanced rectal cancer  
B-0370
O. Ganvch; Kyiv/UA

» Prediction of response to transarterial radioembolisation by means of MRI-based textureanalysis as a potential radiomics tool  
B-0371
R. Reimer1, P. Reimer1, A. Mahnken1; Marburg/DE, 1Karlsruhe/DE
Radiomics of high-grade serous ovarian cancer: association between quantitative CT features and prognosis  

Prostate cancer detection rate in patients with negative multi parametric (mp) MRI or negative biopsy after 2 years of follow up  
[E. Appendino1, S. Pedalino1, E. Tabone1, V. Romano1, S. Mazzetti1, A. Giacobbe1, G. Muto1, F. Russo1, D. Regge1; 1Candiolo-Turin/IT, 2Milan/IT]

Which cancer-related factors are associated with prostate cancer missing when evaluating mpMRI with PI-RADS v2?  
[R. Girometti1, F. Greco1, L. Cereser1, G. Como1, V. Ficarra2, G. Giannarini1, A. Crestani1, C. Zuiani1; 1Udine/IT, 2Messina/IT]

Role of ureteric jet angle as measured by colour Doppler ultrasound in evaluating severity (grading) of VUR in patients presenting with urinary complaints  
[P. Maravi; Bhopal/IN]

Accuracy of multiparametric MRI of prostate cancer recurrence after high intensity focused ultrasound (HIFU): is dynamic contrast enhancement still needed?  

Development of preoperative prediction of high Fuhrman grade in the patient with clear cell renal cell carcinoma  
[J. Ding, J. Chen, J. Sun, W. Xing; Changzhou/CN]

Prognostic value of diffusion-weighted imaging for clinical outcome prediction in uterine cervical cancer treated with radiotherapy  
[K. Gu, C.K. Kim, J. Lee; Seoul/KR]

Intravoxel incoherent motion and blood oxygen level-dependent of early iodinated contrast-induced acute kidney injury induced in a rabbit model  
[Y. Wang, K. Ren, L. Xie; X. Zhang1; Shenyang/CN, 2Beijing/CN]

Comparison of MRI and transvaginal ultrasonography in the diagnosis of retrocervical septum endometriosis  
[M. Wang, J. Lu, Y. Dai, Y. Xia; Beijing/CN]

Clinical complications in percutaneous renal biopsy guided by ultrasound: 16 gauge vs. 18 gauge needles  
[P. Ramos Botelho Antunes1, M.C. Barbosa Álvares1, F. Franco Monteiro Prado1, F. Tinôco Alvim de Souza1, M. Álvares de Campos1, E. Carvalho de Siqueira1, R. Berindoaque Neto1, B. Carvalho Silva Rabelo1; 1Belo Horizonte/BR, 2Itauna/BR]

Developing a new PI-RADS v2-based nomogram for forecasting high-grade prostate cancer  
[X. Niu; Chengdu/CN]

Diffusion-weighted MRI as a prognostic and response biomarker in patients with castration resistant prostate cancer and bone metastases  
[R. Perez Lopez1, N. Tunariu1, D.-M. Koh1, J.S. de Bono1; London/UK, 2Barcelona/ES]

Tumour size at MRI association with lymph node metastasis and lymphovascular space invasion in resectable cervical cancer: a multicentre evaluation of surgical specimens  
[X.-I. Chen, P. Zhou, H. Li; Chengdu/CN]

NSsaFe: observational study on the incidence of nephrogenic systemic fibrosis in patients with renal impairment following gadoteric acid administration  
[A. Gottschalk, B. Kress; Frankfurt a.Main/DE]

Staging of endometrial carcinoma with MRI: does the fusion T2-weighted and high b-value diffusion-weighted images improve diagnosis? An agreement study with histopathology  
[M. Correia1, M.A. Serrado1, M. Hortá1, T.M. Cunha1, D. Virella1; Lisbon/PT, 2Funchal/PT]

Testicular microlithiasis: clinic-radiologic-pathologic correlation in 289 patients with germ cell tumour  
[M. De la Mora Malváez1, A. Garza Gangemi1, D.A. Sánchez Nava1, M. Licano2, O.C. Rico Rodríguez1, C. Kauffman Ortega1, R. Castilijes Molina1; Mexico City/MX, 2Tlalpan/MX]

Differentiation and diagnosis of benign and malignant testicular lesions using 18F-FDG PET/CT  
[D. Shao; Guangzhou/CN]

Ectopic pregnancies in Caesarean section scars: five-years’ experience  
[H.S. Darwih1, Y. Habash1, M. Habsah2; 1Ismailia/EG, 2Cairo/EG]

Role of ultrasound and MR imaging in evaluation of patients at high risk of morbidly adherent placenta  
[G. Khatri1, N. Antil1, R. Misra, S.K. Bajaj; New Delhi/IN]
Advantages of spectral CT in staging of patients with non-small cell lung cancer (NSCLC)  
[ B-0412 ]  
U. Fehrenbach1, G. Böning1, J. Kahn1, F. Feldhaus1, M.H. Maurer2, B. Hamm1, F. Streitparth1; 1Berlin/DE, 2Berne/CH

Longitudinal airway remodeling in active and past smokers in a lung cancer screening population  
[ B-0413 ]  

Bronchial wall changes after thermoplasty in the treatment of severe asthma: CT-scan assessment at 3 months  
[ B-0414 ]  
Y.W. Kim1, M.P. Debray2, C. Fetita3, O. Fouque1, M. Aubier2, P.Y. Brillet1; 1Bobigny/FR, 2Paris/FR, 3Evry/FR

Optimisation of a chest CT protocol for the detection of ground glass opacity nodules: feasibility study with a computer assisted detection system and a lung cancer screening phantom  
[ B-0415 ]  

Diagnostic ability of the primary lung cancer by radiologists with chest x-ray  
[ B-0416 ]  
R. Nishino1, H. Numasaki2, N. Minamoto1, S. Nakai1, T. Uchigashima1, A. Takahashi1, S. Saka1, S. Takashima1; 1Suita/JP, 2Osaka/JP

Salivary gland tumours in the central airway: the comparison of CT features between adenoid cystic carcinoma and mucoepidermoid carcinoma  
[ B-0417 ]  
Y. Deng, Q. Zeng, X. Li, W. Luo; Guangzhou/CN

Early residual tumour differentiation from benign periablational thermal injury after radiofrequency ablation by spectral analysis with dual-energy computed tomography  
[ B-0418 ]  
L. Yuekao; Shi Jiazhuang/CN

Assessment of survival in patients with idiopathic pulmonary fibrosis using Kurtosis and mean lung density HRCT indexes  
[ B-0420 ]  
A.G. Torcitto1, M. Pavone1, A. Stefano2, C. Vancheri1, S. Palmucci1; 1Catania/IT, 2Cefalù/IT

Volumetric analysis of intravoxel incoherent motion diffusion-weighted MRI in predicting the invasiveness of non-small cell lung cancer  
[ B-0421 ]  
J. Jiang1, L. Cui1, Y. Fu1, G. Xu1; 1Yancheng/CN, 2Nantong/CN

Fully automated assessment of HRCT - images for follow-up of IPF  
[ B-0402 ]  

Quantitative prediction of malignancy on newly developed 3D computer-aided volumetry (CADv) with pulmonary nodule component evaluation on thin-section CT  
[ B-0403 ]  
Y. Ohno1, A. Yaguchi1, K. Aoyagi1, S. Kaminaga1, Y. Kishida1, S. Seki1, T. Yoshikawa1; 1Kobe/JP, 1Kawasaki/JP, 1Otawara/JP

Logistic regression analysis and a risk prediction model of tumour spread through air spaces (STAS) in patients with stage I lung adenocarcinoma  
[ B-0404 ]  
X. Wang; Beijing/CN

Quantitative MRI assessment of interstitial lung disease  
[ B-0405 ]  
M.T.A. Buzan1, A. Wetscherek2, C. Heussel2, M. Kreuter2, J. Dinkel2; 1Cambridge/UK, 2Heidelberg/DE, 3Munich/DE

Primary and metastatic lung tumours treated with stereotactic body radiation therapy (SBRT): own experience  
[ B-0406 ]  

Diagnostic value of radiologic signs of pulmonary hypertension: pulmonary artery aortic ratio, pulmonary artery vertebral ratio, contrast regurgitation in hepatic veins  
[ B-0407 ]  
G. Zanirato Rambaldi, F. Niro, N. Galiè, M. Zompatori; Bologna/IT

Application of high-pitch scanning mode in low-dose lung-computed tomography screening for patients with chronic obstructive pulmonary disease: a pilot study  
[ B-0408 ]  
C. Li, M. Li, L. Jin; Shanghai/CN

Morphological study of blood vessels near lung tumour by the 3D quantitative CT technique  
[ B-0409 ]  
Y. Li, Y.-l. Dai, Y.-m. Guo; Xi’an/CN

Ipf: diagnosis and follow-up using CT-fibrosis score; correlation with clinical and functional data in a cohort of patients in therapy with Pirfenidone or Nintedanib  
[ B-0410 ]  
S. Riva, G. Guzzardi, M. Barini, M. Valenti, A. Carriero, M. Pelle; Novara/IT

Pulmonary embolism-induced perfusion defects on iodine maps: quantitative comparison of dual-energy CT and subtraction CT  
[ B-0411 ]  
D. Grob1, L.J. Oostveen1, M.M. Prokop1, C. Schaefer-Prokop2, I. Sechopoulos1, M. Brink1; 1Nijmegen/NL, 2Amersfoort/NL
MY 7 Cardiovascular

Moderators: A. Tóth; Budapest/HU
M. Zins; Paris/FR

- The image quality of turbo high-pitch dual-source CT coronary angiography in patients with free-breathing, free heart rate and any BMI [B-0774]
K. Sun, B. Lu; Beijing/CN

- Machine-learning on-site CT-derived fractional flow reserve (FFR) compared to invasive FFR: influence of myocardial mass on accuracy [B-0776]

- Extra-cardiac findings at cardiac MR imaging: a single-center retrospective study over 14 years [B-0777]

- Incremental diagnostic value of myocardial perfusion stress testing for intermediate obstructive lesions on coronary CT angiography in acute chest pain [B-0778]
E. Feldman, J. Bai, E. van Staalduinen; Stony Brook, NY/US

- Subclinical coronary and carotid atherosclerosis in asymptomatic high risk patients [B-0779]
M. Guglielmo1, A. Guaricci2, V. Lorenzoni1, S. Mushtaq1, G. Muscogiuri1, E. Maffei2, F. Cademartiri1, R. Mark4, G. Pontone1; Milan/IT, 2Bari/IT, 1Monastier di Treviso/IT, 2Charleston, SC/US, 3Maywood, IL/US

- Comparison of sports activity between ambitious triathletes with and without myocardial late gadolinium enhancement [B-0780]

- Evaluation of dark blood LGE in assessing sub-endocardial MI and papillary muscle scar [B-0781]
L. Song1, X. Ma2, X. Zhao3, L. Zhao1, Y. Fan1, B. Wu1, Z. Wang1, H. Chen1; Beijing/CHN, 2Kunning/CHN

- Stress-rest CMR for the assessment of myocardial perfusion reserve index modification after coronary sinus stent implantation [B-0782]
A. Palmisano, G. Benedetti, F. Giannini, L. Baldetti, A. Del Maschio, F. De Cobelli, E. Maffei, Milan/IT

- Myocardial fibrosis imaging based on T1-mapping and ECV measurement in diabetes: diagnostic value compared with LGE imaging [B-0783]
Y. Gao, Z. Yang, X. Liu; Chengdu/CN

- Prevalence of subclinical coronary artery disease by coronary computed tomography among low risk women after preeclampsia [B-0785]

- Quantitative oedema and late gadolinium enhancement thresholds for the diagnosis of myocarditis in suspect cases [B-0786]
M. Ali1, C.B. Monti, F.S. Carbone, F. Secchi, P.M. Cannao1, F. Sardanelli; Milan/IT

- Correlation between liver density and epicardial fat volume: biomarkers of coronary artery disease [B-0787]
C. Ferrari1, G. Milanese1, M. Silva1, N. Giovanardi1, M. Goldoni1, E. Maffei2, F. Cademartiri1, N. Sverzellati1; 1Parma/IT, 2Urbino/IT, 3Rotterdam/DE

- Semi-quantitative evaluation of coronary microvascular dysfunction in paediatric patients with leukemia using magnetic resonance first-pass perfusion imaging [B-0788]
Q. Zhao1, X. Rong, Z. Yang, K. Diao, Y. Gao, Y. Guo; Chengdu/CN

- Cardiac magnetic resonance in prognostic stratification of patients with acute myocardial infarction and preserved ejection fraction [B-0789]
G. Dacquino, I. Carbone, N. Galea, L. Agati, G. De Rubeis, C. Catalano, M. Francone; Rome/IT

- 4D flow MRI for the analysis of celiac trunk and mesenteric artery stenoses [B-0790]

- Comparison of biphasic DE-CT with virtual unenhanced dual energy reconstruction and triphasic CT with true unenhanced images in patients with suspected acute bleeding [B-0791]

- Virtual monochromatic imaging improve the stent visualisation in lower extremity run-off CT angiography by dual-layer spectral detector CT [B-0792]
D. Zhang, Z. Jin, H. Xue, S. Yu, R. Wu; Beijing/CHN

- Magnetic particle imaging: safe use of endovascular stents [B-0793]
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MY THESIS IN 3 MINUTES

Thursday, March 1, 16:00–17:30, Sky High Stage

MY 8 Neuro

Moderators: Z. Merhemic; Sarajevo/BA
M. Vernooij; Rotterdam/NL

» Trajectories of imaging markers of the aging brain: the Rotterdam study  [B-0794]
E.J. Vinke, M. de Groot, V. Venkatraghavan, S. Klein, W.J. Niessen, M.A. Ikram, M.W. Vernooij; Rotterdam/NL

» The neural substrate of retinal neurodegeneration: the Rotterdam study  [B-0795]

» Mult-parametric 11C-Methionine-MR/PET for brain tumour imaging utilising MR fingerprinting  [B-0796]

» Sum score of cerebral small vessel disease relates to risk of stroke, dementia and mortality in the Rotterdam study  [B-0797]
P. Yilmaz, M. Ikram, W.J. Niessen, M. Ikram, M.W. Vernooij; Rotterdam/NL

» MRI brain atrophy can predict dementia in cognitively normal Parkinson’s patients: a 7 year follow-up study  [B-0798]

» Quantitative study noninvasively prediction of glioma IDH1 gene status by APT combined with ASL imaging  [B-0799]
J. Wen; Shanghai/CN

» Sex differences in resting-state cerebral activity alterations in internet gaming disorder  [B-0800]
Y. Sun, Y. Zhou, Y. Wang, X. Han, W. Ding, J. Xu, F. Wang; Shanghai/CN

» 3D neuromelanin imaging for differential diagnosis between Parkinson disease and essential tremor: a multicenter retrospective study  [B-0801]

» Ischaemic optic neuropathy: using track-weighted imaging to detect changes in the neuroretina  [B-0802]

» Intracranial atherosclerotic plaque enhancement associated with ischaemic stroke: a study with three-dimensional high-resolution magnetic resonance vessel wall imaging  [B-0804]
X. Bai, J. Lin; Shanghai/CN

» Quantitative measurement of brain iron deposition in patients with peritoneal dialysis using susceptibility mapping  [B-0805]
A.-N. Lin; Kaohsiung/TW

» Increased cerebral GABA concentration measured using 1H MRS in the acute paediatric mTBI  [B-0806]
P.E. Menshchikov, N. Semenova, I. Melnikov, M. Ublinskiy, T. Akhadov; Moscow/RU

» A preliminary study on non-invasive prediction of IDH1 gene status in glioblastoma by intravoxel incoherent motion MR imaging  [B-0807]
J. Wen; Shanghai/CN

» In vivo molecular profiling of human glioma using dynamic susceptibility contrast magnetic resonance perfusion imaging  [B-0808]

» Prediction of postoperative cerebral hyperperfusion: a study using territory arterial spin labelling (tASL)  [B-0810]
T. Lin, Y. Lyu, Z. Zuo, H. You, J. Qu, B. Hou, F. Feng; Beijing/CN

» Characteristics of plaques and lenticulostriate arteries in stroke patients by whole-brain vessel wall imaging  [B-0811]
F. Wu, Q. Yang, C. Zhang; Beijing/CN

» MRI assessment of brain gray matter structural changes in severe nicotine dependent  [B-0813]
A. Dong; Zhengzhou/CN
MY THESIS IN 3 MINUTES

**2 March**
Friday, March 2, 08:30–10:00, Sky High Stage

**MY 9 Interventional radiology**

**Moderators:** R.F. Dondelinger; Liège/BE
P.M. Kitrou; Patras/GR

- Two year follow-up: results after acute stroke endovascular thrombectomy [B-0814]
  A. Balodis, M. Radzina, K. Kupcs, E. Milglane, J. Savlovskis, H. Kidikas, A. Veiss; Riga/LV

- Comparison between not-stent retriever and stent retriever mechanical thrombectomy for the intra-arterial acute ischemic stroke treatment [B-0815]
  E. Puglielli, R. Lattanzi, V. Di Mizio, S. Roiati, F. Navarra, V. Di Egidio; Teramo/IT

- Endoscopic ultrasound-guided hybrid thrombination in patients with stage III pancreatic adenocarcinoma: a clinical study with radiological perspectives [B-0816]
  M. Barbera, S. Testoni, E. Dabizzi, S. Gusmini, M. Petrone, A. Esposito, A. Del Maschio, P. Arcidiacono, F. De Cobelli; Milan/IT

- Impacts of related risk factors on the efficacy of interventional treatment towards intractable postpartum haemorrhage [B-0817]
  C. Zhao; Beijing/CN

- Is portal vein embolisation of liver segment IV mandatory before extended right hemihepatectomy? [B-0818]
  C. Loborg, S. Keil, F. Goerg, C.K. Kuhl, P.L. Bruners; Aachen/DE

- Combined antegrade and retrograde approach in iatrogenic ureteral injuries: the rendez-vous technique [B-0820]
  G. Pacella, E. Faieila, D. Santucci, A. Alfonsi, C. Altomare, B. Beomonte Zobel, R.F. Grasso; Rome/IT

- MR-guided focused ultrasound (MRgFUS) thalamotomy for the treatment of medically refractory essential tremor [B-0821]
  S. Dababou1, C. Marrocchio1, C. Halpern2, J. Henderson2, A. Napoli1, C. Catalano1, K. Butts Pauly3, V. Santini2, P. Ghanouni4,1; Rome/IT, 1Stanford, CA/US

- CT guided percutaneous synovial cyst rupture using a 11G Jamshidi needle: early experience and results of a novel technique [B-0822]
  S. Islam; D. Johnson; London/UK

- Performance and safety of pancreas biopsy: are there more complications by routes of risk? [B-0823]
  J.M. Sastakou G. S. Lombardo, J.J. Espejo Herrero, I. Dominguez Paillacho, M. Perez Montilla, L.J. Zurerden Tendero; Cordoba/ES

- TACE using mitomycin with or without irinotecan for HCC in European patients [B-0824]

- Randomised controlled trial of freehand vs robotic-guided needle positioning in CT-guided thermoablation of liver tumours [B-0825]
  W.J. Heerink1, S.J.S. Ruiter1, M. Arnolli2, J. Pennings1, B. Lamsdorp2, R. Vliegenthart1, M. Oudkerk2, K.P. de Jong1,1; Groningen/NL, 2Enschede/NL

- Vertebroplasty with trajectory planning and 3D road map applications: first experiences [B-0826]
  M. Inecikli; Rize/TR

- Stent retriever single shot study (4S): multivariable analysis for first-pass recanalisation in acute stroke [B-0827]
  F.J. Melendez1,1, S. Rosati2,2, S. Aixut Lorenzo1,1, S. Remollo Friedemann3,1, M.F. Werner Reyes1,1, M. Ribó Jacobí1,1, D. Hernández Morales1,1, M. Martinez1,1, A. Tommasello Weitz1,1; 1Barcelona/ES, 2Madrid/ES, 3Riells i Viabrea/ES

- US guided percutaneous renal biopsy: a 10 year retrospective analysis [B-0828]
  J.A. Sheehan, R. Durganaudu, T. Tarmey, G.J. O’Sullivan, D. Sheppard; Galway/IE

- Treatment of intramural and submucosal uterine fibroids (UFs) using MRgFUS (magnetic resonance-guided focused ultrasound surgery) [B-0829]
  S. Iafrate, I. Capretti, E. Cannizzaro, F. Arrigoni, M. Di Luzio, A.V. Giordano, S. Mascaretti, G. Mascaretti, C. Masciocchi; L’Aquila/IT

- Evaluation of a 3D printed anthropomorphic phantom for simulation of CT-guided procedures [B-0830]
  P. Jahnke, F.B. Schwarz, M. Ziegert, O. Abdelhadi, T. Almasi, M. Nunninger, B. Hamm, M. Scheel; Berlin/DE

- Recurrence and survival following image-guided percutaneous microwave ablation in primary lung malignancy [B-0831]
  M. Tsakok, M. Little, R. Millington, G. Hynes, F. Gleeson, M. Anderson; Oxford/UK

- Sampling errors in image-guided liver biopsies: depiction of the biopsy site on immediate post-interventional CE MRI [B-0832]
  G. Schneider, A. Bücker, L. Fenzl; Homburg/DE

- Contrast-enhanced ultrasound (CEUS) as guidance system for ablative treatments of primary and secondary liver tumours: a multicenter study [B-0833]
» Spectral detector-computed tomography iodine density thresholds for the detection of vertebral metastases [B-1012]
N. Abdullayev, V. Neuhaus, M. Le Blanc, N. Groshe Hokamp, V. Maus, S. Lennartz, D. Maintz, J. Borggreve; Cologne/DE

» Combining fractal- and entropy-based bone texture analysis for the prediction of osteoarthritis: data from the multicenter osteoarthritis study (MOST) [B-1013]
Z. Bertalan1, S. Nehrer2, R. Liuhar3, A. Fahrleitner-Pammer4, D. Liuhar1, H.-P. Dimai5; 1Vienna/AT, 2Krems/AT, 3Graz/AT

» Delayed gadolinium enhanced MRI of menisci and cartilage (dGEMIRM/dGEMRIC) in overweight patients with knee osteoarthritis [B-1014]
S. Hangaard1, H. Gudberg2, C.L. Daugaard3, H. Blidadi2, J.D. Nybing2, V. Casula1, M.T. Nieminen3, C.J. Tiderius4, M. Boesen5; 1Frederiksberg/DK, 2Copenhagen/DK, 3Oulu/FI, 4Lund/SE

» Ultrasound of the posterior interosseous nerve in the arcade of Frohse [B-1015]
C. Tu1ay, S. Aubry, A. Podda, J. Behr; Besancon/FR

» Safety and efficiency of treatment of partial supraspinatus tendon tear with injection of PRP and HA [B-1016]
C. Lupo1, A. Meiri2, V. Incarbone3, N. Casamassima4, L. Callegari5; Palermo/IT, 2Varese/IT

» Improving the sensitivity of bone mineral density assessment using spectral detector CT [B-1017]
S. van Hedert1, K.-H. Su, F. Liang, J.-W. Kuo, D.W. Jordan, B. Eck, P.R. Ros, R. Muzic; Cleveland. OH/US

» Virtual bone mineral density imaging with third-generation dual-energy CT for diagnosis of osteoporosis: a preliminary study [B-1018]
L. Wang, G. Shenchu, B. He, J. Chen; Nantong/CN

» Quantitative MRI of knee articular cartilage in hyperuricemia [B-1019]
X. Cai1, X. Liu2, Guangzhou/CN

» In-vivo quantitative 4D-CT analysis of carpal kinematics with radio-scaphoid and luno-capitate angles during radio-ulnar deviation: feasibility and clinical interest [B-1020]
A. Rauch; Nancy/FR

» Detection of osseous metastases using dual-energy CT with material decomposition algorithms: phantom development and preliminary clinical validation [B-1021]
H.-C. Huang1, B.M. Yeh2, R. Srinivasan2, Y. Sun2; 1Taipei City/TW, 2San Francisco, CA/US

» High diagnostic accuracy of kep on dynamic contrast enhanced MRI perfusion in identifying vertebral malignancy [B-1022]
M. Verma1, S. Sood, B. Singh, M. Thakur, S. Sharma, S. Sharma; Shimla/IN

» Complementary metal artefact reduction of total hip replacements by monoenergetic and O-MAR reconstructions in spectral-detector computed tomography [B-1023]

» Ultra-high field 7 Tesla MRI and biomechanical investigation of vertebral bone microarchitecture [B-1024]
D. Guenoun1, A. Foure, M. Pithiou2, S. Guis, T. Le Coroller, V. Pauly, P. Chabrand, P. Champsaur, D. Bendahan; Marseille/FR

» Postoperative evaluation of a arthroscopic coracoid bone block surgery with CT-Scan. [B-1025]
O. Andreani1, P. Gendre2, C. Dekimpe3, A. Rudel4, N. Amoretti5, P. Boileau6; Nice/FR, 7Cagnes sur Mer/FR

» Volumetric bone mineral density assessment of the lumbar spine using a novel phantomless dual-energy CT postprocessing algorithm in comparison to dual x-ray absorptiometry [B-1026]

» Learning curve of an ultrasound guided percutaneous release of carpal tunnel: a cadaveric study [B-1027]
O. Andreani, C. Dekimpe, C.-P. Rafteri, N. Amoretti, Nice/FR

» Accuracy of ultrasound with and without sonoelastography in the diagnosis of partial-thickness rotator cuff tears with MDCT arthrography and arthroscopic verification [B-1028]
V.E. Gazhynova1, M. Emelianenko2, M. Onishchenko; Moscow/RU

» Iterative reconstruction improves image quality in virtual non-calcium images of the spine for the detection of bone marrow edema in patients with vertebral compression fractures [B-1029]
N. Engelhard1, K.-G. Herrmann2, M. Fuchs1, M. Pumberger1, M. Putzier1, J. Mews1, B. Hamm1, T. Diekhoff1, Berlin/DE, 2Neuss/DE

» T2 relaxometry of cartilage and meniscus and semi-quantitative assessment of the knee using DESS: a 5-minute MRI scan [B-1030]
S. Eijgenraam1, A. Chaudhari2, G. Gold3, M. Reijman1, E. Oei1, B. Hargreaves2; 1Rotterdam/NL, 2Rotterdam/CA, 3Stanford, CA/US

» Correlation of body mass index with paraspinal muscle fatty degeneration in non-diabetic patients with lumbar spinal canal stenosis: results from 685 patients [B-1031]
S. Winklhofer1, J. Burgstaller1, U. Held1, T. Finkenstaedt1, F. Del Grande2, G. Andreisek3, J. Steurer1, N. Bolog4; 1Zurich/CH, 2Lugano/CH, 3Münsterlingen/CH, 4Munchenstein/CH
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MY THESIS IN 3 MINUTES

Saturday, March 3, 10:30–12:00, Sky High Stage

MY 14     Head and Neck

Moderators: S.J. Golding; Oxford/UK
           B. Verbist; Leiden/NL

» Evaluation of the differentiation in head and neck squamous cell carcinoma with PET/MR  [B-1181]
H. Dang, Y. Chen, Z. Jin, H. Xue, B. Hou, F. Li; Beijing/CN

» Is it benign or malignant? Assessing isolated lymphadenopathy of the head and neck using textural analysis.  [B-1182]
S. Chin, A. Karnalasanan, S. Henderson, T.A. Sudarshnan; Dundee/UK

» Head and neck cancer heterogeneity assessed by CT texture analysis: can it predict the Human Papillomavirus status?  [B-1183]
F. Mungai, M. Pietragalla, L. Bonasera, M. Bartolucci, V. Berti, V. Miele; Florence/IT

» Estimation of the irradiation dose of children exposed to CBCT for various dental pathologies  [B-1184]
M. Marcu, M. Hedesiu; Cluj-Napoca/RO

» Disrupted brain functional network architecture in long term sensorineural hearing loss patients.  [B-1185]
X.-M. Xu, G. Teng; Nanjing/CN

» Elastography Shear Wave contribution when evaluating thyroid follicular nodules comparing to histological findings  [B-1186]
P.H.D. Moraes, M. Charmas, M. Schelini; São Paulo/BR

» Metrics and textural features of MRI diffusion to improve classification of common parotid gland tumours.  [B-1187]
Z. Zhang, J. Cheng; Zhengzhou/CN

» The diagnostic value of combination of US < MRI preoperative prediction for the extrathyroidal extension of papillary thyroid carcinoma  [B-1188]
S. Hu; Zhenjiang/CN

» Use of the previously proposed (2013) ultrasound total malignancy score (TMS) in the management of thyroid nodules  [B-1189]
S. Zannoni1, G. Pompili1, S. Tresoldi1, G. Di Leo1, A. Ravelli1, A. Primolevo1, G. Spadarella1, G. Carrafiello1; Milan/IT, 1Aldamura/IT

» A multivariate analysis combining DCE and IVIM derived parameters to improve parotid tumours differential diagnosis  [B-1190]
F. Patella1, G. Franceschelli1, M. Petriollo2, M. Sansone2, R. Fusco2, G. Carrafiello1; 1Milan/IT, 2Naples/IT

» Does RFA induce neoplastic change of benign thyroid nodules  [B-1191]
S. Ha, J. Shin, J. Baek, D. Song, S. Chung, Y. Choi, J. Lee; Seoul/KR

» Prognostic significance of PET-based radiomic image features in locally advanced laryngeal and hypo-phyaryngeal squamous cell carcinoma  [B-1192]
H.L. Nelstrop, R. Prestwich, M. Barnfield, G.M. McDermott, A. Scarsbrook; Leeds/UK

» Lateralisation effects on functional connectivity of the auditory network in patients with unilateral pulsatile tinnitus as detected by functional MRI  [B-1193]
W. Chang, M. Chen; Shanghai/CN

» Shear wave elastography in the evaluation of level VI lymph nodes in papillary thyroid carcinoma  [B-1194]
W. Chang, M. Chen; Shanghai/CN

» Diagnostic value of dual-energy CT imaging for cervical lymph nodes metastasis in patients with papillary thyroid cancer  [B-1195]
N. Tharwat Mohammed El-Sayed; Mansoura/EG

» An innovative 3D-3D superimposition for assessing anatomical uniqueness of frontal sinuses (FS) through segmentation on CT-scans  [B-1197]
R.V. Mathilakath; Davangere Karnataka/IN

» Radiological diagnosis of desomorphine-associated osteonecrosis  [B-1200]
A. Babkova, N.S. Serova, S.P. Pasha, M. Shariya; Moscow/RU

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MY THESIS IN 3 MINUTES

Saturday, March 3, 14:00–15:30, Sky High Stage

**MY 15  Abdominal and Gastrointestinal**

**Moderators:** M. Dewey; Berlin/DE
M. Zins; Paris/FR

» The efficacy of MRI in the diagnostic work-up of cystic fibrosis-associated liver disease [B-1255]
S. Pötter-Lang, K. Stauffer, P.A. Baltzer, D. Tamandi, D. Muin, N. Bastati-Huber, E. Halibasic, L. Kazemi-Shirazi, A. Ba-Salamah; Vienna/AT

» T1 mapping on Gadoxetic acid-enhanced MR imaging potentially predicts recurrence of HCC after hepatectomy [B-1256]

» Magnetic resonance imaging of hepatitis B virus-related hepatocellular carcinoma: correlations with imaging features and molecular marker glypican-3 [B-1257]
S. Wang, J.H. Li; Beijing/CN

» Differentiation of inflammatory pseudo-tumour from colorectal liver metastases on gadoxetic acid-enhanced magnetic resonance imaging [B-1258]

» Dynamic enhanced CT of multiple solid pancreatic lesions: prevalence and features of non-malignancies [B-1259]
L. Zhu, J. Li, Z.-Y. Sun, H.-D. Xue, Z.-Y. Jin; Beijing/CN

» Diagnostic accuracy and interobserver agreement: CEUS-LI-RADS vs MRI-LI-RADS [B-1260]
B. Schellhaas, M. Hammon, D. Strobel, R. Görtz, A. Cavallaro, R. Janka, M. Uder, H. Seuss; Erlangen/DE

» Evaluating autoimmune pancreatitis under corticosteroid treatment with T1 mapping [B-1261]

» Non-hypervascular pancreatic neuroendocrine tumours: spectrum of MDCT imaging findings and differentiation from pancreatic ductal adenocarcinoma [B-1262]
E. Belousova, G. Karmazanovsky; Moscow/RU

» Application of CT texture analysis in evaluating histologic grade of pancreatic neuroendocrine tumours [B-1264]
S.-h. Cheng, L. Zhu, H. Xue, Z. Jin; Beijing/CN, Chengdu/CN

» The efficacy of superb microvascular imaging for diagnosing acute cholecystitis: comparison with conventional ultrasonography [B-1265]
J. Ro, E. Lee, H. Park, J. Lee, S. Park, B. Choi; Seoul/KR

» MR T2 mapping of hepatocellular carcinoma: sequence parameters optimisation and its correlation with Ki-67 proliferation status, histological grades and microvascular density [B-1266]
L. Cao, B. Song; Chengdu/CN

» Readout-segmented echo-planar diffusion-weighted MR for the evaluation of aggressive characteristics of rectal cancer [B-1267]
X. Chunchao, Z.-L. Li; Shanghai/CN

» Comparison of liver stiffness measurements between point shear wave elastography (ElastPQ) and two-dimensional shear wave elastography (ElastQ Imaging) equipped on a same machine [B-1269]

» MRI-detected extramural vascular invasion is one of the strongest risk factors in predicting distant metastasis in rectal cancer [B-1270]
P. Tripathi, S. Rao, W. Guo, B. Rai, M.-S. Zeng; Shanghai/CN, Wuhan/CN

» Radiomics analysis for preoperative prediction of synchronous distant metastasis in patients with rectal cancer [B-1271]
H. Liu, C. Zhang, J. Li, D. Wang; Shanghai/CN

» CT-based radiomics for prediction of neoadjuvant chemotherapy outcomes in locally advanced gastric cancer: a pilot study [B-1272]
Z. Li; Kunming/CN

» Can emergency CT reliably detect significant blunt bowel and mesenteric injury? [B-1273]
N. Keller, T. Zingg, F. Agri, J.-F. Knebel, S. Schmidt Kobbe; Lausanne/CH

» Comparison of liver stiffness measurements between point shear wave elastography (ElastPQ) and two-dimensional shear wave elastography (ElastQ Imaging) equipped on a same machine [B-1269]

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N. Keller, T. Zingg, F. Agri, J.-F. Knebel, S. Schmidt Kobbe; Lausanne/CH

» MRI vs FDG PET-CT for response assessment after neoadjuvant chemoradiotherapy in oesophageal cancer [B-1274]
» Comparison of double-reading of mammography-2D with single-reading of tomosynthesis plus synthesised mammography. Is it time to change the way we work in breast-screening programme? [B-1275]
S. Romero, J.L. Raya Povedano, M. Cara Garcia, A.L. Santos, M. Pedrosa Garriguet; Cordoba/ES

» Radiomics signature from enhanced T1-weighted MR image helps to improve the differential diagnosis performance of sub-1cm breast mass [B-1276]
L. Wang¹, D. Wang¹, X. Li²; ¹Shanghai/CN, ²Guangzhou/CN

» Correlation between optoacoustic imaging and molecular subtypes of malignant breast masses [B-1277]
G. Menezes¹, R.M. Pijnappel¹, C. Meeuwis², B. Bisschops³, J. Veltman³, P. Lavin³, M. van de Vijver³, R.M. Mann³; ¹Utrecht/ NL, ²Amsterdam/ NL, ³Dordrecht/ NL, ⁴Almelo/ NL, ⁵Framingham, MA/ US, ⁶Amsterdam/ NL, ⁷Nijmegen/ NL

» Diagnostic values of magnetic resonance imaging in mammography detected BI-RADS 4 category calcifications [B-1278]
Y. Jiang, H.-U. Kauczor; Heidelberg/DE

» Characterising mammographic calcification as a prognostic biomarker for breast tumour phenotypes [B-1279]
J. Li, Y. Song, Y. Wu, H. Cai, L. Li; Guangzhou/CN

» Intravoxel incoherent motion diffusion-weighted magnetic resonance imaging in characterisation of axillary lymph nodes: preliminary animal experience [B-1280]
Y. Zhu, X. Li, F. Wang, Z. Ye; Tianjin/CN

» Radiomics with MRI for early prediction of the response to neo-adjuvant chemotherapy in breast cancer patients [B-1281]
A. Kambie¹, A. Kambie¹, M. Popli¹; ¹New Delhi/IN, ²Mumbai/IN

» The role of arterial spin labelling (ASL) and diffusion tensor imaging (DTI) to differentiate between malignant and benign breast lesions [B-1282]
A.N. Kambie¹, A. Kambie¹, M. Popli¹; ¹New Delhi/IN

» Earlier detection of breast cancer using artificial intelligence [B-1283]
A. Watanabe¹, W. Bradley¹, V.D. Lim², C.Y.R. Chim³; ¹Manhattan Beach, CA/US, ²San Diego, CA/US

» Sensitivity of contrast enhanced spectral mammography (CESM) versus digital mammography (DM) for detecting breast cancer in dense or extremely dense breasts [B-1284]
E. Gioutlaki¹, C. Tzimas¹, E. Feida¹, A.N. Chalazonitis; Athens/GR

» MRI analysis after neoadjuvant chemotherapy on breast cancer: correlation between radiological and pathological response [B-1285]

» Screen-detected breast cancer: differences in mammographic tumor features between agreement and disagreement recall [B-1286]
M. Orsi, M. Cellina, F. Leone, D. Mariani, A. Presazzi, C. Floridi, G. Oliva; Milan/IT

» Interpretation of patterns of enhancement on contrast-enhanced digital mammography: an approach to a standardised scheme [B-1287]
S. Gareer¹, Y. Mounir², M.H. Helal³, O. Mokhtar³, A. Abdel Aziz³, H. Kassas³, L. Bassam³; ¹Cairo/EG

» Screen detected breast cancer: an argument for starting screening mammography at age 40 in the community-based setting [B-1288]
R. Benjamin¹, M. Aujero¹, K.S. Traylor¹, M. Gerges²; ¹Newark, DE/US, ²Philadelphia, PA/US

» Abbreviated breast MRI: do we still need contrast media? [B-1289]
A. D’Angelo¹, J. Al Mohanna², P. Clauser³, P. Kapetas³, P. Rinaldi¹, C. Zuiani⁴, T. Helbich³, K. Preidler³, P.A. Baltzer³; ¹Rome/IT, ²Riyadh/SA, ³Vienna/AT, ⁴Udine/IT

» Molecular subtypes of invasive breast cancer: correlation between PET/CT and MRI findings [B-1291]
M. Akin, I.S. Örgüc, F. Aras, A. Kandiloglu; Manisa/TR

» Radiomics with MRI for early prediction of the response to neo-adjuvant chemotherapy in breast cancer patients [B-1281]
A. Kambie¹, A. Kambie¹, M. Popli¹; ¹New Delhi/IN

» Comparison of automated vs bilateral handheld whole-breast US in screening patients regarding efficacy and patient preference [B-1293]
B. Tutar, G. Esen, H. Kara, N. Guldogan, C. Uras; Istanbul/TR

» Breast cancer staging with automated breast volume scanner (ABVS) and digital breast tomosynthesis (DBT): a comparison with magnetic resonance imaging (MRI) [B-1294]
R. Girometti¹, L. Tomkova², M. Zanotel³, M. Lorenzon; ¹Utrecht/ NL, ²Arnhem/ NL, ³Dordrecht/ NL, ⁴Almelo/ NL, ⁵Framingham, MA/ US, ⁶Amsterdam/ NL, ⁷Nijmegen/ NL
How can we improve the patient experience of nuclear medicine hybrid imaging procedures? A systematic review of the evidence  
S. King; Bristol/UK

Air embolism on coronary computed tomography angiography: its incidence associated with preparation of intravenous infusion.  
S. Kayano1, K. Ono1, T. Yamaguchi2, H. Ota1; 'Sendai'/JP, 'Sapporo'/JP

Evaluating the roles of CT radiographers in the UK  
M.A. Harris1, M. Hardy2; 'Wakefield'/UK, 'Bradford'/UK

Digital radiography: impact of a lower tube voltages on image quality and radiation dose in chest phantom radiography  
I. Hauge1, I.-J. Aandahl1, J.-P. Baranzelli2, P.M. Coelho3, L. Eriksen1, N. Hadebe4, G. Kahl5, S. van Shagen6, M. O`Connor7; 1Oslo/NO, 2Lausanne/CH, 3Lisbon/PT, 4Bloemfontein, Free State/ZA, 5Santa Catarina/BR, 6Groningen/NL, 7Dublin/IE

Patient doses in plain chest x-ray compared to national DRLs  
A. Henner, K. Paalimäki-Paakki; Oulu/FI

Radiography on wheels for nursing home residents may reduce healthcare costs  
E. Kjelle1, L. Kleven2, H. Olerud1, H. Melberg2; 1Trondheim/NO, 2Kongsberg/NO

Relationship between body fat by DEXA and cardiovascular risk factors  
R.A.M. Santos; A.C. Girão, J.P. Figueiredo; Coimbra/PT

Exposure to electromagnetic fields during a gradient echo sequence in a 3T MRI scanner along z-axis  
V.M.F. Silva, I. Ramos, M. Marques, J. Moreira; Porto/PT
Volumetric histograms-based analysis of SUV and ADC values for the assessment of pediatric sarcomas at staging: preliminary results of a PET/MR study  
A. Varotto¹, G. Orsatti¹, F. Crimi¹, D. Cecchin¹, P. Zucchetta¹, M. Weber², R. Stramare³, C. Giraudo¹; ¹Padua/IT, ²Vienna/AT

Computer-assisted detection of acute pulmonary embolism in children and young adults: inter-observer effect  
C. Tang¹, C. Zhou¹, U.J. Schopf², D. Mastroidicasa³, Y. Zhao³, L. Lu³, X. Li³, M. Lu³, L. Zhang⁴; ⁴Nanjing/CN, ²Charleston, SC/US, ³Chieti/IT

Clinical equivalence assessment of T2 synthetic paediatric brain MRI  
B. Kerleroux¹, T. Kober¹, T. Hilbert¹, D. Sirinelli¹, B. Morel¹; ¹Tours/FR, ²Zurich/CH, ³Lausanne/CH

Effect of a child-adjusted method for brain volume quantification on group comparisons in dyslexia  
T. Phan, D. Smeets, M. Vandermosten; Leuven/BE

Enhancement of MRI histogram in the identification of children with medulloblastoma and ependymoma  
W. Wang, J. Cheng, Y. Zhang; Zhengzhou/CN

Prenatal imaging of anorectal malformations  
L. Rohrer, Y. Vial, R. Meuli, L. Alamo-Maestre; Lausanne/CH

Prognostic value of radiological response assessment after induction therapy in paediatric soft tissue sarcomas  
G. Orsatti¹, A. Varotto¹, F. Crimi², G. Bisogno¹, I. Zanetti¹, C. Giraudo¹, R. Stramare¹; ¹Padua/IT, ²Vicenza/IT

Central nervous system (CNS) involvement in congenital heart diseases (CHD): value of foetal MRI  
R. Petrillo¹, A. Antonelli, S. Bernardo, S. Satta, V. Vinci¹, L. Manganaro, C. Catalano; Rome/IT

Vermis-to-Pons ratio in the differential diagnosis of Vermian malformations: a foetal MRI study  
A. Antonelli, S. Bernardo, R. Petrillo, S. Satta, S. Ciulla, V. Vinci¹, L. Manganaro, C. Catalano; Rome/IT

Radiation use in paediatric age: are paediatricians updates of the state of the art legislation?  
s. Salerno¹, C. Tudesca¹, C. Granata³, D. Origgi³, L. Moro³, M. Barbagallo¹, G. Corseil¹, A. Villani¹; ¹Palermo/IT, ²Genoa/IT, ³Milan/IT, ⁴Pavia/IT, ⁵Catania/IT, ⁶Rome/IT

Histogram analysis of apparent diffusion coefficients may predict molecular subgroups of medulloblastoma in children  
W. Wang, J. Cheng, Y. Zhang; Zhengzhou/CN

The role of prenatal diffusion weighted MRI in the evaluation of the fetal CNS condition in patients who received intrauterine blood hemotransfusion as the hemolytic disease treatment  
A.A. Berman¹, A. Ageev¹, O. Chernova², A. Vazhenin²; ¹Ekaterinburg/RU, ²Chelyabinsk/RU

Hepatobiliary ultrasonographic abnormalities and clinical severity score of paediatric sickle cell anaemia patients in a resource-poor setting  
D. Ibe; Kaduna/NG

Ultrasound diagnostics of the respiratory distress syndrome in premature infants  
O. Sorochan; Kharkiv/UA

Role of MR enterography in evaluation of disease activity and treatment response in paediatric Crohns disease correlation between MRE and PCDAI scores  
A. Chellathurai, A. Narasingam, S. Radhakrishnan, S. Sankaranarayanan, D. Arun; Chennai/IN

Transverse comparisons between ultrasound and radionuclide parameters in children with pelviureteric junction obstruction  
N.O. Shwaky; Cairo/EG

Spectrum of malformations of cortical development with clinicoradiological correlation and analysis of associated abnormalities: Experience from a tertiary care center in Egypt  
D.M. El-Mossly, S.A. Mohammad, E.M. Abelhafez, N. Osman, K.A. Ahmad; Cairo/EG

Role of MRI vs CT in staging and decision making in pediatric renal masses  
E. Nasr, A. Youssef, W. Zekry, T. Raafat, A. Younis, H.A. Elkiki; Cairo/EG

Closed spinal dysraphisms: how to improve prenatal diagnosis?  
T. Nguyen, V. Houfflin-Debarge, M. Vinchon, N. Boutry, F.E. Avni; Lille/FR

Radiological appearance and follow up results of diaphragmatic mesothelial cysts during childhood  
I. Akdulum¹, M. Öztürk², S. Karatoprak³, A. Siğirici⁴; ¹Ankara/TR, ²Konya/TR, ³Malatya/TR
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At ECR 2018 two series of educational Hands-on Workshops will take place dealing with the topics ‘MRI in the Prostate’ and ‘Ultrasound Elastography’. The number of participants at each session is restricted to 30. Places at these workshops are allocated on a first-come, first-served basis.
HANDS-ON WORKSHOPS

MRI OF THE PROSTATE

Participants are asked to bring their own laptops.

1 March Thursday, March 1, 08:30–09:30, Room Y
HW 530 Hands-on Workshop: MRI of the Prostate (1)
» Instructor: P. Asbach; Berlin/DE

1 March Thursday, March 1, 10:30–11:30, Room Y
HW 630 Hands-on Workshop: MRI of the Prostate (2)
» Instructor: A. Baur; Berlin/DE

1 March Thursday, March 1, 14:00–15:00, Room Y
HW 730 Hands-on Workshop: MRI of the Prostate (3)
» Instructor: G.M. Villeirs; Ghent/BE

1 March Thursday, March 1, 16:00–17:00, Room Y
HW 830 Hands-on Workshop: MRI of the Prostate (4)
» Instructor: P. Asbach; Berlin/DE

3 March Saturday, March 3, 08:30–09:15, Room Y
HW 1331 Liver and spleen elastography (adult and paediatric)
» Instructors: S. Franchi-Abella; Le Kremlin-Bicêtre/FR
O. Lucidarme; Paris/FR

3 March Saturday, March 3, 10:30–11:15, Room Y
HW 1431 Breast elastography
» Instructor: C.S. Balleyguier; Villejuif/FR

3 March Saturday, March 3, 14:00–14:45, Room Y
HW 1531 Thyroid elastography
» Instructor: V. Cantisani; Rome/IT

3 March Saturday, March 3, 16:00–16:45, Room Y
HW 1631 Prostate elastography
» Instructor: J.-M. Correas; Paris/FR

ULTRASOUND ELASTOGRAPHY

2 March Friday, March 2, 08:30–09:30, Room Y
HW 930 Hands-on Workshop: MRI of the Prostate (5)
» Instructor: B. Hamm; Berlin/DE

2 March Friday, March 2, 10:30–11:30, Room Y
HW 1030 Hands-on Workshop: MRI of the Prostate (6)
» Instructor: A.R. Padhani; London/UK
JOINT SESSIONS
**EDiR TEASER**  
(*European Diploma in Radiology*)

This session aims to prepare prospective candidates for the European Diploma in Radiology (EDiR).

**Friday, March 2, 13:30–14:00, Room Z**

**EDiR Teaser**

**Moderator:** J. Vilar; Valencia/ES  
[A-492]

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**EFOMP WORKSHOPS**  
(*European Federation of Organisations for Medical Physics*)

**Friday, March 2, 08:30–10:00, Room G**

**EF 1**  
**Dose management systems and repositories: part A**

**Moderators:** J. Damilakis; Iraklion/GR  
A. Trianni; Udine/IT

- **Chairperson’s introduction**  
  J. Damilakis; Iraklion/GR  
  [A-418]

- **The ‘EuroSafe Imaging’ campaign’s point of view**  
  G. Frija; Paris/FR  
  [A-419]

- **Strategies for dose management for achieving optimised imaging**  
  J.N. Vassileva; Vienna/AT  
  [A-420]

- **The benefits of dose management systems in view of the new Euratom Directive**  
  V. Tsapaki; Athens/GR  
  [A-421]

This session is part of the EuroSafe Imaging campaign.

**Friday, March 2, 10:30–12:00, Room G**

**EF 2**  
**Dose management systems and repositories: part B**

**Moderators:** M. Brambilla; Novara/IT  
M. Mahesh; Baltimore, MD/US

- **Chairperson’s introduction**  
  M. Brambilla; Novara/IT  
  [A-456]

- **Organisation of dose management systems and repositories for radiation protection and biomedical research: possibilities and limitations of current implementations and standards**  
  B. Gibaud; Rennes/FR  
  [A-457]

- **Imaging and dose repositories: tools to boost radiation protection and research?**  
  E. Neri; Pisa/IT  
  [A-458]

- **The ACR dose index registry: setting a benchmark**  
  M. Mahesh; Baltimore, MD/US  
  [A-459]

This session is part of the EuroSafe Imaging campaign.
**Joint Sessions**

**March 3**  
Saturday, March 3, 14:00–15:30, Room K

**EIBIR SESSION**  
(European Institute for Biomedical Imaging Research)

**EFRS WORKSHOP**  
(European Federation of Radiographer Societies)

**Making the most of social media**

- Chairperson’s introduction: Social media in healthcare  
  J. McNulty; Dublin/IE
- Enhancing communication and collaboration through social media  
  M.J. Díaz Candamio; Ferrol/ES
- #MedRadJClub: a Twitter journal club  
  N.H. Woznitza; London/UK
- The value of social media to professional societies  
  E. Alfayate Sáez; Madrid/ES
- Social media at ECR  
  S. Lee; Vienna/AT  
  K. Friedrich; Vienna/AT
- Improving patient engagement through social media  
  L. Robinson; Salford/UK
- Panel discussion: Making better use of social media: what should we consider?

**March 1**  
Thursday, March 1, 16:00–17:30, Room L 8

**EIBIR Research Session:**  
European imaging researchers united in diversity  

- Chairperson’s introduction  
  G.P. Krestin; Rotterdam/NL
- Laser and Ultrasound Co-analysers for Thyroid Nodules (LUCA) Project: latest results  
  U. Weigel; Barcelona/ES
- Testing hybrid MR/PET (HYPMED) device for enhanced breast diagnosis in a multicentre clinical trial  
  T.H. Helbich; Vienna/AT
- Smart Optical and Ultrasound Diagnostics of Breast Cancer (SOLUS) Project: aims and objectives  
  P. Taroni; Milan/IT
- EIBIR’s role in imaging research projects  
  P. Zolda; Vienna/AT
ESHI SESSION
(European Society for Hybrid Medical Imaging)

**Thursday, March 1, 14:00-15:30, Room M 3**

**Trends in quality education in radiology**

**Moderators:** B. Brkljačić; Zagreb/HR
N. Gourtsoyiannis; Athens/GR

- **Introduction** [A-283]
B. Brkljačić; Zagreb/HR

- **ESOR in action 2018** [A-284]
N. Gourtsoyiannis; Athens/GR

- **The beauty of face-to-face teaching** [A-285]
Y. Menu; Paris/FR

- **Flipped classroom: paradigm shift with pathologists** [A-286]
V. Vilgrain; Clichy/FR

- **Integration of big data in radiological education** [A-287]
L. Martí-Bonmatí; Valencia/ES

- **Awards**

**Non-oncological hybrid imaging: case-based**

**Moderators:** O. Ratib; Geneva/CH
K. Riklund; Umea/SE

- **Cardiac hybrid imaging indications:** case-based [A-581]
C. Rischpler; Munich/DE

- **Non-oncological intracranial indications for hybrid imaging: case-based** [A-582]
A. Drzezga; Cologne/DE

- **Hybrid imaging in inflammation: case-based** [A-583]
A. Signore; Rome/IT

**Friday, March 2, 16:00-17:30, Room M 1**

**ESOR SESSION**
(European School of Radiology)

**March 1**

**Thursday, March 1, 14:00-15:30, Room M 3**

**Trends in quality education in radiology**

**Moderators:** B. Brkljačić; Zagreb/HR
N. Gourtsoyiannis; Athens/GR

- **Introduction** [A-283]
B. Brkljačić; Zagreb/HR

- **ESOR in action 2018** [A-284]
N. Gourtsoyiannis; Athens/GR

- **The beauty of face-to-face teaching** [A-285]
Y. Menu; Paris/FR

- **Flipped classroom: paradigm shift with pathologists** [A-286]
V. Vilgrain; Clichy/FR

- **Integration of big data in radiological education** [A-287]
L. Martí-Bonmatí; Valencia/ES

- **Awards**
**ESR AUDIT AND STANDARDS SESSION**

**Saturday, March 3, 16:00–17:30, Room M 1**

Audit across Europe: directive and perspective

» Chairpersons’ introduction
  A. Brady; Cork/IE  [A-852]
  D.C. Howlett; Eastbourne/UK  [A-853]

» The Esperanto Audit Project: results from the pilot project and roll out
  B.E. Kelly; Belfast/UK

» Engaging in the Pilot: The Eurosaf e Imaging Star Perspective
  G. Paulo; Coimbra/PT

» Quality improvement and change management: Audit in industry
  S. Lee; Guildford/UK

» HERCA and Audit: Inspection vs Clinical Audit. What’s the difference?
  S. Ebdon-Jackson; Didcot/UK

» Panel discussion: Does Audit make the patient journey safer?

This session is part of the EuroSafe Imaging campaign.

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**ESR PATIENT ADVISORY GROUP (ESR-PAG) SESSIONS**

**Saturday, March 3, 10:30–12:00, Room L 8**

**ESR-PAG 1**

Patient-doctor relationship and interdisciplinary communication in the radiology department

» Chairpersons’ introduction
  N. Bedlington; Vienna/AT  [A-692]
  M.H. Fuchsjäger; Graz/AT  [A-693]

» A radiologist’s point of view
  D.-G. Carrié; Toulouse/FR

» A radiographer’s point of view
  B.T. Andersson; Lund/SE

» Patients’ point of view
  J. Birch; Poole/UK  [A-696]
  D. Walsh; Dublin/IE  [A-697]

» The radiologist as a patient
  R. Stern Padovan; Zagreb/HR

» Panel discussion: How can we improve communication in the department and avoid misunderstanding?

**Saturday, March 3, 16:00–17:30, Room L 8**

**ESR-PAG 2**

Big data: implications for medical imaging and the need for data protection and cyber security

» Chairpersons’ introduction
  N. Bedlington; Vienna/AT  [A-817]
  L.E. Derchi; Genoa/IT  [A-818]

» Implications of protection of medical imaging data: a European perspective
  C.D. Becker; Geneva/CH

» Cyber security in radiology
  J. Sosna; Jerusalem/IL

» Importance of data protection from a patient’s view
  E. Briers; Hasselt/BE

» Experiences from the US
  J.A. Brink; Boston, MA/US

» Panel discussion: What is the future direction of data protection and cyber security in medical imaging?
ESR PUBLICATIONS COMMITTEE SESSION

**Sunday, March 4, 08:30–10:00, Room M 1**

**How to write a scientific paper and how to get it published**

**Moderators:** R.G.H. Beets-Tan; Amsterdam/NL
F. Sardanelli; San Donato Milanese/IT

» The study design and the structure of an original article  [A-931]
  F. Sardanelli; San Donato Milanese/IT

» The review process in radiology  [A-932]
  Y. Menu; Paris/FR

» The review process in other clinical journals  [A-933]
  R. Madoff; Minneapolis, MN/US

» Important papers other than original articles  [A-934]
  L. Martí-Bonmatí; Valencia/ES

» Discussion

ESR RESEARCH COMMITTEE SESSION

**Friday, March 2, 08:30–10:00, Room L 8**

**How to foster clinical research in imaging departments**

**Moderator:** O. Clément; Paris/FR

» Results of the ESR Survey on European Research  [A-400]
  O. Clément; Paris/FR

» An overview of the roles of radiographers in research  [A-401]
  J. McNulty; Dublin/IE

» How to structure a research management unit in an imaging department  [A-402]
  S. Mallard; Bordeaux/FR

» Implementing quality imaging in multicentre trials  [A-403]
  Y. Liu; Brussels/BE

» Panel discussion: How to structure imaging departments for clinical research?
ESR WORKING GROUP
ON ULTRASOUND SESSIONS

February 28, Wednesday, 16:00–17:30, Room M 1

EU 1  Euratom Basic Safety Standards Directive: a comprehensive approach for radiation protection

Chairpersons: G. Frija; Paris/FR
S. Ebdon-Jackson; Didcot/UK

» Chairperson’s introduction [A-145]
S. Ebdon-Jackson; Didcot/UK

» The technical approach: achievements and future of dose reduction [A-146]
W.A. Kalender; Erlangen/DE

» The clinical approach: the gap to be closed [A-147]
G. Frija; Paris/FR

» The clinical audit: the missing link [A-148]
E.J. Adam; London/UK

» The regulatory approach [A-149]
S. Ebdon-Jackson; Didcot/UK

» The European Commission’s perspective and update on the transposition in the European Member States [A-150]
G. Simeonov; Luxembourg/LU

» The industry’s perspective and work needed to comply with the Basic Safety Standards [A-151]
N. Denjoy; Brussels/BE

» Panel discussion: Is the Basic Safety Standards Directive a step forward for patients, clinical professionals and regulators?
G. Frija; Paris/FR
S. Ebdon-Jackson; Didcot/UK
W.A. Kalender; Erlangen/DE
E.J. Adam; London/UK
N. Denjoy; Brussels/BE
G. Simeonov; Luxembourg/LU

This session is part of the EuroSafe Imaging campaign.

March 3, Saturday, 16:00–17:30, Room E1

WG 1  Ultrasound-guided interventional procedures: new techniques and applications

Moderators: P.L. Pereira; Heilbronn/DE
D.A. Clevert; Munich/DE

» Liver [A-823]
E. Leen; London/UK

» Pancreas [A-824]
M. D’Onofrio; Verona/IT

» Kidney [A-825]
J.-M. Correas; Paris/FR

» Thyroid [A-826]
G. Mauri; Milan/IT

March 2, Friday, 08:30–10:00, Room M 3

WG 2  Tips and tricks for abdominal ultrasound

» Chairpersons’ introduction [A-437]
M. Claudon; Vandoeuvre-les-Nancy/FR
V. Vařek; Brno/CZ

» Doppler imaging [A-439]
F. Calliada; Pavia/IT

» CEUS [A-440]
M. D’Onofrio; Verona/IT

» Elastography [A-441]
D.A. Clevert; Munich/DE

» Fusion imaging [A-442]
C. Ewertsen; Copenhagen/DK

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Scientific Programme

EUROSAFE IMAGING
SESSIONS
EUROSAFE IMAGING SESSIONS

1 March
Thursday, March 1, 10:30–12:00, Room X

EU 2 Strategies for dose reduction in computed tomography: from technical concepts to clinical practice

Chairpersons: W. Stiller; Heidelberg/DE
R.W.R. Loose; Nuremberg/DE

» Chairperson's introduction [A-247]
W. Stiller; Heidelberg/DE

» Systems for dose reduction in CT: more than automated exposure control [A-248]
M. Prokop; Nijmegen/NL

» Iterative image reconstruction for dose reduction in CT: technical background and concepts for clinical practice [A-249]
P.B. Noël; Munich/DE

» Dose reduction strategies in paediatric CT [A-250]
E. Castellano; London/UK

» Adapting protocols towards dose reduction in chest CT [A-251]
D. Tack; Baudour/BE

» Dose reduction and image quality: when low is too low [A-252]
S.T. Schindera; Aarau/CH

This session is part of the EuroSafe Imaging campaign.

2 March
Friday, March 2, 14:00–15:30, Room M 1

EU 3 Clinical diagnostic reference levels for x-ray medical imaging

Chairpersons: J. Damilakis; Iraklion/GR
G. Frija; Paris/FR

» Chairpersons’ introduction and update on the project on clinical DRLs for x-ray medical imaging
J. Damilakis; Iraklion/GR [A-500]
G. Frija; Paris/FR [A-501]

» The concept of diagnostic reference levels (DRLs) [A-502]
E. Vaño; Madrid/ES

» The concept of clinical diagnostic reference levels (DRLs) [A-503]
G. Frija; Paris/FR

» An update on current European diagnostic reference levels (DRLs) in adult imaging [A-504]
J. Damilakis; Iraklion/GR

» An update on current paediatric diagnostic reference levels (DRLs) [A-505]
C. Granata; Genoa/IT

» The concept of local diagnostic reference levels (DRLs) [A-506]
N. Saltybaeva; Zurich/CH

» Panel discussion
J. Damilakis; Iraklion/GR
G. Frija; Paris/FR
E. Vaño; Madrid/ES
J.N. Vassileva; Vienna/AT
M.R. Perez; Geneva/CH

This session is part of the EuroSafe Imaging campaign.
JOINT SESSIONS

March 2 Friday, March 2, 10:30–12:00, Room M 2
PIER 1 Establishing competence in radiology

Moderators: J. McNulty; Dublin/IE  
P. Valdés Solís; Marbella/ES

» Achieving homogeneity in radiology education:  
linking content to competence through the European training curriculum  
L. Oleaga Zufiría; Barcelona/ES

» Establishing competence in radiology:  
a UK perspective  
C. Rubin; Southampton/UK  
W. Ramsden; Leeds/UK

» The value of the European Diploma  
P.C. Maly Sundgren; Lund/SE

» Obstacles to establishing competence in radiology  
P. Valdés Solís; Marbella/ES

» How to manage the incompetent professional?  
J.K. Bell; Manchester/UK

» Panel discussion: Overcoming heterogeneity in radiology competence across Europe:  
a dream or reality?

March 2 Friday, March 2, 14:00–15:30, Room M 2
PIER 2 Radiology will survive, but will the radiologist still be there?

Moderators: P. Leander; Malmö/SE  
S. Morozov; Moscow/RU

» The landscape in radiology is changing:  
the radiologists need to adapt  
P. Leander; Malmö/SE

» Big-data, artificial intelligence, machine learning, deep learning etc.: what radiologists should know  
K.J. Dreyer; Boston, MA/US

» How cope with the new IT developments:  
the developer’s perspective  
S. Tolle; Galway/IE

» The value of the radiologist in the evolving digital environment: challenges for leadership  
C.D. Becker; Geneva/CH

IIQ Image Interpretation Quiz  
Imaging wizardry

Moderator: E.J. Adam; London/UK

Panellists:  
M.I. Argyropoulou; Ioannina/GR  
S. Barter; Cambridge/UK  
M.H. Fuchs; Graz/AT  
A. Gangi; Strasbourg/FR  
H.-U. Kauczor; Heidelberg/DE  
L. Oleaga Zufiría; Barcelona/ES  
C. Owens; London/UK  
M. Zins; Paris/FR

IIIQ Junior Image Interpretation Quiz  
Young radiologists in the landscape of artificial intelligence

Moderator: O.F. Donati; Zurich/CH

Eminence Joker:  
R.A. Kubik-Huch; Baden/CH

Panellists:  
E. Dappa; Mainz/DE  
L. Filli; Zurich/CH  
K.L. Gandrup; Copenhagen/DK  
R. Nicolaescu; Bucharest/RO  
I. Pogledic; Vienna/AT  
D. Ramos-Andrade; Coimbra/PT

March 3 Saturday, March 3, 12:55–13:55, Room A
JIIQ Junior Image Interpretation Quiz  
Young radiologists in the landscape of artificial intelligence

Moderator: O.F. Donati; Zurich/CH

Eminence Joker:  
R.A. Kubik-Huch; Baden/CH

Panellists:  
E. Dappa; Mainz/DE  
L. Filli; Zurich/CH  
K.L. Gandrup; Copenhagen/DK  
R. Nicolaescu; Bucharest/RO  
I. Pogledic; Vienna/AT  
D. Ramos-Andrade; Coimbra/PT
PROFESSIONAL ISSUES AND ECONOMICS IN RADIOLOGY (PIER) SESSIONS

2 March Friday, March 2, 16:00–17:30, Room M 2

PIER 3 Value-based radiology

Moderators: P. Mildenberger; Mainz/DE  
G. McGinty; New York, NY/US

» Basic concepts of value-based radiology:  
US perspective  [A-584]  
J.A. Brink; Boston, MA/US

» Basic concepts of value-based radiology:  
European perspective  [A-585]  
L. Donoso; Barcelona/ES

» New metrics are required for value-based radiology  [A-586]  
G. McGinty; New York, NY/US

» Panel discussion: A European - US debate on the value of ‘value-based radiology’  
J.A. Brink; Boston, MA/US  
L. Donoso; Barcelona/ES  
G. McGinty; New York, NY/US  
L.E. Derchi; Genoa/IT  
E.J. Adam; London/UK

3 March Saturday, March 3, 08:30–10:00, Room Z

Joint Session of the ESR and the BBMRI-ERIC  
(Biobanking and BioMolecular resources Research Infrastructure - European Research Infrastructure Consortium)

Linking imaging biobanks to -omics: the role of BBMRI and ESR

Moderators: A. van der Lugt; Rotterdam/NL  
E. Steinfelder; Graz/AT

» Introduction to BBMRI biobanking and biomolecular resources research infrastructure  [A-612]  
E. Steinfelder; Graz/AT

» Secondary use of existing data: ethical issues, sharing and data protection  [A-613]  
M.T. Mayrhofer; Graz/AT

» Types of biobanks in the BBMRI network  [A-614]  
P. Holub; Graz/AT

» Radiomics: enhancing the value of images by standardised feature extraction  [A-615]  
S. Trattnig; Vienna/AT

» Integrating an imaging biobank in a BBMRI biobank  [A-616]  
B. Gibaud; Rennes/FR

1 March Thursday, March 1, 08:30–10:00, Room M 1

Joint Session of the ESR and EFOMP  
(European Federation of Organisations for Medical Physics)

CT screening: benefits, doses and associated risks

Moderators: J. Damilakis; Iraklion/GR  
D. Tack; Baudour/BE

» Dose and risk assessment  [A-228]  
M. Brambilla; Novara/IT

» Quantitative benefit-risk analysis  [A-229]  
J. Damilakis; Iraklion/GR

» Breast CT  [A-230]  
W.A. Kalender; Erlangen/DE

» How to communicate  [A-231]  
G. Paulo; Coimbra/PT

» Discussion

This session is part of the EuroSafe Imaging campaign.
Wednesday, February 28, 16:00–17:30, Room L 8

Joint Session of the ESR and ESMRMB
(European Society for Magnetic Resonance in Medicine and Biology)

Exploring the microscopic from macroscopic: the strengths of multiparametric MRI

Moderators: D. Sappey-Marinier; Bron/FR
T. Leiner; Utrecht/NL

» Modelling brain multicompartment microscopic diffusion [A-113]
C. Poupon; Gif-sur-Yvette/FR

» How quantitative MRI reveals brain microstructure [A-114]
C. Granziera; Lausanne/CH

» MRI of cardiac muscle microstructure [A-115]
M. Froeling; Utrecht/NL

March 1
Thursday, March 1, 08:30–10:00, Room L 8

Joint Session of the ESR and ESHI
(European Society for Hybrid Medical Imaging)

When to use hybrid imaging

Moderators: K. Riklund; Umeå/SE
T. Beyer; Vienna/AT

» Imaging prostate cancer: MRI or PSMA-PET/CT? [A-201]
L. Schimmöller; Düsseldorf/DE

» Differentiating radiation necrosis from tumour recurrence: do we need hybrid imaging? [A-202]
E.-M.B. Larsson; Uppsala/SE

» What can we expect as future targets for new radiopharmaceuticals? [A-203]
G. Cook; London/UK

Wednesday, February 28, 16:00–17:30, Room X

Joint Session of the ESR Working Group on Ultrasound with EFSUMB
(European Federation of Societies for Ultrasound in Medicine and Biology)

Elastography of superficial structures: where are we now?

Moderators: M. Claudon; Vandoeuvre-les-Nancy/FR
P.S. Sidhu; London/UK

» Thyroid US elastography: indications and limitations [A-103]
V. Cantisani; Rome/IT

» Elastography of the breast: when should we assess tumour stiffness? [A-104]
J. Carlsen; Copenhagen/DK

» Is there any value in tendon and nerve assessment? [A-105]
A. Klauser; Innsbruck/AT

» Scrotal elastography: hype or real? [A-106]
M. Bertolotto; Trieste/IT

» Discussion

Sunday, March 4, 08:30–10:00, Room X

Joint Session of the ESR and ESTRO
(European Society for Radiotherapy and Oncology)

New imaging approaches for radiotherapy

» Chairpersons’ introduction
V. Valentini; Rome/IT [A-883]
M.H. Fuchsjäger; Graz/AT [A-884]

» Dual-energy CT: what are the benefits for radiotherapy? [A-885]
P. Wohlfahrt; Dresden/DE

» Ultrasound imaging in radiotherapy: ‘old’ technology with new applications in RT? [A-886]
E. Harris; Sutton/UK

» MR-LINAC technological advances and potential usability in clinical setting [A-887]
O. Jäkel; Heidelberg/DE

» Multiparametric MR-PET for differentiation of residual disease vs treatment-induced inflammatory changes [A-888]
M. Becker; Geneva/CH

» Panel discussion: Will radiation oncology and radiology be able to take advantage of each other’s technological innovation?
JOINT SESSIONS
WITH RELATED SOCIETIES

**JOINT SESSIONS**

**March 3**  
**Saturday, March 3, 14:00–15:30, Room F2**

**Joint Session of the ESR and EU Commission**  
*European Commission*

**eHealth in radiology: policies, practices, pitfalls, potential**

- Chairperson's introduction  
  K. Riklund, Umea/SE  
  [A-771]
- ESR eHealth SC and eHealth policy positions  
  E. Neri, Pisa/IT  
  [A-772]
- EU Strategy for Digital Transformation of Health and Care  
  T. Piha, Brussels/EU  
  [A-773]
- Member States Joint Action on eHealth  
  C.M. Auer, Vienna/AT  
  [A-774]
- ESR eHealth tools  
  B. Brkljačić, Zagreb/HR  
  [A-775]
- ESR-HIMSS Digital Imaging Adoption Model  
  J. Studzinski, Leipzig/DE  
  [A-776]
- Patient perspective on EU eHealth policies  
  N. Bedlington, Vienna/AT  
  [A-777]
- Panel discussion: The role of medical societies in implementing EU eHealth policy

**March 1**  
**Thursday, March 1, 08:30–10:00, Room Z**

**Joint Session of the ESR and UEMS**  
*Union Européenne des Médecins Spécialistes*

**ESR and UEMS: a united European voice**

- Chairpersons' introduction  
  L. Bonomo, Rome/IT  
  [A-178]
  M. Adriaensen, Heerlen/NL  
  [A-179]
- Differences and similarities between ESR and UEMS  
  P.M. Parizel, Antwerp/BE  
  [A-180]
  B. Maillet, Brussels/BE  
  [A-181]
- The European Perspective (part 1): advocacy at the EU Level  
  V.E. Sinitsyn, Moscow/RU  
  [A-182]
  B. Maillet, Brussels/BE  
  [A-183]
- The European Perspective (part 2): clinical audit and its implementation in view of the European BSS Directive  
  B.E. Kelly, Belfast/UK  
  [A-184]
- ETAP 2.0 (part 1): history of ETAP  
  H. Aronen, Turku/Fin  
  [A-185]
- ETAP 2.0 (part 2): modernisation of ETAP  
  L. Oleaga Zufiría, Barcelona/ES  
  [A-186]
- CME/CPD in Europe (part 1): EACCME 2.0  
  P. Ricci, Rome/IT  
  [A-187]
- CME/CPD in Europe (part 2): the Accreditation Council in Imaging  
  P. Ricci, Rome/IT  
  [A-188]
- CME/CPD in Europe (part 3): the many ways to gain European CME/CPD credits  
  M.A. Lucic, Sremska Kamenica/RS  
  [A-189]
- Questions
Industrial Satellite Symposia are organised by various international companies. These sessions are a chance to get an industry perspective on various scientific subjects, including technical updates, emerging trends and future innovations.

The symposia vary in length from one hour to 90 minutes, with the number of speakers also differing between companies and subjects.

Places are allocated on a first-come, first-served basis.

For details of the programmes see separate booklet ‘Industry Programme & On-Show Guide’.
Industry Programme

SATELLITE SYMPOSIA

28 Feb
Wednesday, February 28, 10:30–12:00, Studio 2018
SY 1a Satellite Symposium jointly organised by Siemens Healthineers and Bayer HealthCare

28 Feb
Wednesday, February 28, 12:15–13:45, Studio 2018
SY 1b Satellite Symposium jointly organised by Siemens Healthineers and Bayer HealthCare

28 Feb
Wednesday, February 28, 14:00–15:30, Studio 2018
SY 1c Satellite Symposium organised by Siemens Healthineers

28 Feb
Wednesday, February 28, 16:00–17:00, Studio 2018
SY 1d Satellite Symposium organised by Siemens Healthineers

28 Feb
Wednesday, February 28, 12:30–13:30, Room F2
SY 2 Satellite Symposium organised by GE Healthcare

28 Feb
Wednesday, February 28, 12:30–13:30, Room K
SY 3 Satellite Symposium organised by Canon

28 Feb
Wednesday, February 28, 12:30–13:30, Room M 3
SY 4 Satellite Symposium organised by SuperSonic Imagine

1 March
Thursday, March 1, 12:30–13:30, Room O
SY 5 Satellite Symposium organised by Philips

1 March
Thursday, March 1, 12:30–13:30, Room N
SY 6 Satellite Symposium organised by Samsung

1 March
Thursday, March 1, 12:30–13:30, Studio 2018
SY 7 Satellite Symposium organised by Siemens Healthineers

1 March
Thursday, March 1, 12:30–13:30, Room E1
SY 8 Satellite Symposium organised by Bracco

1 March
Thursday, March 1, 12:30–13:30, Room G
SY 9 Satellite Symposium organised by Bayer HealthCare

1 March
Thursday, March 1, 12:30–13:30, Room K
SY 10 Satellite Symposium organised by Hologic

1 March
Thursday, March 1, 12:30–13:30, Room M 3
SY 11 Satellite Symposium organised by Siemens Healthineers
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Intensive practical sessions organised directly by a particular company or commercial vendor. Classes are conducted on their own state-of-the-art workstations with expert technical support provided by company staff.

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POSTGRADUATE EDUCATIONAL PROGRAMME (A)

Session numbers are prefixed by
E³, EF, EM, HL, MC, MS, NH, PC, RC, SA, SF, TF

Presentation numbers are prefixed by the letter A

Key to Abbreviations
Basic Sessions (BS)
Basic Radiographers’ Sessions (BR)
Coffee & Talks (C)
EFOMP Workshop (EF)
ESR/EFRS meets Sessions (EM)
European Excellence in Education (E³)
Headline Sessions
Joint Sessions
Multidisciplinary Sessions (MS)
New Horizons Sessions (NH)
Professional Challenges Sessions (PC)
Pros & Cons Session (PS)
Refresher Courses (RC)
Special Focus Sessions (SF)
State of the Art Symposia (SA)
Transatlantic Courses (TC)
08:30 - 10:00  Room A

E³ - ECR Academies: Interactive Teaching Sessions for Young (and not so Young) Radiologists

E³ 121
Emergency radiology I

A-001 08:30
A. Acute aortic syndrome
H. Alkadhi; Zurich/CH

**Learning Objectives:**
1. To understand the different types of acute aortic syndrome.
2. To learn about imaging findings and management options.

A-002 09:15
B. Abdominal trauma
R. Basilico; Chieti/IT

**Learning Objectives:**
1. To identify the signs of trauma.
2. To provide an indication of their clinical significance.

A-003 08:30
Chairperson's introduction
S. Wirth; Munich/DE

**Session Objectives:**
1. To define acute, overt and occult GI bleeding.
2. To learn about different imaging modalities that can be utilised in the work-up of GI bleeding.
3. To define the role of the interventional radiologist in the management of the GI bleeding.

A-004 08:35
A. Acute GI bleeding
G.H. Mostbeck; Vienna/AT

**Learning Objectives:**
1. To learn about the common causes of the acute upper and lower GI bleeding.
2. To understand the rationale for different investigative pathways depending on the likely site of bleeding.
3. To appreciate how best to optimise imaging protocols to identify the site and cause of bleeding, and assist with treatment planning.

A-005 08:58
B. Occult and overt GI bleeding: the role of radiology
J. Brito; Portimão/PT

**Learning Objectives:**
1. To learn about the differences between obscure, occult and overt GI bleeding, and the most common causes of each.
2. To understand when imaging is indicated which tests to perform, and the most important diagnoses to look for.
3. To appreciate the interaction between endoscopic and radiologic investigations in managing patients with obscure GI bleeding.

A-006 09:21
C. When is the interventional radiologist needed?
D.K. Tsetis; Iraklion, Crete/GR

**Learning Objectives:**
1. To learn about the role of interventional radiology in the management of acute and chronic GI bleeding.
2. To learn about the variety of techniques available to the interventional radiologist to evaluate obscure GI bleeding and control acute GI bleeding.
3. To understand when interventional radiology is clearly indicated, when it should be considered, and when it should be avoided if possible.

A-007 08:30
A. CT
M. Rémy-Jardin; Lille/FR

**Learning Objectives:**
1. To learn about the creation of CT perfusion images.
2. To understand the complementarity between morphological and functional information.
3. To learn the various causes of perfusion defects.

A-008 09:00
B. MRI
M.O. Wielpütz; Heidelberg/DE

**Learning Objectives:**
1. To become familiar with the technical aspects of MRI perfusion.
2. To learn key imaging features.
3. To discuss the most relevant clinical indications.

A-009 09:30
C. Nuclear medicine and hybrid imaging
E.J.R. van Beek; Edinburgh/UK

**Learning Objectives:**
1. To learn about the specificities of perfusion scintigraphy.
2. To understand the advantages of hybrid imaging.
3. To appreciate potential pitfalls of nuclear medicine techniques.

09:44
Panel discussion: Guidelines for management of GI bleeding and real life: why are they different?

08:30 - 10:00  Room C

Chest

RC 104
When and how to use perfusion imaging in pulmonary vascular and airway disease?

**Moderator:**
C.J. Herold; Vienna/AT

A-007 08:30
A. CT
M. Rémy-Jardin; Lille/FR

**Learning Objectives:**
1. To learn about the creation of CT perfusion images.
2. To understand the complementarity between morphological and functional information.
3. To learn the various causes of perfusion defects.

A-008 09:00
B. MRI
M.O. Wielpütz; Heidelberg/DE

**Learning Objectives:**
1. To become familiar with the technical aspects of MRI perfusion.
2. To learn key imaging features.
3. To discuss the most relevant clinical indications.

A-009 09:30
C. Nuclear medicine and hybrid imaging
E.J.R. van Beek; Edinburgh/UK

**Learning Objectives:**
1. To learn about the specificities of perfusion scintigraphy.
2. To understand the advantages of hybrid imaging.
3. To appreciate potential pitfalls of nuclear medicine techniques.

08:30 - 10:00  Room O

Paediatric

RC 112
Paediatric musculoskeletal imaging

**Moderator:**
A.C. Offiah; Sheffield/UK

A-010 08:30
A. How to distinguish normal variants from pathology on musculoskeletal MRI in children
D. Avenarius; Tromsø/NO

**Learning Objectives:**
1. To discuss MRI protocols for MSK-imaging in children.
2. To give an overview of normal development and variations in MR anatomy and signal patterns.
3. To provide an understanding of features indicative of pathology.

A-011 09:00
B. MRI of the temporomandibular joints: findings that can mimic arthritis
T. von Kalle; Stuttgart/DE

**Learning Objectives:**
1. To discuss MRI protocols for imaging of the temporomandibular joints (TMJ).
2. To give an overview of MR imaging finding in arthritis of the TMJ.
3. To highlight the major differential diagnoses of TMJ arthritis and its MR imaging characteristics.
Postgraduate Educational Programme

A-018 08:58
Diagnosis of HCC, LI-RADS 2017: why we need it
C.B. Sirlin; San Diego, CA/US

Learning Objectives:
1. To understand the need for standardised terminology, interpretation, and reporting for clinical care.
2. To understand the need for standardised terminology, interpretation, and reporting for research.
3. To become familiar with LI-RADS terminology, interpretation, and reporting.

A-019 09:21
Atypical appearance of HCC and mimics: how to solve the challenging cases
J.M. Lee; Seoul/KR

Learning Objectives:
1. To demonstrate imaging spectrum of hepatocellular carcinoma including typical and atypical appearance.
2. To illustrate common mimickers of hepatocellular carcinoma in cirrhotic liver.
3. To provide useful tips of differentiation of focal hepatic nodules in cirrhotic liver.

09:44
Panel discussion: At the plateau of the learning curve: how do experts reason?

A-020 08:30
A. Degenerative uncovertebral and facet disease
J. Van Goethem; Antwerp/BE

Learning Objectives:
1. To learn about the physiological and pathophysiological degeneration of the cervical spine.
2. To understand the role of imaging in the diagnosis and clinical decision making in the degenerative cervical spine.
3. To appreciate the clinical relevance of imaging findings in the degenerative cervical spine.

A-021 09:00
B. Cervical spinal stenosis and cervical spondylotic myelopathy
A.S. Gersing; Munich/DE

Learning Objectives:
1. To learn about the pathophysiology and imaging findings in spinal stenosis and cervical spondylotic myelopathy.
2. To understand the relation between imaging findings and clinical presentation.
3. To appreciate the importance of imaging findings and the clinical presentation with respect to possible treatment options.

A-022 09:30
C. The postoperative cervical spine
I. Herrera; Madrid/ES

Learning Objectives:
1. To learn about the imaging findings and pitfalls of postoperative cervical spine imaging.
2. To understand the heterogeneity of imaging findings and their clinical relevance.
3. To appreciate the importance of standardised imaging, interpretation and reporting of postoperative imaging findings in the cervical spine.

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E1 - Rising Stars Programme: Basic Session

BS 1
Head and neck: inflammation, tumour or something else?
Moderator:
B. Verbist; Leiden/NL

A-023 08:30
Sinuses
R. Maroldi; Brescia/IT

Learning Objectives:
1. To discuss current imaging techniques for evaluation of normal anatomy.
2. To describe common imaging manifestations of inflammatory diseases.
3. To review tumour and tumour-like lesions.

A-024 08:53
Thyroid and parathyroid
H. Imhof; Vienna/AT

Learning Objectives:
1. To discuss current imaging techniques for evaluation of normal anatomy.
2. To describe common imaging manifestations of inflammatory diseases.
3. To identify and describe the imaging appearance of malignant pathologies.

A-025 09:15
Salivary glands
S.J. Golding; Oxford/UK

Learning Objectives:
1. To discuss current imaging techniques for evaluation of normal anatomy.
2. To describe common imaging manifestations of inflammatory diseases.
3. To identify and describe the imaging appearance of malignant pathologies.

A-026 09:38
Lymph nodes
S.S. Özbek; Izmir/TR

Learning Objectives:
1. To discuss current imaging techniques for evaluation of normal anatomy.
2. To describe the imaging features of infectious and inflammatory disorders.
3. To describe the imaging appearance of neoplastic disorders.

A-028 09:00
B. Radiomics: the role of imaging
S. Rizzo; Milan/IT

Learning Objectives:
1. To learn about the concept of radiomics and individualised medicine.
2. To learn how radiomics can be extracted from standard clinical examinations.
3. To appreciate the consequences of radiomics for radiologists in the future.

A-029 09:30
C. Imaging-guided liver interventions in oncology
B. Gebauer; Berlin/DE

Learning Objectives:
1. To learn about new established treatment options in interventional oncology.
2. To understand the role of pre- and post-treatment imaging in increasing clinical outcome.
3. To appreciate potential future application of interventional oncology.

E3 126
Novelties in oncologic imaging

A-027 08:30
A. Imaging and response assessment of immune-related therapies
P. Brader; Graz/AT

Learning Objectives:
1. To understand the basic principle of immune related therapies.
2. To learn how tumour morphology and functional parameters change with therapy.
3. To appreciate the existing evidence for immune therapy follow-up strategies.
08:30 - 10:00 Room G

Physics in Medical Imaging

RC 113

Single-dual-multi-energy CT

A-033 08:30
Chairperson’s introduction
A. Torresin; Milan/IT

Session Objectives:
1. To learn about the basics of dual-energy CT (DECT).
2. To understand today’s photon counting detector technology.
3. To learn how DECT is applied in clinical practice.

A-034 08:35
A. Basics of dual- and multi-energy CT
K. Perisinakis; Iraklion/GR

Learning Objectives:
1. To learn about the underlying physics and today’s technology.
2. To see potential advantages compared to single-energy CT.
3. To appreciate the rationale behind clinical applications.

A-035 08:58
B. Photon counting detectors in diagnostic CT Invited Speaker
A. Altman; Haifa/IL

Learning Objectives:
1. To learn about the underlying physics and technological solutions.
2. To understand the potential advantages compared to dual-energy CT.
3. To appreciate how mature today’s photon counting technology is.

A-036 09:21
C. Clinical need of multi-energy CT
S.T. Schindera; Aarau/CH

Learning Objectives:
1. To learn about medical applications and potential benefits.
2. To understand which single-energy applications could be replaced by multi-energy CT applications.
3. To learn which additional multi-energy CT applications could be developed.

09:44
Panel discussion: Are there sufficient benefits of this technique?

08:30 - 10:00 Room M 1

Vascular

RC 115

Peripheral vascular malformations: what every radiologist should know

A-040 08:58
B. The role of CT angiography in forensic imaging
A. Dominguez; Lausanne/CH

Learning Objectives:
1. To learn about the development of multiphase post-mortem CT angiography (MPMCTA).
2. To appreciate the benefits and limitations of MPMCTA examinations.
3. To understand the role of the radiologist in the MPMCTA.

A-041 09:21
C. The importance of the radiographer’s role in forensic imaging
A.L. Brookes; London/UK

Learning Objectives:
1. To appreciate the role of the radiographer in forensic imaging.
2. To learn about the importance of continuity of evidence and record keeping.
3. To discuss the various situations a radiographer can be exposed to during forensic imaging.

09:44
Panel discussion: How could we improve diagnosis and optimise the results of our interventions?
08:30 - 10:00 Room M 2

Computer Applications

**RC 105**
Everything you need to know about 3D post-processing

**A-046 08:30**
Chairperson's introduction
E. Sorantin; Graz/AT

**Session Objectives:**
1. To learn about the state of the art in 3D post-processing.
2. To understand how 3D post-processing can most optimally be used in daily clinical practice.
3. To appreciate how automated 3D post-processing and quantification will lead to increased use of 3D visualisations for diagnostics and therapy planning, over 2D viewing.

**A-047 08:35**
A. 3D post-processing in 2018
A. Alberich-Bayarri; Valencia/ES

**Learning Objectives:**
1. To learn about recent advances in 3D post-processing techniques.
2. To understand how these techniques can be used in clinical practice now.
3. To learn new tips and tricks to use in your daily practice.

**A-048 08:58**
B. Making better use of your 3D package: tips and tricks
P.M.A. van Ooijen; Groningen/NL

**Learning Objectives:**
1. To learn about the functionality of state-of-the-art 3D packages.
2. To understand the pitfalls in use of 3D post-processing.
3. To appreciate the need for training in 3D post-processing techniques.

**A-049 09:21**
C. Interpretation of 3D processing results: from image to volume reading
T. Frauenfelder; Zurich/CH

**Learning Objectives:**
1. To learn about different developments in creating 3D anatomical and functional models for diagnostic and therapy planning purposes.
2. To understand the pros and cons of such technologies.
3. To appreciate that automated 3D image analysis will lead to new ways in which diagnosis and therapy planning will be performed.

09:44
Panel discussion: Will we still look at 2D images in 10 years' time?

08:30 - 10:00 Room M 3

Interventional Radiology

**RC 109**
Portal hypertension and interventional radiology (IR)

**A-050 08:30**
Chairperson's introduction
A. Mizzi; Msida/MT

**Session Objectives:**
1. To appreciate the role of multidisciplinary treatment of portal hypertension.
2. To learn about imaging and intervention in portal hypertension.
3. To discuss outcomes of interventions in portal hypertension.

**A-051 08:35**
A. Imaging of portal hypertension
I. Bargellini; Pisa/IT

**Learning Objectives:**
1. To appreciate imaging features of portal hypertension.
2. To discuss the appropriate choice and timing of imaging technique in investigation of portal hypertension and its complications.
3. To learn about relevant findings that influence therapy choice in portal hypertension.

**A-052 08:58**
B. Embolisation of varices and splenic artery in portal hypertension
I.E. Keussen; Lund/SE

**Learning Objectives:**
1. To discuss the rationale for embolisation.
2. To learn about the selection of technique and choice of material.
3. To understand outcomes from embolisation techniques.

**A-053 09:21**
C. Transjugular intrahepatic portosystemic shunt (TIPS): critical appraisal of techniques and guidelines for treatment
A. Krajina; Hradec Králové/CZ

**Learning Objectives:**
1. To discuss the selection of patients for TIPS.
2. To learn about the techniques for TIPS formation.
3. To discuss outcomes of TIPS and role of imaging surveillance.

09:44
Panel discussion: Appropriate selection of patients for IR including the role of balloon-occluded retrograde transvenous obliteration (BRTO) for gastric varices

08:30 - 10:00 Room M 4

E3 - ECR Academies: Chest Imaging

**E3 118**
Lung cancer in the era of molecular oncology and immune therapy

**A-054 08:30**
Chairperson's introduction
H. Prosch; Vienna/AT

**A-055 08:35**
A. Lung adenocarcinomas with EGFR mutations
M. Lederlin; Rennes/FR

**Learning Objectives:**
1. To be aware of the importance of detecting EGFR mutation.
2. To learn about demographic and CT features suggestive of EGFR mutation.
3. To learn about the various initial and follow-up CT features.

**A-056 09:03**
B. ALK-rearranged lung adenocarcinomas
M. Silva; Parma/IT

**Learning Objectives:**
1. To learn about clinicopathologic features characterising ALK-rearrangement.
2. To understand the impact of ALK rearrangement on the prognosis of non-small cell lung cancer.
3. To see some illustrative cases.

**A-057 09:31**
C. PD-L1 positive lung tumours
O.L. Sedlacek; Heidelberg/DE

**Learning Objectives:**
1. To know about the impact of PD-L1 positivity.
2. To know how to evaluate the tumour response after immunotherapeutics.
3. To be aware of the imaging features of immune therapy complications.
### Molecular Imaging

**RC 106**  
**Merging the best: hybrid imaging**  
**Moderator:**  
G. Antoch; Düsseldorf/DE

**A-058** 08:30  
A. Hybrid imaging with SPECT/CT  
A. Scarsbrook; Leeds/UK

**Learning Objectives:**  
1. To learn the basic principles of hybrid SPECT/CT imaging.  
2. To understand what complementary information can be given by SPECT/CT.  
3. To learn about clinical applications of SPECT/CT.

**A-059** 09:00  
B. Hybrid imaging with MR/PET  
F.M.A. Kiessling; Aachen/DE

**Learning Objectives:**  
1. To learn the basic principles of hybrid MR/PET imaging.  
2. To understand what new information can be given by MR/PET.  
3. To learn about emerging clinical applications of MR/PET.

**A-060** 09:30  
C. Hyperpolarised MRI  
F.A. Gallagher; Cambridge/UK

**Learning Objectives:**  
1. To learn the basic principles of hyperpolarisation.  
2. To understand what new information can be given by hyperpolarised MRI.  
3. To learn about oncological and non-oncological applications of hyperpolarised MRI.

### Gastrointestinal: ’the gut’

**BS 2**  
**Moderator:**  
B. Marinck; Kilchberg/CH

**A-063** 10:30  
Oesophagus  
S. Romano; Naples/IT

**Learning Objectives:**  
1. To discuss current imaging techniques for evaluation of normal anatomy.  
2. To describe the imaging features in most common benign pathologies.  
3. To review and illustrate the imaging features of malignant pathologies.

**A-064** 10:53  
Stomach  
M. Laniado; Dresden/DE

**Learning Objectives:**  
1. To discuss current imaging techniques for evaluation of normal anatomy.  
2. To describe the imaging features in most common benign pathologies.  
3. To review and illustrate the imaging features of malignant pathologies.

**A-065** 11:15  
Small bowel  
N. Papamikolaou; Lisbon/PT

**Learning Objectives:**  
1. To discuss current imaging techniques for evaluation of normal anatomy.  
2. To describe the imaging features in most common benign pathologies.  
3. To review and illustrate the imaging features of malignant pathologies.

**A-066** 11:38  
Colon  
R.G.H. Beets-Tan; Amsterdam/NL

**Learning Objectives:**  
1. To discuss current imaging techniques for evaluation of normal anatomy.  
2. To describe the imaging features in most common benign pathologies.  
3. To review and illustrate the imaging features of malignant pathologies.

### Musculoskeletal radiology: inflammation

**E³ 221**  
**Moderator:**  
B. Marincek; Kilchberg/CH

**A-061** 10:30  
A. Inflammatory and infections in the soft tissues  
S. Martin; Palma de Mallorca/ES

**Learning Objectives:**  
1. To learn the key signs for differential diagnosis.  
2. To learn about imaging findings and management options.

**A-062** 11:15  
B. Arthropathies  
U. Aydingoz; Ankara/TR

**Learning Objectives:**  
1. To explain the key points in the differential diagnosis of common arthropathies.  
2. To describe the imaging findings of common arthropathies as they relate to pathophysiology.
A-069 11:03
B. Evaluating the pulmonary vasculitis
E. Castañer; Sabadell/ES

Learning Objectives:
1. To learn the common imaging features of granulomatosis with polyangiitis (GPA).
2. To learn how to differentiate between GPA and eosinophilic granulomatosis with polyangiitis (Churg-Strauss).
3. To learn about the imaging features and differential diagnosis of pulmonary haemorrhage.

A-070 11:31
C. Rendu-Osler disease
S.D. Qanadli; Lausanne/CH

Learning Objectives:
1. To become familiar with the CT manifestations of this disease.
2. To identify imaging features determining outcome and treatment strategies.
3. To learn about endovascular treatment modalities and complications.

12:30 - 13:30 Room C
E³ - The Beauty of Basic Knowledge: Cardiovascular and Interventional Radiology

E³ 24A
No time to lose: aortic dissection - revisited
Moderator: M. Krokidis; Cambridge/UK

A-077 12:30
Acute diagnosis and imaging in aortic dissection
R. Iezzi; Rome/IT

Learning Objectives:
1. To learn about definition and classification of aortic dissections and subtypes.
2. To understand the importance of accurate diagnosis for appropriate treatment planning.
3. To appreciate the need for acute diagnosis and treatment indication.

A-078 13:00
Endovascular treatment in aortic dissection
J.P. Schäfer; Kiel/DE

Learning Objectives:
1. To learn about endovascular treatment possibilities for aortic dissections.
2. To understand the role of radiology in modern treatment of aortic dissections.
3. To appreciate the need to combine the radiological information with the clinical situation.

A-071 12:00
Chairperson's introduction and introduction to EuroSafe Imaging
G. Frija; Paris/FR

Session Objectives:
1. To get to know EuroSafe Imaging.
2. To become familiar with the EuroSafe Imaging Call for Action.
3. To understand the need for collaboration.

A-072 12:05
Introduction to Japan Radiological Society
H. Honda; Fukuoka/JP

Learning Objectives:
1. To get to know Japan Safe Radiology.
2. To become familiar with Japan Safe Radiology's activities.
3. To learn about Japan Safe Radiology's future directions.

A-073 12:15
Standardisation and optimisation of referral/indication (CDS) and Japan-QIBA in Japan
K. Kumamaru; Tokyo/JP

Learning Objectives:
1. To know the roles of clinical decision support in Japan Safe Radiology.
2. To learn about future directions of CDS and standardisation.
3. To get to know activities of Japan-QIBA (quantitative imaging biomarker alliance).

A-074 12:20
Report registry in Japan Safe Radiology
S. Kanazawa; Okayama/JP

Learning Objectives:
1. To learn about the benefits of the report registry.
2. To understand the problems of introducing the report registry in Japan.
3. To become familiar with the future directions.

A-075 12:25
Radiation dose management in Japan Safe Radiology
M. Hori; Osaka/JP

Learning Objectives:
1. To learn about Japanese DRLs.
2. To learn how to introduce DRLs in a Japanese hospital.
3. To become familiar with the future directions.

A-076 12:30
Imaging and artificial intelligence in Japan Safe Radiology
M. Jinzaki; Tokyo/JP

Learning Objectives:
1. To learn how to use artificial intelligence in the field of radiology.
2. To understand problems of introducing artificial intelligence in Japan.
3. To become familiar with the future directions.

12:35 Open forum discussion
14:00 - 15:30 Room F1

E³ - Rising Stars Programme: Basic Sessions

BS 3 Neurologic emergencies
Moderator: N. Chidambaranathan; Chennai/IN

A-080 14:00
Brain injury
J. Walecki; Warsaw/PL

Learning Objectives:
1. To review mechanisms of brain injury.
2. To present current imaging techniques for evaluation of brain injury.
3. To illustrate different types of traumatic intracranial lesions.

A-081 14:30
Subarachnoid haemorrhage
C. Calli; Izmir/TR

Learning Objectives:
1. To review the most common pathologies leading to SAH.
2. To present current imaging techniques for evaluation of SAH.
3. To describe the radiological findings of SAH.

A-082 15:00
Ischaemic stroke
Z. Merhemic; Sarajevo/BA

Learning Objectives:
1. To become familiar with the most common aetiologies of stroke.
2. To present current imaging techniques for evaluation of stroke.
3. To recognise the imaging signs of stroke.

14:00 - 15:30 Room M 4

E³ - ECR Academies: Chest Imaging

E³ 318 MR imaging of the lungs

A-083 14:00
Chairperson's introduction
E.J.R. van Beek; Edinburgh/UK

A-084 14:05
A. Diagnosing pulmonary embolism
M.-P. Revel; Paris/FR

Learning Objectives:
1. To learn about the various MR sequences for pulmonary arteries imaging.
2. To become familiar with the MR signs of pulmonary embolism.
3. To understand the current limitations of MR for PE diagnosis.

A-085 14:33
B. Evaluating lung neoplasms
J. Dinkel; Munich/DE

Learning Objectives:
1. To review the role of MR for assessing the T status.
2. To learn about MR diffusion sequence performance for N staging.
3. To review the persisting limitations.

A-086 15:01
C. Evaluating the airways
G. Dournes; Bordeaux/FR

Learning Objectives:
1. To review the role of MR for evaluating the large and small airways.
2. To learn about the current state-of-the-art MR sequences.
3. To learn about the current role of MR in cystic fibrosis.

14:00 - 15:00 Room Coffee & Talk

C 2 The best recipes for failing as a department chair

A-091 14:00
Chairperson's introduction
Y. Menu; Paris/FR

A-092 14:05
How to carefully select the wrong words for lousy communication
J.M.L. Bosmans; Ghent/BE

Learning Objectives:
1. To learn about the mechanism of the most common communication problems.
2. To understand that an analysis of people's needs and expectations is a preliminary to a successful communication.
3. To appreciate the relevant level of communication, neither too little nor too much.
A-093 14:10
How to fail at managing imaging subspecialists
K. Nikolaou; Tübingen/DE

Learning Objectives:
1. To understand that an imaging department is a federation of people with different fields of interest as well as common links.
2. To learn about some tricks to enlighten what they have in common and to improve the understanding of differences.
3. To appreciate the relevant level of valorisation of individuals.

A-094 14:15
How to securely make enemies within your clinical environment
R. Manfredi; Rome/IT

Learning Objectives:
1. To learn about the common opinions about imaging department, heard from the clinician’s perspective.
2. To understand why the negotiation with the clinician is easier when patient-centred rather than clinician-centred.
3. To be able to explain to the clinicians why the optimal organisation of an imaging department necessitates a relevant balance between standardisation and customisation.

A-095 16:00
Chairperson’s introduction
C.J. Zech; Basle/CH

Session Objectives:
1. To learn about the most common indications for abdominal surgery.
2. To understand the normal imaging findings in postoperative abdomen.
3. To describe and identify the most common postoperative complications.

A-096 16:05
A. Liver
C. Ayuso; Barcelona/ES

Learning Objectives:
1. To learn about indications for liver interventions and different surgical approaches to focal liver lesions.
2. To understand the role for the different imaging techniques (US, CEUS, CT and MRI) in assessing different types of complications.
3. To appreciate the spectrum of parenchymal, biliary and vascular complications occurring after liver resection or transplantation.

A-097 16:28
B. Pancreas
R.M. Gore; Evanston, IL/US

Learning Objectives:
1. To learn about the various surgical approaches for acute and chronic pancreatitis, benign and malignant pancreatic neoplasms.
2. To understand profound impact that the partial and complete pancreatectomy have on the adjacent abdominal organs.
3. To appreciate the common postoperative complications of pancreatic surgery.

A-098 16:51
C. Bowel
D.J.M. Tolan; Leeds/UK

Learning Objectives:
1. To learn about the most common types of major oesophago-gastric, small bowel and colorectal surgical procedures and the expected postoperative anatomy and imaging findings.
2. To understand how to optimise imaging protocols to maximise the opportunity to detect postoperative complications after enteric surgery.
3. To appreciate and identify early and late complications after bowel surgery.

A-099 16:00
Chairperson’s introduction
M.A. Mazzei; Siena/IT

Session Objectives:
1. To emphasise the importance of anatomy in reading CT.
2. To appreciate the necessity of defining patterns to improve CT diagnoses.

A-100 16:05
A. Secondary pulmonary lobule anatomy: essential to tackle with the nodular pattern
T. Frauenfelder; Zurich/CH

Learning Objectives:
1. To become confident in recognising the anatomical compartments of the lung.
2. To describe typical nodular imaging patterns of lung disease using appropriate terminology.

A-101 16:28
B. Linear and reticular pattern
F. Molinari; Lille/FR

Learning Objectives:
1. To recognise and interpret typical reticular imaging patterns.
2. To differentiate acute and chronic diseases which cause septal patterns.

A-102 16:51
C. Ground glass opacities (GGO) and consolidation
J. Vogel-Claussen; Hannover/DE

Learning Objectives:
1. To appreciate different conditions which cause GGO pattern and consolidation.
2. To learn how to interpret GGO and consolidation in different clinical settings.
Joint Session of the ESR Working Group on Ultrasound with EFSUMB

WG/EFSUMB 1
Elastography of superficial structures: where are we now?
Moderators:
M. Claudon; Vandoeuvre-les-Nancy/FR
P.S. Sidhu; London/UK

A-103 16:00
Thyroid US elastography: indications and limitations
V. Cantisani; Rome/IT
Learning Objectives:
1. To learn about thyroid nodules evaluation by using TIRADS and US-elastography.
2. To provide tips and tricks, guidelines established indications and limitation of thyroid US-elastography.

A-104 16:20
Elastography of the breast: when should we assess tumour stiffness?
J. Carlsen; Copenhagen/DK
Learning Objectives:
1. To learn how to perform breast elastography with different US techniques.
2. To learn when breast elastography is a useful adjunct to the standard breast ultrasound examination.
3. To understand the potentials and limitations of breast elastography.

A-105 16:40
Is there any value in tendon and nerve assessment?
A. Klauser; Innsbruck/AT
Learning Objectives:
1. To learn about the value of sonoelastography in musculoskeletal disorders.
2. To understand the impact of sonoelastography in tendon and nerves.
3. To appreciate the meaning of sonoelastographic findings in tendon and nerve disorders.
4. To become familiar with sonoelastographic techniques used in tendons and nerves.

A-106 17:00
Scrotal elastography: hype or real?
M. Bertolotto; Trieste/IT
Learning Objectives:
1. To learn how to perform elastography of the testis with the different US equipment.
2. To become familiar with the appearance of normal testis at strain and shear wave elastography.
3. To understand the potential and limitation of elastographic modes in imaging scrotal pathologies.

17:20
Discussion

Paediatric

RC 412
Vascular and interventional radiology in children
Moderator:
E. Alexopoulou; Athens/GR

A-107 16:00
A. Common IR procedures in children: state-of-the-art
A. Barnacle; London/UK
Learning Objectives:
1. To learn about the most common causes for image-guided intervention in children.
2. To understand how the practical and technical approach to intervention in a child differs from that in adults.
3. To appreciate tips, tricks and pitfalls in the paediatric intervention.

A-108 16:30
B. Vascular malformations: diagnosis and interventions
M. Beeres; Frankfurt a. Main/DE
Learning Objectives:
1. To learn about the classification of paediatric vascular malformations.
2. To understand the diagnostic work-up and the indications for percutaneous treatment of paediatric vascular malformations.
3. To appreciate the treatment options for different vascular malformations.

A-109 17:00
C. Percutaneous treatment of osteoid osteoma
D. Filippiadis; Athens/GR
Learning Objectives:
1. To learn about the treatment options for osteoid osteomas.
2. To understand the techniques for percutaneous treatment of osteoid osteoma: preparations, procedure and follow-up.
3. To appreciate advantages and potential complications in percutaneous treatment of osteoid osteoma in children.

RC 408
Pathways for tumour spread
Moderator:
J. Huyskens; Antwerp/BE

A-110 16:00
A. Pathways for oral cavity and oropharynx tumour spread
A. Borges; Lisbon/PT
Learning Objectives:
1. To become familiar with the anatomy of the oral cavity and oropharynx.
2. To learn which imaging technique to use.
3. To understand the typical local and remote spread of oral cavity and oropharynx tumours.

A-111 16:30
B. Pathways for nasopharyngeal tumour spread including perineural spread
M. Leif; Nuremberg/DE
Learning Objectives:
1. To become familiar with the anatomy of the nasopharynx.
2. To learn which imaging technique to use.
3. To understand the typical local and remote spread of nasopharyngeal tumours, including perineural spread.
Session Objectives:
1. To become familiar with the anatomy of the larynx and hypopharynx.
2. To learn which imaging technique to use.
3. To understand the typical local and remote spread of laryngeal and hypopharyngeal tumours.

Learning Objectives:
1. To learn about mammography screening and how it should be monitored.
2. To understand the value of supplementary techniques and how it is monitored.
3. To appreciate its role in clinical practice.

Learning Objectives:
1. To understand the potential of tomosynthesis in the screening setting.
2. To become familiar with the different protocols.
3. To appreciate potential advantages of tomosynthesis in screening.

Learning Objectives:
1. To learn from the terrorist attacks in Paris and Nice.
2. To understand the planning for pre-hospital damage control, medical strategy for quick mobilisation of resources, training and multidisciplinary simulation exercises, and post-trauma psychological care.
3. To appreciate the role of imaging in case of massive attack.

Learning Objectives:
1. To learn about mammography screening and how it should be monitored.
2. To understand the value of supplementary techniques and how it should be used in practice.
3. To recognise that tomosynthesis presents significant advantages and disadvantages when used in a screening setting.

Learning Objectives:
1. To learn about the role of tomosynthesis in the screening setting.
2. To become familiar with the common level of evidence.
3. To appreciate the role of imaging in case of massive attack.

Learning Objectives:
1. To learn about the added value of US in screening and its indication.
2. To become familiar with the range of imaging findings related to MCI.
3. To learn about new roles and challenges for radiologists in Europe.
High-end CT imaging in forensic medicine: experience after recent Brussels terror attacks
W. Develter; Leuven/BE

Learning Objectives:
1. To illustrate MC findings from the Thai Tsunami over the MH-17 to the Brussels attacks.
2. To become familiar with the imaging findings related to unidentified people and its medico-legal related issues.
3. To understand the importance of imaging in the reconciliation process with the relatives of the victims.

Panel discussion: How to be prepared accordingly?
16:00 - 17:30 Room F1

BS 4
Thoracic emergencies
Moderator:
K. Malagari; Athens/GR

A-125 16:00
Acute aortic syndrome
T. Jargiello; Lublin/PL

Learning Objectives:
1. To become familiar with the most common aetiologies of acute aortic diseases.
2. To present current imaging techniques for evaluation of acute aortic diseases.
3. To demonstrate the most important imaging findings.

A-126 16:30
Pulmonary embolism
C. Loewe; Vienna/AT

Learning Objectives:
1. To review the most common pathologies leading to pulmonary embolism.
2. To present current imaging techniques for evaluation of pulmonary embolism.
3. To become familiar with the typical findings in acute and chronic pulmonary embolism.

A-127 17:00
Acute coronary syndrome
R.M.M. Hinzpeter; Zurich/CH

Learning Objectives:
1. To become familiar with segmental coronary anatomy.
2. To present different techniques for assessment of acute coronary syndrome.
3. To become familiar with the typical findings of acute coronary syndrome.

16:00 - 17:30 Room F2

Multidisciplinary Session

MS 4
The heart team: coronary imaging and treatment

A-128 16:00
Chairperson's introduction
E. Mershina; Moscow/RU

Session Objectives:
1. To recognise the possibilities of modern coronary imaging modalities.
2. To explain possible discrepancies in the results of different diagnostic investigations and clinical picture.
3. To understand how to translate the results of coronary imaging into clinical practice.

A-129 16:05
Non-invasive cardiac imaging
V.E. Sinitsyn; Moscow/RU

Learning Objectives:
1. To get knowledge about modern technology and protocols used in coronary/cardiac CT and MRI in coronary artery disease (CAD).
2. To learn about scientific evidence (including results of major clinical trials) supporting use of these technologies in CAD.
3. To be aware about new developments in non-invasive cardiac imaging including studies of coronary flow, myocardial perfusion and hybrid imaging.
4. To understand the role of co-operation between radiologists and cardiologists in non-invasive cardiac imaging for benefit of CAD patients.

A-130 16:25
Interventional treatment/percutaneous
A. Osiev; Moscow/RU

Learning Objectives:
1. To learn about the current indications for diagnostic coronary catheterisation and transluminal interventions.
2. To know about the latest innovations in percutaneous coronary revascularisation technique.
3. To understand difficulties in assessment of stenosis and occlusions during coronary interventions.
4. To be aware how combined analysis of coronary CTA and invasive coronary angiography could help in planning of interventional treatment of coronary lesions.

A-131 16:45
The role of coronary imaging in the coronary artery bypass and valve surgery
K. Mershin; Moscow/RU

Learning Objectives:
1. To learn about surgeon's opinion and the possibilities of different methods of coronary imaging.
2. To understand which coronary imaging modality should be the best in complicated cases.
3. To be aware of CT coronary angiography benefits in the redo procedures.

A-132 17:05
Multidisciplinary case presentation and discussion
Y. Ashikhmin; Moscow/RU

Learning Objectives:
1. To outline the rational diagnostics pathways in typical situations: following the guidelines.
2. To learn how to manage the difficult diagnostic cases: beyond the guidelines.
3. To explain how to switch clinicians from invasive procedures to cardiac MRI and CT when it is the best bet.
4. To discuss the future in imaging technologies translation: from the technology-driven to the unmet clinical need-driven progress in imagine tools.

16:00 - 17:30 Room D

Musculoskeletal

RC 410
Bone, joint and soft tissue infection
Moderator:
T. Kaya; Eskisehir/TR

A-133 16:00
A. Osteomyelitis
K. Verstraete; Ghent/BE

Learning Objectives:
1. To understand the pathophysiology and disease spectrum of osteomyelitis.
2. To learn about the basic imaging criteria for diagnosis of acute and chronic osteomyelitis in children and adults.
A-134 16:30
B. Septic arthritis
M. Zanetti; Zurich/CH

Learning Objectives:
1. To understand the pathophysiology and disease spectrum of septic arthritis.
2. To learn about the basic imaging criteria for diagnosis of septic arthritis in children and adults.

A-135 17:00
C. Pyomyositis and other soft tissue infections
D.J. Wilson; Oxford/UK

Learning Objectives:
1. To understand the pathophysiology and disease spectrum of pyomyositis and other soft-tissue infections.
2. To learn about the basic imaging criteria for diagnosis of these conditions.

16:00 - 17:30 Room G

SF 4

Gadolinium deposition: is it harmful?

A-136 16:00
Chairperson’s introduction
P.M. Parizel; Antwerp/BE

Session Objectives:
1. To review the evidence of intracranial gadolinium deposits after intravenous administration of gadolinium-based contrast agents (GBCAs).
2. To summarise current theories about why, how, and where gadolinium is deposited in the brain and other tissues.
3. To assess the clinical relevance of this finding for daily radiological practice.

A-137 16:05
Gadolinium deposition in the brain: from preclinical studies to clinical implications
R.J. McDonald; Rochester, MN/US

Learning Objectives:
1. To understand how gadolinium is deposited in the brain (chemistry and pathophysiology).
2. To demonstrate where gadolinium is deposited in the brain (and other tissues) (neuropathology).
3. To assess the potential clinical implications of gadolinium deposition in the human body.

A-138 16:30
Assessing tissue integrity in the presence of gadolinium deposition in the brain
C. Olchowy; Wroclaw/PL

Learning Objectives:
1. To detect possible tissue abnormalities with sodium (23Na) MRI in the brain of MS patients.
2. To measure total sodium concentrations in the brains of patients exposed to repeated gadolinium administrations.
3. To predict possible harmful effects of gadolinium deposition in the brain in view of the presence or absence of tissue abnormalities.

A-139 16:55
Clinical recommendations in consideration of the EMA’s pharmacovigilance and risk assessment committee recommendation for suspension of linear agents
V. Runge; Berne/CH

Learning Objectives:
1. To review the in vivo distribution, possible dechelation, and subsequent deposition of gadolinium.
2. To clarify this phenomenon and to stratify gadolinium-based contrast agents on this basis.
3. To provide clinical recommendations to radiologists on how to deal with gadolinium deposition in the brain and body.
Postgraduate Educational Programme

16:00 - 17:30 Room M 1

EuroSafe Imaging Session

EU 1

Euratom Basic Safety Standards Directive: a comprehensive approach for radiation protection

Moderator:
G. Frija; Paris/FR

A-145 16:00
Chairperson's introduction
S. Ebdon-Jackson; Didcot/UK

Session Objectives:
2. To learn about the most important changes compared to the previous directive.
3. To understand the implications of the new directive for medical imaging.

A-146 16:05
The technical approach: achievements and future of dose reduction
W.A. Kalender; Erlangen/DE

Learning Objectives:
1. To learn about the technical perspective from the BSS.
2. To become familiar with dose reduction.
3. To become familiar with the achievements and future of dose reduction.

A-147 16:17
The clinical approach: the gap to be closed
G. Frija; Paris/FR

Learning Objectives:
1. To learn about the clinical perspective.
2. To become familiar with the concept of clinical DRLs.
3. To understand the need for DRLs based on clinical indications.

A-148 16:30
The clinical audit: the missing link
E.J. Adam; London/UK

Learning Objectives:
1. To understand what clinical audit is.
2. To learn how to implement clinical audit in practice.
3. To become familiar with the ESR audit pack.

A-149 16:41
The regulatory approach
S. Ebdon-Jackson; Didcot/UK

Learning Objectives:
1. To understand the regulator's perspective on the BSS.
2. To learn about the regulator's role and tasks.
3. To become familiar with inspection.

A-150 16:53
The European Commission's perspective and update on the transposition in the European Member States
G. Simeonov; Luxembourg/LU

Learning Objectives:
1. To learn about the Euratom Basic Safety Standards Directive.
2. To understand the European Commission's perspective.
3. To understand how the European Commission ensures implementation of the BSS Directive.

A-151 17:05
The industry's perspective and work needed to comply with the Basic Safety Standards
N. Denjoy; Brussels/BE

Learning Objectives:
1. To learn about industry's perspective on the BSS.
2. To understand the work needed to comply with the BSS.
3. To identify regulatory hurdles for industry.

17:17
Panel discussion: Is the Basic Safety Standards Directive a step forward for patients, clinical professionals and regulators?

16:00 - 17:30 Room M 2

E³ - ECR Master Class (Paediatric)

E³ 426
Juvenile idiopathic arthritis (JIA)

Moderator:
K. Rosendahl; Bergen/NO

A-152 16:00
A. Conventional radiography, still a helpful method?
S.C. Shelmerdine; London/UK

Learning Objectives:
1. To learn about the features of joint inflammation on plain radiographs.
2. To understand the role of this technique in the diagnosis and follow-up of children with JIA.
3. To appreciate the strengths and limitations of conventional radiography compared to other modalities in JIA.

A-153 16:30
B. Ultrasound for detecting and grading of inflammation in JIA
L. Tanturri De Horatio; Rome/IT

Learning Objectives:
1. To learn about normal features vs pathology on ultrasound of joints in children.
2. To understand the role of ultrasound in diagnosing and grading of joint inflammation.
3. To appreciate the research-based evidence of ultrasound.

A-154 17:00
C. MRI and role of contrast in the assessment of synovitis
L.-S. Ording Müller; Oslo/NO

Learning Objectives:
1. To learn about the definition of synovitis on MRI.
2. To understand the appearances of synovitis and potential pitfalls on MRI.
3. To appreciate new techniques that may replace contrast-enhanced MRI in the assessment of synovitis.

16:00 - 17:30 Room M 3

Molecular Imaging

RC 406
Molecular imaging in oncology

A-155 16:00
Chairperson's introduction
K. Nikolaou; Tübingen/DE

Session Objectives:
1. To understand the basics of molecular imaging.
2. To appreciate the unmet needs of oncological imaging.
3. To learn the role of molecular imaging in oncology.
A-156 16:05
A. Imaging of hypoxia
V.J. Goh; London/UK

Learning Objectives:
1. To review the fundamentals of hypoxia imaging.
2. To review the advantages and disadvantages of hypoxia imaging and its relation to perfusion.
3. To learn about hypoxia imaging in radiation treatment.

A-157 16:23
B. Imaging of proliferation
A. Kjaer; Copenhagen/DK

Learning Objectives:
1. To understand basic principles of proliferation imaging.
2. To become familiar with imaging of proliferation.
3. To learn about difficulties in liver proliferation imaging.

A-158 16:41
C. Imaging of metabolism
C. Nanni; Bologna/IT

Learning Objectives:
1. To learn the clinical indications for FDG imaging.
2. To become familiar with imaging protocol.
3. To learn about difficulties in FDG imaging.

A-159 16:59
D. Biomarker imaging with MR
M.E. Mayerhöfer; Vienna/AT

Learning Objectives:
1. To learn the clinical indications for biomarker imaging.
2. To become familiar with quantification.
3. To learn about difficulties in quantification.

Panel discussion: The pros and cons of molecular imaging in oncology

E3 420
Advanced MR techniques and imaging biomarkers

A-164 16:00
Chairperson’s introduction
D.-M. Koh; Sutton/UK

A-165 16:05
A. Diffusion-weighted imaging
N. Papanikolaou; Lisbon/PT

Learning Objectives:
1. To recognise the general principles of liver DW MRI.
2. To be familiar with the clinical applications of DW imaging in diffuse and focal liver diseases.
3. To be aware of the evolving developments in liver DW imaging.

A-166 16:33
B. MR and US elastography
D.J. Lomas; Cambridge/UK

Learning Objectives:
1. To recognise the clinical applications and diagnostic performance of MR and US elastography.
2. To be able to compare both techniques.
3. To be familiar with the factors confounding the accuracy of elastography.

A-167 17:01
C. MR contrast agents in liver imaging
M. Karcaaltincaba; Ankara/TR

Learning Objectives:
1. To understand the dynamic contrast-enhanced imaging and liver perfusion.
2. To recognise the role of hepatocyte specific contrast agents in liver function and lesion characterisation.
3. To learn the weaknesses of extracellular and hepatospecific contrast agents.

E3 418
Cavitary and cystic diseases of the lung

A-160 16:00
Chairperson’s introduction
N. Howarth; Chêne-Bougeries/CH

A-161 16:05
A. Cavitary lung lesions
A.P. Parkar; Bergen/NO

Learning Objectives:
1. To review the diagnostic criteria and differentials of cavitary lung lesions.
2. To learn about the most common causes.
3. To learn about an algorithmic approach to narrow the differential diagnosis.

A-162 16:33
B. Langerhans cell histiocytosis (LCH)
A. Devaraj; London/UK

Learning Objectives:
1. To understand the pathophysiology of LCH.
2. To review key features on CT.
3. To learn about the various stages of the disease.

A-163 17:01
C. Lymphangioleiomyomatosis
A. Oikonomou; Toronto, ON/CA

Learning Objectives:
1. To learn about the current concepts on pathogenesis.
2. To review the typical and atypical CT features.
3. To learn about the tuberous sclerosis complex.
08:30 - 10:00 Room A

E³ 521
Imaging of the skull base

A-168 08:30
A. Non-tumoural pathology of the temporal bone
B. Ozgen Mocan; Ankara/TR

Learning Objectives:
1. To learn the most common inflammatory lesions of the temporal bone.
2. To become familiar with the most common malformations and non-tumoural pathologies.

A-169 09:15
B. Tumours of the skull base
T. Beale; London/UK

Learning Objectives:
1. To become familiar with the imaging technique of the skull base.
2. To identify imaging criteria for improved differential diagnosis.

08:30 - 10:00 Room B

New Horizons Session

NH 5
The machines are coming: how will they change our future?

A-170 08:30
Chairperson's introduction
H.-U. Kauczor; Heidelberg/DE

Session Objectives:
1. To understand the basics of machine learning.
2. To appreciate the opportunities to improve quality in radiology.
3. To redefine the professional role of the radiologist.

A-171 08:35
Deep learning: current performance
B. van Ginneken; Nijmegen/NL

Learning Objectives:
1. To learn about the principles of machine learning.
2. To appreciate the current performance of deep learning in radiology and beyond.
3. To learn about the limitations due to the complexity of radiology.

A-172 08:58
Artificial intelligence applications in radiology
J.B. Seo; Seoul/US

Learning Objectives:
1. To become familiar with first clinical applications.
2. To consolidate knowledge about the integration in the clinical workflow.
3. To appreciate the future roadmap and its impact on training of young radiologists.

A-173 09:21
Big data for deep learning
C.L. Schlett; Heidelberg/DE

Learning Objectives:
1. To become familiar with the opportunities of big data analysis.
2. To understand that quality of big data is pivotal.
3. To learn how to generate „evidence” from big data analysis in radiology.

09:44
Panel discussion: Machines in radiology: do we still need the radiologist?

08:30 - 10:00 Room C

Breast

RC 502
New mammography: tomosynthesis and future techniques

A-174 08:30
Chairperson's introduction
E.M. Fallenberg; Berlin/DE

Session Objectives:
1. To learn about 2D mammography and digital breast tomosynthesis.
2. To recognise the advantages and disadvantages of tomosynthesis compared to 2D mammography.
3. To look into the future and hear about the potential of new breast imaging techniques in lesion assessment.

A-175 08:35
A. Should we abandon 2D mammography?
S. Zacker; Malmö/SE

Learning Objectives:
1. To understand the technique of 2D mammography and what the limits could be.
2. To learn if there are ways to improve image quality of 2D mammography.
3. To understand when 2D mammography is better than DBT.

A-176 09:00
B. Clinical validation of tomosynthesis and results in the last 10 years: where do we stand?
P. Skaane; Oslo/NO

Learning Objectives:
1. To become familiar with the technique of DBT.
2. To understand the results of DBT in the screening and diagnostics settings.
3. To know the evolution of tomosynthesis in screening organisation.

A-177 09:25
C. The future of mammography: my predictions
E. Giannotti; Nottingham/UK

Learning Objectives:
1. To understand the role of mammography in analysing and characterising breast lesions.
2. To become familiar with new developments in digital mammography such as contrast mammography, tomosynthesis and 3D contrast mammography.
3. To learn about the new potential of combining mammography with molecular imaging, optical imaging and texture analysis.

09:50
Panel discussion: Mammography and/or tomosynthesis: where will we stand in 10 years?

08:30 - 10:00 Room Z

Joint Session of the ESR and UEMS

ESR/UEMS 1
ESR and UEMS: a united European voice

A-178/A-179 08:30
Chairpersons' introduction
L. Ronoma; Rome/IT, M. Adrienssen; Heerlen/NL

Session Objectives:
1. To describe the role of the UEMS within the EU.
2. To understand the difference between ESR and UEMS.
3. To understand the importance of cooperation between ESR and UEMS.
Postgraduate Educational Programme

**A-180/A-181 08:35**  
Differences and similarities between ESR and UEMS  
P.M. Parizel1, B. Maillet2; 1Antwerp/BE, 2Brussels/BE

**Learning Objectives:**  
1. To understand the structure of the UEMS and ESR.  
2. To understand the differences between ESR and UEMS.  
3. To understand the importance of UEMS/ESR political involvement in EU affairs.

**A-182/A-183 08:45**  
The European Perspective (part 1): advocacy at the EU Level  
V.E. Sinitsyn1, B. Maillet2; 1Moscow/RU, 2Brussels/BE

**Learning Objectives:**  
1. To understand the concept of advocacy.  
2. To understand the importance of advocacy in the EU.  
3. To learn how the advocacy can improve the role of UEMS and the ESR in Europe.

**A-184 08:55**  
The European Perspective (part 2): clinical audit and its implementation in view of the European BSS Directive  
B.E. Kelly; Belfast/UK

**Learning Objectives:**  
1. To understand the definition of clinical audit.  
2. To learn about the existence and the legal consequences of the current European directive addressing clinical audit in radiology.  
3. To hear about best practices with regard to the implementation of clinical audit in radiology.

**A-185 09:05**  
ETAP 2.0 (part 1): history of ETAP  
H. Aronen; Turku/FI

**Learning Objectives:**  
1. To understand the importance of ETAP in the past years.  
2. To know about the structure of ETAP.  
3. To learn about facts and figures of ETAP.

**A-186 09:15**  
ETAP 2.0 (part 2): modernisation of ETAP  
L. Oleaga Zufiria; Barcelona/ES

**Learning Objectives:**  
1. To understand the limits of ETAP 1.0.  
2. To learn about the new configuration of ETAP.  
3. To learn about the „starring system“.

**A-187 09:25**  
CME/CPD in Europe (part 1): EACCME 2.0  
P. Ricci; Rome/IT

**Learning Objectives:**  
1. To learn about the European Accreditation Council for Continuing Medical Education (EACCME®).  
2. To know about the existence of European CME and CPD credits.  
3. To learn about the new EACCME 2.0.

**A-188 09:30**  
CME/CPD in Europe (part 2): the Accreditation Council in Imaging  
P. Ricci; Rome/IT

**Learning Objectives:**  
1. To learn about the ESABs under the EACCME umbrella.  
2. To learn about the structure of the Accreditation Council in Imaging (ACI).  
3. To understand the importance of cooperation with and recognition by the EACCME®.

**A-189 09:35**  
CME/CPD in Europe (part 3): the many ways to gain European CME/CPD credits  
M.A. Lucic; Sremska Kamenica/RS

**Learning Objectives:**  
1. To know about the existence of European CME Credit (ECMEC®).  
2. To learn about the concept of CPD.  
3. To learn about the importance of credits in different European countries.

09:45  
Questions

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**RC 512**  
Imaging in abdominal emergencies: an (evidence-based) update  
Moderator: C.E. de Lange; Oslo/NO

**A-190 08:30**  
A. The acute abdomen in neonates  
S. Stafrace; Doha/QA

**Learning Objectives:**  
1. To learn about typical neonatal abdominal emergencies.  
2. To understand the choice of modalities in acute abdomen in neonates.  
3. To appreciate typical findings and „red flag“ features.

**A-191 09:00**  
B. The acute abdomen in young children  
A.D. Calder; London/UK

**Learning Objectives:**  
1. To learn about the causes of acute abdominal pain in children.  
2. To understand the choice of imaging techniques and their limitations.  
3. To appreciate typical radiological features of abdominal emergencies.

**A-192 09:30**  
C. Polytrauma: differences between adult and paediatric protocols  
M. Raissaki; Iraklion/GR

**Learning Objectives:**  
1. To learn how paediatric trauma differs from adult trauma.  
2. To understand how examination techniques and protocols must be tailored accordingly.  
3. To appreciate the importance of multidisciplinary team collaboration in planning and conducting radiological investigations in a trauma setting.

**RC 503**  
From diagnosis to prognosis: how does cardiac imaging affect patient outcome?  
Moderator: U. Reiter; Graz/AT

**A-193 08:30**  
A. In myocarditis  
M. Francione; Rome/IT

**Learning Objectives:**  
1. To learn about the link between clinical presentation and imaging signs.  
2. To understand the current state-of-the-art MRI method for the diagnosis of myocarditis.  
3. To learn how MRI could be used to assess prognosis in myocarditis.

**A-194 09:00**  
B. In non-ischaemic cardiomyopathy  
A. Jacquier; Marseille/FR

**Learning Objectives:**  
1. To recognise the tell-tale signs of early ARVC, HCM and dilated cardiomyopathy that affect progression or prognosis.  
2. To understand what should be measured and reported.  
3. To appreciate the role of MRI in early diagnosis and prognosis assessment in these cardiomyopathies.
3. To understand current imaging protocols.

2. To learn about its roles: detect, monitor and provide prognostic information.

1. To become aware of the value of whole-body MRI in myeloma.

**Learning Objectives:**

- To understand which patients will benefit from anatomic assessment or functional assessment of the coronary arteries.
- To learn about how to report on anatomic and functional assessment of coronary arteries.
- To appreciate the role of non-invasive imaging in prognosis assessment.

08:30 - 10:00  
**State of the Art Symposium**

**SA 5a**

Whole-body MRI: ready for prime time?

**A-196 08:30**

Chairperson’s introduction  
F.E. Lecouvet; Brussels/BE

**Session Objectives:**

1. To become aware of the feasibility of whole-body MRI.
2. To learn about its roles: detect, monitor and provide prognostic information.
3. To understand the anatomic targets: bone and beyond.
4. To become familiar with current developments in the technique and their implementation.

08:35

**The case of metastatic bone disease**  
A.R. Padhani; London/UK

**Learning Objectives:**

1. To understand the clinical rationale for the use of whole-body MRI when evaluating metastatic disease.
2. To learn about the use of METRADS data acquisition and response assessment guidelines.
3. To become aware of the potential benefits of whole-body tumour load quantification.
4. To review examples of clinical pathway benefits, including precision medicine approaches.

08:55

**The case of multiple myeloma**  
A. Moulopoulos, Athens/GR

**Learning Objectives:**

1. To become aware of the value of whole-body MRI in myeloma.
2. To learn about its roles: detect, monitor and provide prognostic information.
3. To understand current imaging protocols.

09:10

**The case of lymphoma**  
M.E. Mayerhofer, Vienna/AT

**Learning Objectives:**

1. To become aware of the protocols and diagnostic value of whole-body MRI in rheumatological and neuromuscular disorders.
2. To understand the role of whole-body MRI screening for multi-site inflammation in one single examination.
3. To learn about its role in differential diagnosis quantification of disease burden and assessment of therapeutic response.

09:25

**Beyond oncology: rheumatology and more**  
S. Weckbach; Heidelberg/DE

**Learning Objectives:**

1. To become familiar with future targets in oncological hybrid imaging.
2. To learn how hybrid imaging can support the oncologist in diagnosis and therapy response assessment.

09:00  
**Room L 8**

**Joint Session of the ESR and ESHI**

**When to use hybrid imaging**

**Moderators:**  
K. Riklund; Umeå/SE  
T. Beyer; Vienna/AT

**A-201 08:30**

Imaging prostate cancer: MRI or PSMA-PET/CT?  
L. Schimmöller; Düsseldorf/DE

**Session Objectives:**

1. To learn about different radiopharmaceuticals available for differentiation of tumour from radiation necrosis.
2. To understand typical hybrid imaging findings in radiation necrosis and tumour recurrence.

09:00  
**Room E1**

**Pros & Cons Session**

**PS 527**

Do we need dynamic contrast enhancement (DCE) in prostate mpMRI?

**A-204/A-205 08:30**

Chairpersons’ introduction  
H.-P. Schlemmer1, J.J. Fütterer2; Heidelberg/DE, Nijmegen/NL

**Session Objectives:**

1. To understand the clinical significance of mpMRI for detection and local-regional staging of prostate cancer.
2. To learn about the potential and limits of DCE MRI.
3. To understand the controversial discussion about the added value of DCE as part of mpMRI in clinical routine.

08:35

**A-206 08:35**

A. Yes we do!  
G.M. Villeirs; Ghent/BE

**Learning Objectives:**

1. To understand how DCE enables improved cancer detection by revealing microvasculature and perfusion.
2. To become familiar with quantitative analysis of signal intensity-time curves after intravenous contrast agent administration in order to reveal cancer specific perfusion-related parameters.
3. To appreciate the diagnostic potential of DCE to detect significant prostate cancer.

09:00

**A-207 B. No we don’t!**  
H. Hricak; New York, NY/US

**Learning Objectives:**

1. To become familiar with the diagnostic potential of mpMRI including T2w, advanced DWI and MRSI.
2. To understand the diagnostic potential non-contrast-enhanced mpMRI to detect significant prostate cancer.
3. To appreciate the benefits of a shortened mpMRI protocol by omitting DCE.

09:25  
**Discussion**
08:30 - 10:00 Room E2

State of the Art Symposium

SA 5b
Current guidelines and diagnostic criteria in multiple sclerosis (MS)

A-208 08:30
Chairperson's introduction
A. Rovira-Cañellas; Barcelona/ES

Session Objectives:
1. To appreciate the importance of an accurate diagnosis of MS.
2. To learn about the value of diagnostic criteria for MS.
3. To understand the relevance of MRI for monitoring and predicting treatment response.
4. To become familiar with treatment-related adverse effects.

A-209 08:40
Update on new clinical diagnostic criteria
C. Enzinger; Graz/AT

Learning Objectives:
1. To understand the scientific data underlying the evolution of the current diagnostic criteria.
2. To recognise chances and implications linked with the use of the new diagnostic criteria.
3. To become aware of the challenges implicated with the application of the new diagnostic criteria.

A-210 09:00
MRI for MS monitoring: the use of guidelines in clinical practice
M.P. Wattjes; Hannover/DE

Learning Objectives:
1. To understand the importance of standardisation in terms of image acquisition and scan intervals in MS monitoring.
2. To learn about the most relevant and possible future MRI outcome measures for MS treatment monitoring purposes.
3. To appreciate the potential role of MRI in predicting MS treatment response.

A-211 09:20
MRI in monitoring treatment complications
J. Hodel; Créteil/FR

Learning Objectives:
1. To learn about the most important treatment-related adverse events and their incidence.
2. To learn about the imaging pattern of these adverse events.
3. To become familiar with the algorithms used to monitor these side events and the central role of imaging in them.

09:40 Panel discussion: Do we need MRI to monitor and predict treatment response in MS?

08:30 - 10:00 Room F2

Oncologic Imaging

RC 516
Functional imaging in oncology beyond morphology: where are we now?

A-215 08:30
Chairperson's introduction: What are the problems of morphologic evaluation
C.D. Becker; Geneva/CH

Session Objectives:
1. To briefly address the limitations of mere morphological imaging modalities.
2. To introduce the basics of the concept of functional imaging in oncology.
3. To learn about current status of these techniques in daily clinical practice.

A-216 08:35
A. Functional MRI techniques
V.J. Goh; London/UK

Learning Objectives:
1. To learn about the different functional MR techniques (diffusion, perfusion).
2. To understand the basic principle behind each technique.
3. To appreciate the clinical usefulness of these techniques in daily clinical practice.

A-217 08:58
B. CT perfusion techniques
H. Schöllnast; Graz/AT

Learning Objectives:
1. To learn about current approaches for CR perfusion techniques.
2. To understand the basic principle behind each technique.
3. To appreciate the clinical usefulness of these techniques in daily clinical practice.

A-218 09:21
C. Assessment by molecular imaging
J. Grimm; New York, NY/US

Learning Objectives:
1. To learn about the different concepts in molecular imaging.
2. To see and understand how molecular imaging might be integrated into patient care.
3. To appreciate clinical examples where molecular imaging is already established.

09:44 Panel discussion: Where are we using functional evaluations in clinical practice?
SF 5
Cystic pancreatic lesions: how to differentiate, how to manage?

A-219 08:30
Chairperson's introduction
C. Matos; Lisbon/PT

Session Objectives:
1. To understand how imaging helps make the differential diagnosis of cystic lesions of the pancreas.
2. To address key questions that should be answered when diagnosing an incidental pancreatic cystic lesion.
3. To discuss how to improve patient management through multidisciplinary interaction.

A-220 08:35
Diagnostic accuracy of non-invasive imaging modalities for characterising cystic pancreatic lesions
N. Kartalis; Stockholm/SE

Learning Objectives:
1. To become familiar with the specific imaging features of pancreatic cystic lesions on US, EUS, CT, and MRI.
2. To learn about the accuracy of cross-sectional imaging in the diagnosis of cystic pancreatic lesions.
3. To understand the added value of contrast-enhanced US and EUS in characterising cystic pancreatic lesions.

A-221 08:58
The evolving role of pathology: can we improve patient stratification?
P. Demetter; Brussels/BE

Learning Objectives:
1. To understand the carcinogenic pathway in pancreatic cystic lesions.
2. To become familiar with the most frequent molecular alterations seen in pancreatic cystic lesions.
3. To learn how the integration of cytohistomorphology, cyst fluid biochemistry and molecular testing helps better stratify patients before therapy.

A-222 09:21
When not to operate and when to operate an incidental cystic pancreatic lesion
M. Del Chiaro; Stockholm/SE

Learning Objectives:
1. To become familiar with surgical options for the management of pancreatic cystic lesions.
2. To understand how information obtained by imaging impact surgical management.
3. To learn how to avoid unnecessary surgery in patients with benign pancreatic cystic lesions.

09:44
Panel discussion: Are current management recommendations appropriate?

RC 514
Successful paediatric imaging

A-223/A-224 08:30
Chairpersons’ introduction: Paediatrics: more than just ‘small adults’
V. Syrgiamiotis; N. Mitreska; Athens/GR, Skopje/MK

Session Objectives:
1. To appreciate strategies for successful imaging of uncooperative children and those with disabilities.
2. To review current guidelines on imaging in suspected non-accidental injury.
3. To demonstrate potential techniques to avoid sedation during paediatric MRI.

A-225 08:35
A. Imaging the uncooperative child and children with disabilities
C. Simcock; London/UK

Learning Objectives:
1. To learn about behaviours and disabilities that can present a challenge to successful imaging.
2. To understand practical techniques and strategies during projection radiography examinations.
3. To appreciate practical advice for imaging in specialist modality areas such as CT, MRI and US.

A-226 08:58
B. Suspected non-accidental injury: best practice and advice
B.R. Mussmann; Odense/DK

Learning Objectives:
1. To appreciate non-accidental injury imaging as a highly specialised procedure.
2. To understand the image quality requirements in non-accidental injury imaging.
3. To be aware of the legal aspects of performing non-accidental injury imaging.

A-227 09:21
C. Reducing the need for sedation and anaesthesia in MRI: the role of play therapy and other techniques
J. Gårdling; Lund/SE

Learning Objectives:
1. To review the current use of sedation and anaesthesia in paediatric MRI.
2. To understand how play therapy and other techniques can be used to prepare patients for imaging.
3. To become familiar with practical skills and techniques that might reduce sedation rates in paediatric MRI.

09:44
Panel discussion: How to avoid mistakes and to learn from working with paediatrics.
<table>
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<tr>
<th>Time</th>
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| 08:30 - 10:00 | Room M 1 | **Joint Session of the ESR and EFOMP**

**ESR/EFOMP**

**CT screening: benefits, doses and associated risks**

Moderators:
- J. Damilakis; Iraklion/GR
- D. Tack; Baudour/BE

**A-228 08:30**

**Dose and risk assessment**

M. Brambilla; Novara/IT

**Learning Objectives:**
1. To learn about the correct methodology to assess the stochastic risk associated with radiation exposure.
2. To understand the differences between exposure indexes (CTDI, DLP, etc.), organ doses, effective doses and risk.
3. To appreciate the risks associated with CT screening.

**A-229 08:50**

**Quantitative benefit-risk analysis**

J. Damilakis; Iraklion/GR

**Learning Objectives:**
1. To learn about medical benefits of CT screening and how they can be expressed quantitatively.
2. To compare the benefits of CT screening with potential radiogenic risks.
3. To learn the limitations of benefit-risk analyses.

**A-230 09:10**

**Breast CT**

W.A. Kalender; Erlangen/DE

**Learning Objectives:**
1. To learn about early efforts at CT imaging of the breast.
2. To note image quality requirements for improving breast cancer diagnosis.
3. To understand the importance of advanced detector technology for the low-dose high-resolution breast CT.

**A-231 09:30**

**How to communicate**

G. Paulo; Coimbra/PT

**Learning Objectives:**
1. To become familiar with the principals of patient communication strategies.
2. To be aware of patients' needs and fragilities at the point of care.
3. To understand the patients' fears and perceptions about risk.

**A-232 08:30**

**A. Postoperative shoulder**

C.W.A. Pfirrmann; Zurich/CH

**Learning Objectives:**
1. To become familiar with the most frequently used surgical techniques for glenohumeral instability, subacromial decompression, rotator cuff repair, and arthroplasty and their imaging appearance.
2. To learn about potential postoperative complications.

**A-233 09:00**

**B. Postoperative knee**

E.H.G. Oei; Rotterdam/NL

**E³ 526a**

**State-of-the-art imaging of postoperative joints**

Moderator:
M.F. Reiser; Munich/DE

**A-234 09:30**

**C. Postoperative ankle and foot**

M.J. Ereno Ealo; Galdacano/ES

**Learning Objectives:**
1. To become familiar with the most frequently used surgical techniques for osteosynthesis, instability, tendon repair and arthroplasty and their imaging appearance.
2. To learn about potential postoperative complications.

**A-235 09:00**

**A. Musculoskeletal ablation and embolisation**

A. Basile; Catania/IT

**Learning Objectives:**
1. To appreciate the indications for ablations and embolisation.
2. To learn about different techniques and combination of them.
3. To discuss the results and literature data of interventional radiology procedures.

**A-236 09:30**

**B. Vertebral augmentation and discectomy techniques: can we challenge surgery?**

D. Filippiadis; Athens/GR

**Learning Objectives:**
1. To appreciate the rationale for the using of interventional radiology procedures.
2. To learn about different techniques and treatment strategy.
3. To discuss results and literature data in comparison with other treatments.

**A-237 09:30**

**C. Bone biopsy and pain treatment using cone-beam CT (CBCT)**

L. Tselikas; Villejuif/FR

**Learning Objectives:**
1. To appreciate the high imaging quality and guidance accuracy using CBCT for biopsy and pain treatment.
2. To learn about the advantages of CBCT-guided interventions, reconstruction algorithms, image enhancement and dose reduction.
3. To discuss about techniques, limitations of CBCT and future applications.
E³ - ECR Master Class (Vascular)

E³ 526b
TEVAR/EVAR: where we are and where we are going
Moderator: F. Fanelli; Rome/IT

A-238 08:30
A. TEVAR
H. Rousseau; Toulouse/FR

Learning Objectives:
1. To understand the evidence supporting endovascular therapy vs surgery.
2. To learn what is new for aortic arch disease.
3. To learn the impact of technological innovation in planning and performing the procedure.

A-239 09:00
B. EVAR
E. Brountzos; Athens/GR

Learning Objectives:
1. To understand the evidence supporting endovascular therapy vs surgery.
2. To learn what is new for thoracoabdominal aortic disease and iliac axis.
3. To learn when and how to perform a percutaneous approach.

A-240 09:30
C. Post-EVG complication
R. Uberoi; Oxford/UK

Learning Objectives:
1. To learn about individualised post-EVG surveillance programme.
2. To learn which are the most common complications.
3. To understand how to select and perform the optimal treatment.
4. To understand the role of contrast-enhanced US (CEUS).

E³ - ECR Academies: Update on Hepatobiliary Imaging

E³ 520
Imaging of HCC

A-241 08:30
Chairperson's introduction
A. Palkó; Szeged/HU

A-242 08:35
A. CT or MRI for diagnosis and follow-up?
G. Brancatelli; Palermo/IT

Learning Objectives:
1. To understand the CT and MR imaging protocols to identify HCC in cirrhotic liver.
2. To be familiar with Li-RADS.
3. To review the role of each modality in detecting, staging and follow-up of HCC.

A-243 09:03
B. Early HCC and well-differentiated HCC
C. Ayuso; Barcelona/ES

Learning Objectives:
1. To review key imaging criteria of HCC in a cirrhotic liver.
2. To be able to differentiate HCC from other lesions in a cirrhotic liver.
3. To reflect the role of early diagnosis of HCC in the management of the patient.

A-244 09:31
C. Mimickers and pitfalls
M. Karcaaltincabac; Ankara/TR

Learning Objectives:
1. To review a diagnostic algorithm to detect HCC mimics in non-cirrhotic liver.
2. To review the imaging characteristics of a wide spectrum of potential pitfalls.
3. To understand the potential role of extracellular and hepatobiliary contrast agents as the problem solvers.

E³ - ECR Academies: Interactive Teaching Sessions for Young (and not so Young) Radiologists

E³ 621
Basic breast imaging

A-245 10:30
A. Calcifications in mammography
C.S. Balleyguier; Villejuif/FR

Learning Objectives:
1. To become familiar with different types of calcifications.
2. To learn the differential diagnosis of different calcifications.
3. To learn the different tools to biopsy calcification clusters.

A-246 11:15
B. Asymmetry and architectural distortion
L.J. Pina Insauti; Pamplona/ES

Learning Objectives:
1. To understand the concept of asymmetry and architectural distortion.
2. To become familiar with the respective imaging features.
3. To learn about the diagnostic approach using all breast imaging modalities.

EU Safe Imaging Session

EU 2
Strategies for dose reduction in computed tomography: from technical concepts to clinical practice

Moderator: R.W.R. Loose; Nuremberg/DE

A-247 10:35
Chairperson's introduction
W. Stiller; Heidelberg/DE

Session Objectives:
1. To raise awareness of different strategies for dose reduction in CT.
2. To learn about and understand technical concepts facilitating dose reduction in CT.
3. To become familiar with methods for dose reduction in CT applied in clinical practice.

A-248 10:35
Systems for dose reduction in CT: more than automated exposure control
M. Prokop; Nijmegen/NL

Learning Objectives:
1. To learn about the technical possibilities available for reducing the dose associated with CT examinations.
2. To become familiar with the functionality of technical systems for dose reduction in CT.
3. To understand the potential and limitations of these dose reduction systems.
### Postgraduate Educational Programme

#### A-249 10:51
Iterative image reconstruction for dose reduction in CT: technical background and concepts for clinical practice
P.B. Noël; Munich/DE

**Learning Objectives:**
1. To learn about current methods for the iterative image reconstruction in CT.
2. To raise awareness about the potential of the iterative image reconstruction for enabling dose reduction in CT.
3. To understand technical limitations of the iterative image reconstruction in view of image quality at very low doses.

#### A-250 11:07
Dose reduction strategies in paediatric CT
E. Castellano; London/UK

**Learning Objectives:**
1. To become familiar with dose reduction strategies employed in paediatric CT.
2. To understand how scanner technology can be used for reducing dose of paediatric CT examinations.
3. To raise awareness of the importance of dose reduction in paediatric CT examinations.

#### A-251 11:23
Adapting protocols towards dose reduction in chest CT
D. Tack; Baudour/BE

**Learning Objectives:**
1. To become familiar with strategies for dose reduction applied in chest CT.
2. To learn about the adaptation of acquisition protocol parameters for reducing dose of chest CT examinations.
3. To raise awareness of the potential for dose reduction in chest CT in clinical routine.

#### A-252 11:39
Dose reduction and image quality: when low is too low
S.T. Schindera; Aarau/CH

**Learning Objectives:**
1. To learn about the implications of dose reduction on the image quality of CT examinations.
2. To become familiar with examples of excessive dose reduction from clinical practice.
3. To understand that dose reduction potential in CT is limited by the image quality requirements inherent to each specific diagnostic task.

### 10:30 - 12:00  Room F1

#### E3 - Rising Stars Programme: Joint Sessions with ESOR

#### ESR/ESOR 1
Radiologic anatomy: lower extremities
Moderator: U. Aydingoz; Ankara/TR

#### A-253 10:30
Hip
A.H. Karantanas; Iraklion/GR

**Learning Objectives:**
1. To identify intra- and extra-articular anatomy on MRI.
2. To learn what we see and what we miss on radiographs.
3. To understand osteoarthritis and learn its key features on imaging.

#### A-254 11:00
Knee
M. Klontzas; London/UK

**Learning Objectives:**
1. To identify intra- and extra-articular anatomy on MRI.
2. To learn what we see and what we miss on radiographs.
3. To understand and learn the key features of meniscal injury.

#### A-255 11:30
Ankle
F. Smithuis; Amsterdam/NL

**Learning Objectives:**
1. To identify intra- and extra-articular anatomy on MRI.
2. To learn what we see and what we miss on radiographs.
3. To understand and learn key features of ankle sprain.

### 10:30 - 12:00  Room M 4

#### E3 - ECR Academies: Chest Imaging

#### E3 618
The heart between the lungs

#### A-256 10:30
Chairperson’s introduction
J.E. Wildberger; Maastricht/NL

#### A-257 10:35
A. Cardiomyopathies
D.J. Murphy; London/UK

**Learning Objectives:**
1. To review the normal anatomy on standard chest CT.
2. To learn about the CT signs of various cardiomyopathies.
3. To learn about CT performance for the diagnosis of cardiomyopathy.

#### A-258 11:03
B. Coronary artery disease
M. Williams; Edinburgh/UK

**Learning Objectives:**
1. To review the normal coronary artery anatomy.
2. To learn about calcium scoring on non-gated CT.
3. To learn about the CT signs of healed myocardial infarction.

#### A-259 11:31
C. Fat and calcium in the heart
F. Pontana; Lille/FR

**Learning Objectives:**
1. To learn about physiologic changes.
2. To review the main causes of fat and calcium.
3. To learn how to differentiate pathologic from physiologic images.

### 10:30 - 12:00  Room M 5

#### E3 - ECR Academies: Update on Hepatobiliary Imaging

#### E3 620
Characterisation of focal liver lesions

#### A-260 10:30
Chairperson’s introduction
C. Stoupis; Männedorf/CH

#### A-261 10:35
A. Hypervascular lesions
R. Manfredi; Rome/IT

**Learning Objectives:**
1. To understand the imaging techniques to characterise focal liver lesions.
2. To get familiar with the typical and atypical imaging features of hypervascular lesions including haemangioma, focal nodular hyperplasia and liver cell adenomas.
3. To be able to differentiate benign hypervascular lesions from malignant ones.
B. Fat-containing lesions
O. Benjaminov; Petach Tikva/IL

Learning Objectives:
1. To list the wide spectrum of fat-containing lesions of the liver.
2. To be able to identify the imaging features of fat-containing liver lesions.
3. To describe the patterns of fatty change within hepatic neoplasms, in order to use them for differential diagnosis.

C. Fibrotic lesions
V. Vilgrain; Clichy/FR

Learning Objectives:
1. To be aware of the imaging techniques and contrast enhancement patterns of the fibrotic lesions.
2. To get familiar with the spectrum of fibrotic lesions in the liver and their imaging features.
3. To be able to differentiate benign from the malignant conditions.

C 3
The right test the first time: clinical decision support systems

A-264 10:30
Chairperson’s introduction
B. Brkljačić; Zagreb/HR.

Learning Objectives:
1. To understand the background of developing clinical decision support systems.
2. To present the overview of utilisation of CDS/iGuide in Europe.
3. To give an overview of the topics to be presented.

A-266 10:36
Reducing variance and improving diagnoses
L. Donoso; Barcelona/ES

Learning Objectives:
1. To understand the importance of appropriate referrals.
2. To learn about the position of imaging referrals within the imaging value-chain.
3. To understand the contribution of CDS to reduce the variance in the clinical practice.

A-267 10:42
ESR iGuide pilot in Jönköping County in Sweden
H. Ståhlbrandt; Eksjö/SE

Learning Objectives:
1. To learn about how to implement iGuide in a clinical non-university hospital setting.
2. To understand how to get the clinicians on-board.
3. To understand how to make the best use of iGuide.

A-268 10:48
“Trumpcare”: where does CDS stand in the USA
J.A. Brink; Boston, MA/US

Learning Objectives:
1. To understand how CDS participation is being rewarded in physician payment reform.
2. To understand how qualified provider-led entities are selected for appropriateness criteria development.
3. To understand how clinical decision support mechanisms are certified for use in the United States.

10:54
Open forum discussion
E³ 25B
Chronic trauma: spectrum of bone response
Moderator:
V.N. Cassar-Pullicino; Oswestry/UK

A-280 12:30
Chronic trauma: spectrum of bone response
A.H. Karantanas; Iraklion/GR

Learning Objectives:
1. To become familiar with the pathomechanisms that can affect the axial and peripheral skeleton in chronic trauma.
2. To understand the radiological manifestation of these pathological mechanisms.
3. To appreciate how to best use imaging modalities in diagnosing occult and overt injury and monitoring the response to treatment.

12:00 - 13:00 Room Coffee & Talk
Coffee & Talk (open forum)

C 4
Research in radiation protection

A-269 12:00
Chairperson's introduction
G. Frija; Paris/FR

Session objectives:
1. To learn about research activities in radiation protection.
2. To become familiar with initiatives and projects ongoing in Europe.
3. To illustrate obstacles, barriers and the way forward.

A-270 12:05
European platforms for radiation protection
W. Stiller; Heidelberg/DE

Learning Objectives:
1. To learn about European platforms for radiation protection.
2. To become familiar with their goals and activities.
3. To understand how to promote synergies between the platforms.

A-271 12:15
Introduction to the MEDIRAD project
G. Frija; Paris/FR

Learning Objectives:
1. To get to know the MEDIRAD project (implications of medical low dose radiation exposure).
2. To become familiar with the project's goals and tasks.
3. To understand the project's impacts.

A-272 12:20
Introduction to EURAMED
C. Hoeschen; Magdeburg/DE

Learning Objectives:
1. To learn about EURAMED (European Alliance for Medical Radiation Protection Research).
2. To become familiar with EURAMED's strategic research agenda.
3. To learn about the strategic research agenda as a tool to promote radiation protection in the health sector.

A-979 12:30
Chairperson's introduction
E. Neri; Pisa/IT

A-980 12:35
Keynote lecture
E.L. Siegel; Baltimore, MD/US

Learning Objectives:
1. To describe the relationship between artificial relationship, machine learning and deep learning.
2. To list the challenges associated with the adoption of a general AI programme that could interpret studies in a manner similar to a radiologist.
3. To explain the reason for the recent excitement about “AI” in diagnostic imaging when the technology has been around for many years.
4. To list applications that are not related to image pixel interpretation that can benefit imaging departments that use machine learning.

A-981 12:45
Image computing in radiology
P. Suetens; Leuven/BE

Learning Objectives:
1. To become familiar with the principles and history of image computing (automated image analysis, artificial intelligence (AI), artificial neural networks (ANN), deep learning).
2. To learn about the opportunities of image computing in radiology.
3. To have a realistic view of the current and future role and impact of image computing to radiology.

A-982 13:00
Deep learning: basic principles
M. de Bruijne; Rotterdam/NL

A-983 13:15
Machine learning for analysing medical images
B. Glocker; London/UK

Learning Objectives:
1. To learn how machine learning can help to analyse medical images.
2. To appreciate the need for close cross-discipline collaboration.
3. To understand what are the key ingredients for successful use of today’s machine learning technology.

14:00 - 15:30 Room A
E³ - ECR Academies: Interactive Teaching Sessions for Young (and not so Young) Radiologists

E³ 721
Gastrointestinal radiology

A-281 14:00
A. Inflammatory bowel disease
J. Rimola; Barcelona/ES

Learning Objectives:
1. To review the spectrum of imaging findings in inflammatory bowel disease, mainly in Crohn's disease.
2. To learn about the management options.

A-282 14:45
B. Rectal cancer staging: key findings
G. Brown; Sutton/UK

Learning Objectives:
1. To understand the imaging technique.
2. To identify the key imaging findings.
**Trends in quality education in radiology**

**Moderators:**
B. Brkljačić, Zagreb/HR  
N. Gourtsoyiannis; Athens/GR

**A-283 14:00**  
Introduction  
B. Brkljačić, Zagreb/HR

**A-284 14:05**  
ESOR in action 2018  
N. Gourtsoyiannis; Athens/GR

**A-285 14:15**  
The beauty of face-to-face teaching  
Y. Menu; Paris/FR

**A-286 14:30**  
Flipped classroom: paradigm shift with pathologists  
V. Vilgrain; Clichy/FR

**A-287 14:45**  
Integration of big data in radiological education  
L. Martí-Bonmatí; Valencia/ES

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**A-291 15:01**  
C. Postoperative  
S. Waldt; Munich/DE

**Learning Objectives:**
1. To identify the most common postoperative changes.  
2. To know the role of MR imaging and MR arthrography (direct/indirect) and how to optimise MR protocols for the postoperative patient.  
3. To understand the typical appearances and complications following rotator cuff repair.

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**A-292 14:00**  
Chairperson’s introduction  
B.J. Op De Beeck; Antwerp/BE

**A-293 14:05**  
A. Focal liver lesions in oncology patient  
F. Caseiro Alves; Coimbra/PT

**Learning Objectives:**
1. To be aware of the most common incidental liver lesions in patients with extrahepatic cancer.  
2. To understand the imaging protocols and findings to differentiate benign lesions from metastases.  
3. To be familiar with the strategies for optimising patient management of these incidental hepatic lesions.

**A-294 14:33**  
B. Treatment options and strategies for liver tumours  
T.K. Helmberger; Munich/DE

**Learning Objectives:**
1. To understand the main options of tumour treatment and to be able to discuss the appropriate method for treatment given the results of imaging.  
2. To recognise the indications of ablation techniques and their outcome.  
3. To know when intra-arterial embolisation techniques are needed and what their outcome is.

**A-295 15:01**  
C. Assessment of response to treatment  
V.J. Goh; London/UK

**Learning Objectives:**
1. To appreciate the value of different imaging techniques and the criteria for assessment of tumour response to systemic therapy.  
2. To become familiar with post-treatment imaging after intra-arterial therapies and ablation techniques.  
3. To be aware of imaging findings of cancer therapy-induced toxicities and adverse effects.
**Postgraduate Educational Programme**

**14:00 - 15:30 Room Coffee & Talk**

**Coffee & Talk (open forum)**

**C 5**  
**How to be effective in undergraduate teaching of radiology**

**A-296** 14:00  
Chairperson’s introduction  
V. Víšek, Brno/CZ

**Learning Objectives:**
1. To learn how to conceptualise, teach and assess radiology training programmes in medical schools.
2. To become familiar with the concept of flipped classroom and flipped learning and to understand how medical students communicate and share information through online profiles.
3. To learn how to use ultrasound equipment to train students or how to utilise simulation models to teach interventional radiology.

**A-297** 14:03  
The role of eLearning in radiology education  
M. Dewey, Berlin/DE

**Learning Objective:**
1. To understand how new technologies and innovative approaches can help teaching radiology.

**A-298** 14:18  
The „flipped classroom/flipped learning“ approach in radiology training  
C. Nyhsen, Sunderland/UK

**Learning Objective:**
1. To understand how radiology educators could use material on a shared website and reinforce the most important concepts during face-to-face sessions.

**A-299** 14:33  
Appropriate use of imaging studies: what students should know  
F. Kainberger, Vienna/AT

**Learning Objective:**
1. To learn how to educate students about the appropriateness of imaging techniques in the clinical setting.

**A-300** 14:48  
Simulation-based teaching in interventional radiology  
R. Iezzi, Rome/IT

**Learning Objective:**
1. To learn the role of simulation techniques in USG/IR training.

15:03  
Open forum discussion: How new education concepts and IT tools can contribute to undergraduate teaching of radiology?

**A-301** 15:20  
Chairperson’s conclusion  
V. Víšek, Brno/CZ

**16:00 - 17:30 Room A**

**E³ - ECR Academies: Interactive Teaching Sessions for Young (and not so Young) Radiologists**

**E³ 821**  
Dementia and movement disorders

**A-302** 16:00  
A. MR contribution to diagnosis and differential diagnosis in dementia  
M. Sasiadek, Wroclaw/PL

**Learning Objectives:**
1. To become familiar with imaging in different types of dementia.
2. To learn the imaging criteria for differentiation.

**A-303** 16:15  
B. Imaging in Parkinsonism and other extrapyramidal disorders  
N.N.

**Learning Objectives:**
1. To become familiar with the different imaging modalities.
2. To learn the imaging criteria.

**16:00 - 17:30 Room B**

**Special Focus Session**

**SF 8d**  
Artificial intelligence and radiology: a perfect match?

**A-984/A-985** 16:00  
Chairpersons’ introduction  
Adrian K. Dixon1, W. Kim2; 1Cambridge/UK, 2Los Angeles, CA/US

**Session Objectives:**
1. To understand the role AI plays in radiology today and in the future.
2. To learn how AI can benefit radiologists.
3. To appreciate the benefits of AI for patients.

**A-986** 16:05  
An overview of where artificial intelligence could/will take us in radiology  
M. Forsting, Essen/DE

**Learning Objectives:**
1. To learn what the prerequisite of application of AI in medicine is.
2. To understand the difference between AI and radiomics.
3. To learn that radiology will grow with AI.
4. To appreciate that AI will be a topic not only for radiology.

**A-987** 16:23  
The science of artificial intelligence and machine learning: creating a partnership between radiologist and machine  
C. Langlotz, Stanford, CA/US

**Learning Objectives:**
1. To learn about the origins of artificial intelligence and deep learning and how they will change the practice of radiology.
2. To appreciate the most important AI research questions, including the analysis of radiology free-text reports and the creation of decision support systems for radiologists.
3. To review examples of clinically relevant AI applications and their likely effect on radiology practice throughout the world.
4. To understand the challenges for AI in radiology and the reasons why AI will not replace radiologists.
A-988 16:41
Deep learning for fully automatic segmentation of normal and pathological structures in medical images
B. Glocker; London/UK

Learning Objectives:
1. To learn how deep learning can be employed to automatically segment anatomical structures from medical images.
2. To appreciate that it takes considerable effort and time to carefully prepare training data.
3. To understand what can be expected from AI and what the limitations of today’s methods are.

A-989 16:59
Artificial intelligence and radiology: a perfect match. Radiology and radiologists: a painful divorce?
B. van Ginneken; Nijmegen/NL

Learning Objectives:
1. To learn about the different types of deep learning products and services that analyse radiological images.
2. To understand which parts of the work of radiologist can be automated in the near future, and which parts cannot.
3. To review examples of clinically relevant artificial intelligence applications that are on the market and are not yet on the market.
4. To understand that artificial intelligence and radiology may be a perfect match, but that artificial intelligence may not be a perfect match for radiologists.

Chest

RC 804
Chronic obstructive pulmonary disease (COPD)

A-304 16:00
Chairperson’s introduction
K. Irion; Manchester/UK

Session Objectives:
1. To describe the current challenges of COPD phenotyping.
2. To learn how to personalise management in COPD.
3. To understand the methodological problems at the stages of selection of patients.

A-305 16:05
A. CT phenotyping and visual assessment
P.A. Grenier; Paris/FR

Learning Objectives:
1. To learn about imaging-based phenotypes.
2. To understand the strengths and limitations of visual assessment.
3. To review the phenotypes and comorbidities approachable by CT.

A-306 16:28
B. Quantitative imaging biomarkers
J.B. Seo; Seoul/KR

Learning Objectives:
1. To learn about the COPD biomarkers that may be helpful for managing COPD patients.
2. To understand the potential role for quantitative imaging in identifying imaging phenotypes.
3. To appreciate the recent development of quantitative imaging methods.

A-307 16:51
C. Is there a role for MRI?
B.J. Jobst; Heidelberg/DE

Learning Objectives:
1. To learn about the morpho-functional pulmonary measurements achievable with MRI.
2. To review the various methodological approaches.
3. To appreciate current and forthcoming developments.

Panel discussion: So where does AI go from here?

SF 8a
CT examination of pregnant patients: a dilemma for the radiologist and the mother

A-308 16:00
Chairperson’s introduction
V. Gershan; Skopje/MK

Session Objectives:
1. To give an overview of radiation risk associated with the CT examination of pregnant patients.
2. To learn how to optimise CT imaging of pregnant patients.
3. To suggest actions for dose management of pregnant patients in CT.

A-309 16:05
Radiation risks vs clinical benefits
M. Prokop; Nijmegen/NL

Learning Objectives:
1. To give an overview of radiation risks of pregnant patients during CT examinations.
2. To learn about the choice of the modality.
3. To learn how to manage risk in the CT examination of pregnant patients.

A-310 16:23
How to reduce radiation dose and keep CT diagnostics
M. Kortesniemi; Helsinki/FI

Learning Objectives:
1. To give an overview of optimisation methods and techniques in CT.
2. To describe the method of choice in particular cases.
3. To learn about examples for different clinical requests.

A-311 16:41
Dosimetry methods available
J. Damilakis; Iraklion/GR

Learning Objectives:
1. To provide information about the available conceptus dosimetry methods in CT.
2. To understand the accuracy and limitations of the dosimetry methods.
3. To learn how to estimate radiation dose in pregnant patients during CT examinations.

A-312 16:59
Dose and risk communication to doctors and patients
P. Gilligan; Dublin/IE

Learning Objectives:
1. To provide information about the latest scientific knowledge about conceptus risk.
2. To learn how to manage incidents and accidents involving pregnant patients in CT.
3. To learn how to communicate to doctors and patients about dose and risk.

Panel discussion: CT during pregnancy: what are the suggested actions for patient dose management?
Postgraduate Educational Programme

**Head and Neck**

**RC 808**

Pitfalls in interpretation of head and neck disease

**Moderator:**
S. Robinson; Vienna/AT

**A-313 16:00**

A. Anatomical variants without clinical consequence  
F.A. Pameijer; Utrecht/NL

**Learning Objectives:**
1. To gain insight into the great variability of head and neck anatomy.
2. To be able to recognise pseudo lesions.

**A-314 16:30**

B. Anatomical variants posing surgical risks  
D. Farina; Brescia/IT

**Learning Objectives:**
1. To learn about structures at risk during functional endoscopic sinus surgery (FESS).
2. To become familiar with vascular variants in the head and neck.
3. To appreciate surgical anatomical landmarks in the head and neck.

**A-315 17:00**

C. Distinct head and neck disease or systemic disease?  
M.G. Mack; Munich/DE

**Learning Objectives:**
1. To recognise head and neck manifestations of systemic disease.
2. To categorise lesions into different pathologic entities.

**Genitourinary**

**RC 807**

Imaging of the prostate

**Moderator:**
P. Puech; Lille/FR

**A-316 16:00**

A. MRI diagnosis of prostate cancer  
A.R. Padhani; London/UK

**Learning Objectives:**
1. To become familiar with the different components of mpMRI of the prostate (T2, DWI and DCE).
2. To discuss the role of PI-RADS version 2 in the diagnosis of clinically significant prostate cancer.
3. To understand the correct indications and guidelines on the use of mpMRI.

**A-317 16:30**

B. MRI staging of prostate cancer  
G.M. Villeirs; Ghent/BE

**Learning Objectives:**
1. To understand the current role of prostate MRI.
2. To learn how to optimise imaging and reporting.
3. To illustrate the staging approach.

**A-318 17:00**

C. Imaging of PSA recurrence  
H.-P. Schlemmer; Heidelberg/DE

**Learning Objectives:**
1. To understand the clinical need and indications for imaging in patients with PSA recurrence.
2. To discuss the optimal imaging modalities for detection of local recurrence.
3. To illustrate the potential of whole-body MRI and new radiotracers for detection of distant recurrence.
Special Focus Session

SF 8b
My three top tips for breast imaging

A-324 16:00
Chairperson's introduction
M.H. Fuchsjäger; Graz/AT

Session Objectives:
1. To appreciate fundamental tips and tricks of the most renowned European breast radiologists for clinical practice.
2. To acknowledge the single most important aspects for successfully performing breast examinations.
3. To learn how to avoid common pitfalls in breast radiology.

A-325 16:05
Screening with tomosynthesis
S. Zackrisson; Malmö/SE

Learning Objectives:
1. To understand why tomosynthesis is better than mammography for breast cancer screening.
2. To appreciate the current scientific evidence of tomosynthesis in screening.
3. To acknowledge what further steps are needed before implementation in screening.

A-326 16:11
Automated breast ultrasound
R.M. Mann; Nijmegen/NL

Learning Objectives:
1. To recognise artefacts that are specific to ABUS.
2. To appreciate the value of multiplanar reconstruction and the coronal spiculation pattern.
3. To gain insight into possible indications for ABUS.

A-327 16:17
Complex cystic and solid lesions
P. Kapetas; Vienna/AT

Learning Objectives:
1. To understand the difference between complex cystic and solid lesions from other cystic lesions of the breast.
2. To become familiar with complementary sonographic techniques for the accurate characterisation of cystic breast lesions.
3. To be able to properly manage complex cystic and solid lesions of the breast.

A-328 16:29
Imaging the axilla
F. Kilburn-Toppin; Cambridge/UK

Learning Objectives:
1. To understand the clinical role of axillary staging.
2. To learn imaging features of abnormal lymph nodes and criteria for biopsy.
3. To understand the importance of discriminating minimal vs advanced nodal disease.

A-329 16:35
Contrast-enhanced spectral mammography
E.M. Fallenberg; Berlin/DE

Learning Objectives:
1. To understand the technical principles of contrast-enhanced spectral mammography.
2. To understand the added value of information provided by contrast-enhanced spectral mammography.
3. To become familiar with the information provided by contrast-enhanced spectral mammography and breast MRI regarding lesion morphology and enhancement.

A-330 16:41
Stereotactic-guided biopsy
E.J. Cornford; Cheltenham/UK

Learning Objectives:
1. To understand the indications for stereotactic-guided breast biopsy.
2. To learn about the technical aspects of stereotactic biopsy.
3. To understand the importance of marker clip placement post-biopsy.

A-331 16:53
US-guided biopsy
A. Athanasiou; Athens/GR

Learning Objectives:
1. To understand current indications, contraindications and possible complications of US-guided biopsy.
2. To be familiar with different available biopsy systems and know which one to choose according to the clinical setting.
3. To learn the most important technical tips for performing a US-guided biopsy successfully.

A-332 16:59
MRI-guided biopsy
G. Esen; Istanbul/TR

Learning Objectives:
1. To understand the importance of pre-biopsy preparation including patient information.
2. To be familiar how to relate lesion and needle positions.
3. To appreciate tricks for targeting lesions in complicated locations (superficial, deep, retroareolar).

A-333 17:05
Treatment response and therapy monitoring
C. Van Ongeval; Leuven/BE

Learning Objectives:
1. To learn what is important in the reporting of the treatment response.
2. To understand the accuracy of mammography, ultrasound and magnetic resonance in the monitoring of therapy.

A-334 17:11
Post-therapy evaluation
J. Camps Herrero; Valencia/ES

Learning Objectives:
1. To understand and learn the different phases of fat necrosis and its imaging correlates in all modalities.
2. To know what to report in patients with breast implants and oncoplastic reconstructions.
3. To learn the different appearances of breast cancer recurrence.

Neuro

RC 811
State-of-the-art paediatric neuroradiology

A-335 16:00
Chairperson's introduction
C. Amarnath; Chennai/IN

Session Objectives:
1. To learn the spectrum of applications and indications for imaging in paediatric neuroradiology.
2. To understand the relevance to apply the appropriate image acquisition protocols of disease in the field.
3. To appreciate the clinical relevance of imaging for the diagnostic process of neurological disorders in infants and children.
A-336 16:05
A. Imaging myelin maturation disorders
N. Wolf; Amsterdam/NL

Learning Objectives:
1. To learn about normal and pathological patterns of myelination.
2. To understand the role of imaging with respect to narrowing the differential diagnosis and supporting the clinical diagnosis.
3. To appreciate the importance of pattern recognition for the diagnosis of myelination disorders in children.

A-337 16:28
B. Imaging of developmental disorders
B. Ertl-Wagner; Munich/DE

Learning Objectives:
1. To learn about the spectrum of developmental disorders of the brain.
2. To understand the key imaging features that lead to the correct diagnosis.
3. To appreciate the increasing clinical relevance of advanced imaging techniques in paediatric neuro-oncology.

A-338 16:51
C. Imaging in paediatric neuro-oncology
E. Vázquez; Barcelona/ES

Learning Objectives:
1. To learn about the spectrum of neuro-oncological diseases in children.
2. To understand the role of imaging beyond the diagnostic process.
3. To appreciate the added value of functional imaging in correlation with the impact of the therapy on tumour cells and neo-vasculature.

Panel discussion: Ask the expert: what is relevant for my own daily clinical practice?
16:00 - 17:30 Room F1

ESR/ESOR 2
Radiologic anatomy: abdomen

Moderator:
S. Gourtsoyianni; Athens/GR

A-339 16:00
Liver
G. Brancatelli; Palermo/IT

Learning Objectives:
1. To locate and identify, using cross sectional medical imaging, superficial and internal structures of common liver anatomy.
2. To learn and understand how the vasculature defines the eight Couinaud segments.
3. To explain how common pathological conditions affect the structure of the liver.

A-340 16:30
Biliary tree
O. Beniaminov; Petach Tikva/IL

Learning Objectives:
1. To discuss current imaging techniques for evaluation of normal biliary anatomy.
2. To learn and understand possible anatomical variants that may occur.
3. To explain how common pathological conditions affect the bile ducts.

A-341 17:00
Pancreas
M. Dioguardi Burgio; Clichy/FR

Learning Objectives:
1. To review and illustrate the imaging features of normal pancreatic anatomy.
2. To review the possible congenital variants and anomalies of the pancreas and pancreatic duct.
3. To explain how common pathological conditions affect the pancreas.

RC 816
Monitoring response: the essential guide for all radiologists

A-342 16:00
Chairperson's introduction
P. Brader; Graz/AT

Session Objectives:
1. To understand the correlation of functional imaging evaluation with the pathophysiological effect of treatment on oncological pathology.
2. To understand the necessity of functional imaging for an accurate (early) evaluation of the therapy regimen on the response (or non-response) of oncological disease.
3. To learn about the added value of functional imaging for evaluating treatment (e.g. anti-angiogenic treatment).
4. To learn about the technical principles of functional imaging in correlation with the impact of the therapy on tumour cells and neo-vasculature.

A-343 16:05
A. RECIST made easy
A.G. Rockall; London/UK

Learning Objectives:
1. To learn about the basic idea of RECIST.
2. To understand how to use RECIST in daily clinical practice.
3. To become familiar with the detailed rules of RECIST.

A-344 16:28
B. PERCIST: PET response criteria
C.C. Cyran; Munich/DE

Learning Objectives:
1. To learn about the basic principles of PERCIST.
2. To understand how to use PERCIST for structured quantitative research and clinical reporting.
3. To appreciate the advantages of PERCIST over mere morphological methods.

A-345 16:51
C. Assessment of response using functional MR and CT imaging: the essentials
L.S. Fournier; Paris/FR

Learning Objectives:
1. To learn about the portfolio of functional imaging response methods in CT and MRI.
2. To understand the current clinical value of each technique.
3. To appreciate potential advantages compared to PERCIST.

Panel discussion: When and how will functional imaging overcome morphological assessment?
17:14

Musculoskeletal

RC 810
Musculoskeletal ultrasound in the management of sports injuries

Moderator:
M. Reijnierse; Leiden/NL

A-346 16:00
A. Ultrasound of ankle injuries: technique and diagnosis
C. Martinoli; Genoa/IT

Learning Objectives:
1. To become familiar with ultrasound findings seen in ankle instability.
2. To learn about the ultrasound patterns of tendon abnormalities.
A-347 16:30
B. Ultrasound of the hip and knee: what is it good for and what are its limitations?
A. Klauser; Innsbruck/AT

Learning Objectives:
1. To become familiar with examination technique and typical findings of ultrasound of the hip and knee.
2. To understand the limitations of ultrasound of the hip and knee.

A-348 17:00
C. Ultrasound-guided intervention in the athlete: indications and techniques
H. Guerini; Paris/FR

Learning Objectives:
1. To become familiar with the indications for ultrasound-guided interventions in the athlete.
2. To learn about the different injection techniques.

16:00 - 17:30 Room G
Special Focus Session

SF 8c
The ten-minute abdominal MRI: make the dream come true!

A-349 16:00
Chairperson's introduction
N. Papanikolaou; Lisbon/PT

Session Objectives:
1. To become familiar with technical challenges of MRI examinations in the abdomen.
2. To review current MR examination protocols of the abdominal organs.
3. To discuss future developments.

A-350 16:05
Liver
T.C. Lauenstein; Essen/DE

Learning Objectives:
1. To briefly review MRI challenges in the liver.
2. To review techniques and methods to optimise image quality.
3. To compare comprehensive and abbreviated protocol strategies.

A-351 16:28
Pancreas
N. Kartalis; Stockholm/SE

Learning Objectives:
1. To briefly review MRI challenges in the pancreas.
2. To review techniques and methods to optimise image quality.
3. To compare comprehensive and abbreviated protocol strategies.

A-352 16:51
Ovaries
E. Sala; Cambridge/UK

Learning Objectives:
1. To briefly review MRI challenges of the adnexa.
2. To review techniques and methods to optimise image quality.
3. To compare comprehensive and abbreviated protocol strategies.

17:14
Panel discussion: MRI technological advances: impact on radiologist routine
A-358 16:28
B. Abdominal aorta
C. Loewe; Vienna/AT

Learning Objectives:
1. To learn about the most common complications after abdominal aortic interventions.
2. To understand imaging specifics after thoracic aortic interventions.
3. To know indications for re-intervention.

A-359 16:51
C. Peripheral arterial disease
M. Anzidei; Rome/IT

Learning Objectives:
1. To learn about the most common complications after PAD endovascular repair.
2. To understand what imaging technique is preferred (any diagnostic).
3. To explain when to re-intervene and how to prepare for it.

17:14
Panel discussion: How to optimise post-treatment imaging: getting proper diagnosis without performing too many examinations

16:00 - 17:30 Room M 2

Computer Applications

RC 805
Daily use of mobile devices in radiology

A-360 16:00
Chairperson's introduction
O. Ratib; Geneva/CH

Session Objectives:
1. To give an overview of tools available on mobile devices for education and exam reporting.
2. To underline the impact of mobile devices in routine clinical activity.
3. To learn about the legislative backbone and potential drawbacks of mobile technology.

A-361 16:05
A. What did mobile devices change in radiology education?
E. Kotter; Freiburg/DE

Learning Objectives:
1. To give an overview of tools available for e-learning.
2. To explore the potential impact of e-learning in the daily radiological practice.
3. To explore future developments and limits of e-learning.

A-362 16:28
B. Is it appropriate to read a study on a smartphone or a tablet?
N.H. Strickland; London/UK

Learning Objectives:
1. To give an overview of available DICOM viewers and software for reporting imaging studies.
2. To discuss technical requirements of mobile devices for use in imaging interpretation.
3. To provide insight on future developments of imaging viewing technology.

A-363 16:51
C. Security and ethical issues of mobile device technology
E.R. Ranschaert; Mol/BE

Learning Objectives:
1. To provide an overview of technical solutions for patients' image and data mobility.
2. To provide a risk assessment analysis (data loss, privacy, etc.) of mobile technology.
3. To provide an overview of European legislation in relation to patient image and data mobility.

17:14
Panel discussion: Can mobile technology supplement stationary technology in radiology?

16:00 - 17:30 Room M 3

Interventional Radiology

RC 809
Percutaneous interventional procedures: a practical guide

A-364 16:00
Chairperson's introduction
R. Iezzi; Rome/IT

Session Objectives:
1. To appreciate the importance of pre-procedure planning and selection of guidance technique.
2. To learn about intra-procedure patient analgesia and adjunctive techniques for access to sites for intervention.
3. To discuss tips and tricks for successful percutaneous intervention.

A-365 16:05
A. How to safely perform US-guided procedures
D. Akinci; Ankara/TR

Learning Objectives:
1. To learn about patient positioning for US-guided percutaneous and endocavitary approaches to sites in the body.
2. To learn about real time guidance advantages of US-guided intervention.
3. To explain image fusion techniques for US-guided intervention.

A-366 16:28
B. How to safely perform CT-guided procedures
R. García Marcos; Valencia/ES

Learning Objectives:
1. To learn about patient positioning for CT-guided percutaneous approaches to sites in the body.
2. To learn the types of CT guidance and advantages of CT-guided intervention.
3. To learn about adjunctive techniques for access to sites for intervention.

A-367 16:51
C. Post-procedure follow-up and complication management
M. Seidensticker; Munich/DE

Learning Objectives:
1. To appreciate the potential for complications in common biopsy procedures.
2. To learn about management of post-procedure complications.
3. To discuss the role of quality improvement.

17:14
Panel discussion: Tips and tricks for choosing your first cases. Controversial case-based review of approaches to difficult lesions
16:00 - 17:30 Room M 4

E³ - ECR Academies: State-of-the-Art and Advanced MR Imaging of the Musculoskeletal system

E³ 819
Lower extremity

A-368 16:00
Chairperson’s introduction
C.W.A. Pfirrmann; Zurich/CH

A-369 16:05
A. Hip and pubic symphysis
S.J. Eustace; Dublin/IE

Learning Objectives:
1. To identify the most common post-traumatic entities.
2. To identify the most common entities leading to chronic pain.
3. To know the role of MR imaging and MR arthrography (direct/indirect) and how to optimise imaging protocols for the hip.

A-370 16:43
B. Post-traumatic ankle
M.-A. Weber; Rostock/DE

Learning Objectives:
1. To identify the most common post-traumatic entities.
2. To know the role of MR imaging and MR arthrography (direct/indirect) and how to optimise imaging protocols for the ankle.
3. To differentiate post-traumatic changes from typical reasons for chronic pain.

A-371 17:06
C. Chronic ankle pain
J. Teh; Oxford/UK

Learning Objectives:
1. To identify the most common entities leading to chronic pain.
2. To know the role of MR imaging and MR arthrography (direct/indirect).
3. To differentiate post-traumatic changes from typical reasons for chronic pain.

16:00 - 17:30 Room M 5

E³ - ECR Academies: Update on Hepatobiliary Imaging

E³ 820
Liver and bile duct pathologies

A-372 16:00
Chairperson’s introduction
M. Zins; Paris/FR

A-373 16:05
A. Inflammatory and infectious disease
A. Arora; Worthing/UK

Learning Objectives:
1. To recognise and describe the radiological appearance of the inflammatory-infectious processes that may involve the liver.
2. To describe the imaging findings in inflammatory-infectious processes that may involve bile ducts.
3. To assess the role of different imaging modalities in the detection, characterisation, and management of patients with inflammatory-infectious hepatobiliary disease.

A-374 16:43
B. Cholangiocarcinoma: diagnosing and staging
C. Matos; Lisbon/PT

Learning Objectives:
1. To be familiar with the multimodality imaging techniques and protocols.
2. To be aware of the imaging findings of different types of cholangiocarcinoma in diagnosing and staging.
3. To be able to recognise recurrent and metastatic disease in the follow-up.

A-375 17:06
C. Gallbladder pathologies
R. Maksimovic; Belgrade/RS

Learning Objectives:
1. To understand the multimodality approach to gallbladder diseases.
2. To be able to identify gallbladder cancer.
3. To be able to differentiate benign conditions from the malignant ones.

16:00 - 17:00 Room Coffee & Talk

Coffee & Talk (open forum)

C 11
Clinical decision support: challenges to overcome
Moderators:
D. Husseiny Salama; Cairo/EG
M. Perez; Geneva/CH

A-376 16:00
Introduction
G. Frija; Paris/FR

Learning Objectives:
1. To stress the value of CDS in developing countries.
2. To propose scenarios for CDS implementation.

A-377 16:05
Structured strategies to combat the CDS challenges in Egypt
D. Husseiny Salama; Cairo/EG

Learning Objectives:
1. To become familiar with the five-year plan for effective implementation of CDS.
2. To learn about the strategic measures against facilities overload.
3. To understand the pervasive goals of Africa’s „AFROSAFE“ and the Arabic world’s „ARAB SAFE“.

A-378 16:15
Challenges and solutions from NDSC
M. Wassink; Vienna/AT

Learning Objectives:
1. To understand the challenge of turning referral guidelines into actionable guidance at the point of care.
2. To understand the functionality of CDS in the order entry workflow.
3. To learn about the benefits and challenges of a CDS implementation.

16:25
Open forum discussion
L. Donoso1, B. Mansouri2, D. Husseiny Salama3, M. Perez4, G. Frija5, M. Wassink6; 1Barcelona/ES, 2Algiers/DZ, 3Cairo/EG, 4Geneva/CH, 5Paris/FR, 6Vienna/AT
08:30 - 10:00 Room A

E³ 921 Emergency radiology II

A-379 08:30 A. Urinary system trauma
V. Logager, Copenhagen/DK

Learning Objectives:
1. To identify the signs of trauma.
2. To outline the clinical impact of these findings.

A-380 09:15 B. Non-traumatic urinary tract emergencies
G. Masselli, Rome/IT

Learning Objectives:
1. To understand the imaging technique.
2. To become familiar with the differential diagnosis.

08:30 - 10:00 Room B

Abdominal Viscera

RC 901 Imaging of benign liver lesions: still difficult?

A-381 08:30 Chairperson’s introduction
L. Martí-Bonmatí, Valencia/ES

Session Objectives:
1. To understand the role of different imaging techniques in characterisation of focal liver lesions.
2. To be aware of malignant lesions which may mimic benign liver conditions.
3. To underline current guidelines for characterisation of equivocal liver lesions.

A-382 08:35 A. Hepatic cysts: always simple?
I. Santiago, Lisboa/PT

Learning Objectives:
1. To learn about different types of cystic lesions in the liver including giant biliary hamartomas or foregut cysts.
2. To understand diagnostic approach to differentiate simple and complex cysts/cystic lesions.
3. To appreciate advantages and limitations of imaging for differentiating simple cyst from other cystic lesions.

A-383 08:58 B. Liver haemangiomas and mimickers
P.R. Ros, Cleveland, OH/US

Learning Objectives:
1. To learn about typical imaging findings of liver haemangioma.
2. To understand the atypical imaging findings of liver haemangiomas.
3. To appreciate the role of multiparametric and liver-specific contrast MRI in differentiation between haemangiomas and malignant lesions mimicking haemangiomas.

A-384 09:21 C. FNH or adenoma?
A. Ba-Ssalamah, Vienna/AT

Learning Objectives:
1. To learn the imaging features associated with FNH and adenoma on contrast-enhanced CT and MRI.
2. To understand how the imaging characteristics are related to the underlying pathological findings.
3. To appreciate the optimal use of liver-specific contrast media for distinguishing between FNH and adenoma, and current classification and pathological characteristics and its impact on the management.

08:30 - 10:00 Room C

New Horizons Session

NH 9 Immunotherapy: a revolution in cancer care?

A-385 08:30 Chairperson’s introduction: What the radiologist needs to know
V.J. Goh, London/UK

Session Objectives:
1. To be familiar with the concept of immunotherapy.
2. To be aware of the current imaging methods for assessing immunotherapies.
3. To learn about new methods in development for assessing immunotherapies.

A-386 08:40 CT: looks bigger, but it’s better
C. Dromain, Lausanne/CH

Learning Objectives:
1. To be aware of the different types of immunotherapies and to understand their mode of action.
2. To understand the limitations of RECIST and be aware of immune response criteria.
3. To understand the limitations of CT for assessment of immunotherapies.

A-387 09:03 The MR armoury in follow-up
D.-M. Koh, Sutton/UK

Learning Objectives:
1. To be aware of the advantages and limitations of MRI for assessment of immunotherapies.
2. To describe the potential role of whole-body MRI and quantitative MRI techniques in follow-up.
3. To consider the potential of integrated MRI/PET for the assessment of immunotherapies.

A-388 09:26 Systemic and immunologic effects of image-guided interventions in oncology
S.N. Goldberg, Jerusalem/IL

Learning Objectives:
1. To be aware of abscopal effects with immunotherapy.
2. To describe how focal therapies can be combined with immunotherapies.
3. To be aware of the challenges of focal treatments for systemic effects.

09:49 Panel discussion: How should radiology improve imaging to support this revolutionary care?
08:30 - 10:00  Room O

Paediatric

RC 912
Dose reduction: tips and tricks
Moderator: C. Granata; Genoa/IT

A-389 08:30
A. Dose reduction in paediatric CT
D. Aadnevik; Bergen/NO

Learning Objectives:
1. To explain the factors that affect patient radiation exposure from CT exams.
2. To discuss the importance of dose reduction in paediatric CT.
3. To give an overview of CT dose-reduction strategies and techniques.

A-390 09:00
B. Diagnostic reference levels in paediatric imaging: international recommendations
R. Seuri; Helsinki/FI

Learning Objectives:
1. To discuss the need for establishing diagnostic reference levels (DRLs) in paediatric diagnostic imaging.
2. To give an overview of DRL values for typical paediatric examinations.
3. To understand the way of implementation and use of DRLs in dose reduction and protocol optimisation.

A-391 09:30
C. The impact of dose management systems
L.A. Rainford; Dublin/IE

Learning Objectives:
1. To discuss the importance of dose monitoring in paediatric imaging.
2. To have an overview of the features and functions of dose-monitoring systems.
3. To understand the role of dose-monitoring systems in the evaluation of population dose and protocol optimisation.

08:30 - 10:00  Room N

Cardiac

RC 903
Novel ways to characterise myocardial tissue: T1 and T2 mapping
Moderator: L.P. Lawler; Dublin/IE

A-392 08:30
A. T1 mapping: technical considerations
M.R. Makowski; Berlin/DE

Learning Objectives:
1. To learn about the principles of T1 mapping.
2. To learn about specific issues of T1 mapping.
3. To learn how to do and assess T1 mapping.

A-393 09:00
B. T2 mapping: technical considerations
C. Tessa; Lido di Camaiore/IT

Learning Objectives:
1. To learn about the principles of T2 mapping.
2. To learn about specific issues of T2 mapping.
3. To learn how to do and assess T2 mapping.

A-394 09:30
C. Clinical use of T1 and T2 mapping
J. Bremerich; Basle/CH

Learning Objectives:
1. To learn about the main fields of application for T1-T2 mapping.
2. To learn the specific parameters useful for the clinical implementation of T1-T2 mapping.
3. To understand the incremental value of T1-T2 mapping over current methodologies.

08:30 - 10:00  Studio 2018

Special Focus Session

SF 9a
Focal treatment of prostate cancer

A-395 08:30
Chairperson’s introduction
H.-P. Schlemmer; Heidelberg/DE

Session Objectives:
1. To recognise the demand for minimal invasive therapy of prostate cancer.
2. To understand the technologies as well as the pros and cons of focal therapies.
3. To be aware of the value of multiparametric MRI for planning and guidance of focal therapy.

A-396 08:35
Focal treatment of prostate cancer: opportunities, challenges and indications
R. Sanchez-Salas; Paris/FR

Learning Objectives:
1. To learn the conceptual possibilities and limitations of focal therapy for prostate cancer.
2. To understand indications and patient selection criteria.
3. To know achievable cure rates, possible causes for failure and treatment-related toxicity.

A-397 08:52
Imaging of prostate cancer: how accurately can prostate cancer be localised?
C. Allen; London/UK

Learning Objectives:
1. To know the examination protocol and the required quality standard of multiparametric MRI.
2. To recognise opportunities and limits of prostate MRI for cancer localisation and delineation.
3. To learn about standardised reporting necessary for precise communication with urologists.

A-398 09:09
Image-guided focal treatment using high-intensity ultrasound (HIFU)
S. Crouzet; Lyon/FR

Learning Objectives:
1. To understand the technology of image-guided high-intensity focused ultrasound (HIFU).
2. To recognise the value of MRI for treatment planning and guidance.
3. To learn about indications, achievable therapeutic results and side effects.

A-399 09:26
Image-guided focal treatment using irreversible electroporation (IRE)
F. Collettini; Berlin/DE

Learning Objectives:
1. To understand the technology of irreversible electroporation (IRE).
2. To recognise the value of MRI for treatment planning and guidance.
3. To learn about indications, achievable therapeutic results and side effects.

09:43
Panel discussion: Can focal therapy already be recommended to prostate cancer patients?
Postgraduate Educational Programme

ESR Research Committee Session

How to foster clinical research in imaging departments
Moderator:
O. Clément; Paris/FR

A-400 08:30
Results of the ESR Survey on European Research
O. Clément; Paris/FR
Learning Objectives:
1. To learn about the results of the European survey on research.
2. To understand how preclinical and clinical research in radiology is organised in Europe.
3. To appreciate the differences between countries.

A-401 08:50
An overview of the roles of radiographers in research
J. McNulty; Dublin/IE
Learning Objectives:
1. To learn about radiographer roles in research studies.
2. To explore the current status of research education and training for radiographers across Europe.
3. To appreciate the added value radiographers can bring to imaging research.

A-402 09:10
How to structure a research management unit in an imaging department
S. Mallard; Bordeaux/FR
Learning Objectives:
1. To learn about the role of a specific imaging research unit in an imaging department.
2. To understand how to structure a research unit in an imaging department.
3. To appreciate the results in terms of quality and performance.

A-403 09:30
Implementing quality imaging in multicentre trials
Y. Liu; Brussels/BE
Learning Objectives:
1. To learn about the role of imaging in clinical trials.
2. To understand the importance of imaging standardisation in multicentre trials.
3. To appreciate the implementation of quality imaging based on risk assessment.

A-404 09:30
High-intensity focused ultrasound (HIFU) therapy
F. Pediconi; Rome/IT
Learning Objectives:
1. To learn about the basics of HIFU therapy.
2. To become familiar with the different types of imaging guidance.
3. To appreciate its role in treating benign and malignant lesions.

A-406 09:00
Radiofrequency ablation therapy
B. Brkljačić; Zagreb/HR
Learning Objectives:
1. To learn about radiofrequency ablation.
2. To become familiar with its use in clinical practice.
3. To appreciate the advantages and disadvantages.

A-407 09:25
Cryotherapy
M.H. Fuchsjäger; Graz/AT
Learning Objectives:
1. To learn about cryotherapy technique.
2. To become familiar with its use in clinical practice.
3. To appreciate its role in treating benign and malignant lesions.

09:50 Panel discussion: How can we overcome resistance of clinical partner specialties to refer eligible women to radiology?

Neuro

RC 911 Cerebrovascular disease
Moderator:
J.-F. Meder; Paris/FR

A-408 08:30
Vascular distribution territories: arterial and venous
T. Engelhorn; Erlangen/DE
Learning Objectives:
1. To become familiar with the vascular anatomy of the brain.
2. To understand the advantages and limitations of CTA and MRA.
3. To recognise the different imaging patterns in stroke and their prognostic value.

A-409 09:00
Arterial dissection and vasculitis
L. van den Hauwe; Antwerp/BE
Learning Objectives:
1. To learn how to image dissections of the neck vessels and intracranial arteries.
2. To learn about the imaging features of cerebral vasculitis and how to differentiate it from reversible cerebral vasocostriction syndrome.
3. To become familiar with the most important causes of secondary vasculitis, including infectious causes such as TB and HIV.

A-410 09:30
Cerebral perfusion studies in cerebrovascular disease: techniques, indications and applications
H.R. Jäger; London/UK
Learning Objectives:
1. To understand how advanced imaging can help select patients for treatment of acute ischaemic stroke.
2. To show the importance of collateral flow in ischaemic patients.
3. To discuss the current evidence-based medicine (EBM) for treatment of patients with acute ischaemic stroke.

Breast

RC 902 Minimally-invasive local treatment of breast cancer: the time is now

A-405 08:35
Chairperson's introduction
A. Athanasiou; Athens/GR

Session Objectives:
1. To learn about HIFU, radiofrequency ablation and cryotherapy that challenge traditional surgical excision in the management of breast cancer.
2. To become familiar with role of imaging in using these new techniques.
3. To understand the potential advantages and disadvantages for each of these techniques.
08:30 - 10:00 Room F1

**E1 - Rising Stars Programme: Basic Sessions**

**BS 6**

**Image-guided therapies in oncology**

Moderator:
V. Bérczi; Budapest/HU

**A-411 08:30**

**Kidney**
O. Akhan; Ankara/TR

**Learning Objectives:**
1. To have a basic knowledge about indications and limitations of interventional radiology procedures in renal malignancies.
2. To have a basic knowledge about embolisation of renal tumours.
3. To become familiar with ablation of renal tumours.

**A-412 08:53**

**Lungs**
M. Bezzi; Rome/IT

**Learning Objectives:**
1. To have a basic knowledge about indications and limitations of interventional radiology procedures in lung malignancies.
2. To have a basic knowledge about image-guided biopsy.
3. To become familiar with ablation of lung cancer.

**A-413 09:15**

**Bones**
A. Gangi; Strasbourg/FR

**Learning Objectives:**
1. To have a basic knowledge about indications and limitations of interventional radiology procedures in bone malignancies.
2. To understand the basic concepts of embolisation of bone tumours.
3. To have a basic knowledge about bone tumours ablation.

**A-414 09:38**

**Liver**
J.I. Bilbao; Pamplona/ES

**Learning Objectives:**
1. To understand the basic concepts of chemoembolisation in liver malignancies.
2. To understand the basic concepts of radioembolisation in liver malignancies.
3. To have a basic knowledge about liver tumours ablation.

08:30 - 10:00 Room D

**Muscloskeletal**

**RC 910**

**Imaging the hip and thigh**

Moderator:
M. Klontzas; London/UK

**A-415 08:30**

**A. Femoroacetabular impingement: what is it, how do I image it and does it matter?**
R. Sutter; Zurich/CH

**Learning Objectives:**
1. To understand the mechanism of femoroacetabular impingement.
2. To learn about the imaging findings in patients with femoroacetabular impingement.

**A-416 09:00**

**B. Groin pain in the athlete: what causes it and what does imaging contribute?**
P. Robinson; Leeds/UK

**Learning Objectives:**
1. To understand the anatomy of the groin region.
2. To learn about the imaging findings in athletes with groin pain.

08:30 - 10:00 Room G

**EFOMP Workshop: Radiation dose management systems and repositories: the present and the future**

**EF 1**

**Dose management systems and repositories: part A**

Moderator:
A. Trianni; Udine/IT

**A-418 08:30**

Chairperson's introduction
J. Damilakis; Iraklion/GR

**Session Objectives:**
1. To become familiar with the main features of dose management systems and repositories.
2. To discuss the services provided by these systems.
3. To understand how dose management systems can optimise medical imaging.

**A-419 08:35**

The ‘EuroSafe Imaging’ campaign's point of view
G. Frija; Paris/FR

**Learning Objectives:**
1. To become familiar with the EuroSafe Imaging campaign's point of view regarding dose management systems and repositories.
2. To understand why collaboration among radiologists, medical physicists and radiographers is needed for the optimum use of these systems.
3. To learn the impact of dose management systems and repositories in the clinical practice.

**A-420 09:05**

Strategies for dose management for achieving optimised imaging
J.N. Vassileva; Vienna/AT

**Learning Objectives:**
1. To learn about the main features of a system for collection and analysis of dosimetric data.
2. To become familiar with different analytical uses of collected dose data.
3. To understand how patient exposure data management fits into the framework of continuous optimisation of medical imaging.

**A-421 09:35**

The benefits of dose management systems in view of the new Euratom Directive
V. Tsapaki; Athens/GR

**Learning Objectives:**
1. To understand how the dose management tools can help in implementation of the new European Directive.
2. To become familiar with the different capabilities of the dose management tools and their connection with the European Directive.
3. To identify the possible limitations of dose management tools in relation with the European Directive.
SF 9b
Radiographers in preclinical imaging research

A-422/A-423 08:30
Chairpersons’ introduction
C. Buissink; N. Grenier; 1Groningen/NL, 2Bordeaux/FR

Session Objectives:
1. To learn more about the techniques devoted to preclinical imaging research.
2. To become familiar with the preclinical image research objectives and constraints.
3. To appreciate the impact of radiographers in preclinical imaging research.

A-424 08:35
Radiographers in preclinical research: challenges and chances
J.-P. Dillenseger; Strasbourg/FR

Learning Objectives:
1. To learn about the importance of translational imaging research.
2. To understand the contribution radiographers can play in preclinical research.
3. To appreciate essential skills and knowledge required in preclinical imaging.

A-425 08:53
Preclinical evaluation of PET tracers
M. Zeilinger; Wiener Neustadt/AT

Learning Objectives:
1. To understand the connection between molecular imaging and the drug discovery process.
2. To become familiar with quantitative molecular imaging approaches.
3. To review technical and biomedical limitations and future perspectives.

A-426 09:11
SPECT/CT
S. Heskamp; Nijmegen/NL

Learning Objectives:
1. To understand the basic principles of preclinical SPECT/CT and the differences with clinical SPECT/CT.
2. To become familiar with the practical aspects which are relevant for preclinical SPECT/CT.
3. To appreciate how preclinical SPECT/CT can help to answer basic oncological research questions.

A-427 09:29
Small animal imaging studies
F. Pichler, M. Zeilinger; Wiener Neustadt/AT

Learning Objectives:
1. To understand work-related challenges in preclinical small animal imaging.
2. To consider limitations in the quantification of preclinical μPET data.
3. To appreciate the radiographers role in a preclinical environment in contrast to clinical work.

A-428 08:30
Professional Challenges Session

PC 9
How can radiologists expand their role in peripheral vascular intervention?

A-428 08:30
Chairperson's introduction
R. Iezzi; Rome/IT

Session Objectives:
1. To focus on the needs for and challenges in organising a multidisciplinary team.
2. To understand the role of clinical as well as radiological evaluation for outpatients consultation and post-procedure visits.
3. To understand how to implement vascular intervention training programmes.

A-429 08:35
How to improve your clinical knowledge
C.W. Kopp; Vienna/AT

Learning Objectives:
1. To become familiar with clinical diagnosis and classification of arterial occlusive disease.
2. To understand the disease states being treated and their clinical management.
3. To learn about intraprocedural and postprocedural medical treatment.

A-430 08:53
How to improve your diagnostic skills
T. Leiner; Utrecht/NL

Learning Objectives:
1. To understand the crucial role of US in the diagnostic assessment and patient recruitment.
2. To learn when is needed to perform a MRA, CTA, or DSA examination.
3. To learn the optimal imaging algorithm for diagnosis and follow-up.

A-431 09:11
How to improve your relationship with the vascular surgeon
C. Ferrer; Rome/IT

Learning Objectives:
1. To understand the challenges of open surgical treatments.
2. To learn about hybrid (surgical and endovascular) treatments.
3. To learn about outcomes of open surgical procedures.

A-432 09:29
How to improve your technical/procedural skills
K. Katsanos; Patras/GR

Learning Objectives:
1. To understand how to perform an accurate treatment planning.
2. To learn how to select the right endovascular treatment for the right patient.
3. To understand the challenges and future prospective of endovascular devices and treatments.

09:47
Panel discussion: Are we ready to be more of a clinician rather than an operator?
Postgraduate Educational Programme

08:30 - 10:00 Room M 2

**E³ - ECR Master Class (Head and Neck)**

**E³ 926**

Distant metastases of head and neck cancer

A-433 08:30

Chairperson's introduction
P.-Y. Marcy; Ollioules/FR

**Session Objective:**
1. To understand impact of the distant metastases in the head and neck treatment.

A-434 08:35

A. Incidence and prognosis of synchronous cancer or distant metastases from head and neck tumours
A.D. King; Hong Kong/CN

**Learning Objectives:**
1. To become familiar with the incidence of the synchronous tumours in the head and neck population.
2. To become familiar with the incidence of the distant metastases in the patients with newly diagnosed head and neck cancer.
3. To understand the consequences in a prognosis.

A-435 08:58

B. Is morphologic imaging enough to stage patients with head and neck tumours before therapy?
S. Rohde; Dortmund/DE

**Learning Objectives:**
1. To review current guidelines and clinical practice.
2. To understand the advantages and disadvantages of the conventional imaging modalities.
3. To appreciate cost-effectiveness of different imaging modalities.

A-436 09:21

C. Is functional imaging necessary to detect distant metastases in head and neck cancers?
R. Maroldi; Brescia/IT

**Learning Objectives:**
1. To learn about functional imaging (DWI, DECT, PET) in head and neck cancer patients.
2. To understand the advantages and disadvantages of the functional imaging modalities.
3. To review the advanced imaging for detection of distant metastases of head and neck cancer.

09:44

Panel discussion: Where and how to search for distant metastases in head and neck cancer

08:30 - 10:00 Room M 3

ESR Working Group on Ultrasound

**WG 2**

Tips and tricks for abdominal ultrasound

A-437/A-438 08:30

Chairpersons' introduction
M. Claudon; V. Valek; Vandoeuvre-les-Nancy/FR; Brno/CZ

**Session Objectives:**
1. To learn about actual indications and applications of ultrasound Doppler imaging, CEUS, elastography and ultrasound fusion imaging.
2. To show better parameter settings for optimal technical results illustrating tips and tricks for technical and clinical successful examinations.
3. To become familiar with the new ultrasound imaging techniques and applications.

A-439 08:40

Doppler imaging
F. Calliada; Pavia/IT

**Learning Objectives:**
1. To learn about actual indications and applications of Doppler imaging.
2. To show better parameter settings for optimal technical results.
3. To illustrate tips and tricks for technical and clinical successful examinations.
4. To become familiar with the new Doppler imaging techniques and applications.

A-440 09:00

CEUS
M. D'Onofrio; Verona/IT

**Learning Objectives:**
1. To learn about actual indications and applications of CEUS.
2. To show better parameter settings for optimal technical results.
3. To illustrate tips and tricks for technical and clinical successful examinations.
4. To become familiar with the new CEUS techniques and applications.

A-441 09:20

Elastography
D.A. Clevert; Munich/DE

**Learning Objectives:**
1. To learn about actual indications and applications of elastography.
2. To show better parameter settings for optimal technical results.
3. To illustrate tips and tricks for technical and clinical successful examinations.
4. To become familiar with the new elastography techniques and applications.

A-442 09:40

Fusion imaging
C. Ewertsen; Copenhagen OE/DK

**Learning Objectives:**
1. To learn about actual indications and applications of fusion imaging.
2. To show better parameter settings for optimal technical results.
3. To illustrate tips and tricks for technical and clinical successful examinations.
4. To become familiar with the new fusion imaging techniques and applications.

08:30 - 10:00 Room M 4

**E³ - ECR Academies: State-of-the-Art and Advanced MR Imaging of the Musculoskeletal system**

**E³ 919**

Upper extremity

A-443 08:30

Chairperson's introduction
M.C. De Jonge; Amsterdam/NL

A-444 08:35

A. Elbow
A.J. Grainger; Leeds/UK

**Learning Objectives:**
1. To identify the most common post-traumatic entities.
2. To identify the most common entities leading to chronic pain.
3. To know the role of MR imaging and MR arthrography (direct/indirect) and how to optimise imaging protocols for the elbow.

A-445 09:17

B. Wrist
M. Shahabpour, M. De Maeseneer; Brussels/BE

**Learning Objectives:**
1. To identify the most common post-traumatic entities.
2. To identify the most common entities leading to chronic pain.
3. To know the role of MR imaging and MR arthrography (direct/indirect) and how to optimise imaging protocols for the wrist.
**Friday**

### 08:30 - 10:00  Room M 5

**E³ - ECR Academies: Chest Imaging**

#### E³ 918

**Updates on lung cancer management**

**A-446 08:30**  
Chairperson’s introduction  
A.R. Larici; Rome/IT

**A-447 08:35**  
A. Lung cancer screening  
M.A. Heuvelmans; Groningen/NL

*Learning Objectives:*  
1. To review the results of the large randomised trials.  
2. To learn about the lung cancer screening modalities.  
3. To understand the overdiagnosis risk.

**A-448 09:03**  
B. Lung nodule management  
A.A. Bankier; Boston, MA/US

*Learning Objectives:*  
1. To review the current guidelines for solid nodule management.  
2. To learn about the subsolid nodule management guidelines.  
3. To review the role of computer-aided tools.

**A-449 09:31**  
C. Lung cancer staging  
G. Aviram; Tel Aviv/IL

*Learning Objectives:*  
1. To learn about the eighth edition of the TNM classification.  
2. To review the main differences with the 2009 edition.  
3. To review the persisting limitations.

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### 10:30 - 12:00  Room B

**ESR meets Switzerland**

#### EM 1

**Radiology and Swiss chocolate: a sweet combination**

Presiding:  
B. Hamm; Berlin/DE  
D. Weishaupt; Zurich/CH

**A-450 10:30**  
Introduction: What Swiss radiology and Swiss chocolate have in common  
D. Weishaupt; Zurich/CH

*Session Objectives:*  
1. To become familiar with the status of radiology in Switzerland.  
2. To learn how Swiss Society of Radiology supports radiology in Switzerland.  
3. To discuss the link between Swiss radiology and top-quality innovative Swiss chocolate culture.

**A-451 10:35**  
Truffle No. 1: MR-diffusion of the urogenital tract: where it really helps  
H.C. Thoeny; Berne/CH

*Learning Objectives:*  
1. To learn how DWI can be integrated in the acquisitions protocols and whether it precludes the need for other sequences.  
2. To learn if DWI can provide useful information for tissue characterisation.  
3. To understand the clinical circumstances in which DWI is most helpful.

10:55  
Interlude 1: From cocoa bean to chocolate creations

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### 10:30 - 12:00  Room G

**EFOMP Workshop: Radiation dose management systems and repositories: the present and the future**

**EF 2**

**Dose management systems and repositories: part B**

Moderator:  
M. Mahesh; Baltimore, MD/US

**A-456 10:30**  
Chairperson’s introduction  
M. Brambilla; Novara/IT

*Session Objectives:*  
1. To provide an overview of imaging and dose repositories.  
2. To understand the main strengths and limitations of these systems.  
3. To understand why dose management systems and repositories are capable of supporting research.

**A-457 10:35**  
Organisation of dose management systems and repositories for radiation protection and biomedical research: possibilities and limitations of current implementations and standards  
B. Gibaud; Rennes/FR

*Learning Objectives:*  
1. To introduce the IHE REM profile.  
2. To discuss its relevance and limitations regarding radiation protection needs.  
3. To introduce other technology that may complement IHE REM to cover future needs of both radiation protection and biomedical research.

**A-458 11:05**  
Imaging and dose repositories: tools to boost radiation protection and research  
E. Neti; Pisa/IT

*Learning Objectives:*  
1. To provide the rationale of imaging and dose repositories.  
2. To describe the services provided by imaging and dose repositories.  
3. To understand the security, legal and other issues associated with the implementation of imaging and dose repositories.
**Postgraduate Educational Programme**

**A-459 11:35**
The ACR dose index registry: setting a benchmark  
M. Mahesh; Baltimore, MD/US

**Learning Objectives:**  
1. To give an overview of the ACR dose index registry.  
2. To understand issues related to technical implementation of the registry.  
3. To learn about the new prospects of the ACR dose index registry.

**A-460 10:30**  
Achieving homogeneity in radiology education: linking content to competence through the European training curriculum  
L. Oleaga Zufiría; Barcelona/ES

**Learning Objectives:**  
1. To discuss the impact of major inhomogeneities on European radiology.  
2. To describe the European training curriculum's role in achieving homogeneity and the importance of linking content to competence.  
3. To evaluate the current status and what must happen next in radiology education.

**A-461/A-462 10:45**  
Establishing competence in radiology: a UK perspective  
C. Rubin, W. Ramsden; Southampton/UK, Leeds/UK

**Learning Objectives:**  
1. To explore the current UK structures for establishing competence in radiology.  
2. To discuss the challenges and opportunities arising from these systems.  
3. To consider the key steps to facilitate the successful implementation of a competence system in radiology.

**A-463 11:00**  
The value of the European Diploma  
P.C. Maly Sundgren; Lund/SE

**Learning Objectives:**  
1. To demonstrate the value of the European diploma in overcoming issues relating to competence.  
2. To discuss the areas of competence which are currently outside the scope of the European diploma.  
3. To propose a route through which the European diploma could form part of a European radiology competence structure.

**A-464 11:15**  
Obstacles to establishing competence in radiology  
P. Valdés Solís; Marbella/ES

**Learning Objectives:**  
1. To show the difficulties that, as a Society, the Spanish Society of Radiology has faced in order to establish a national system of competences.  
2. To explain why radiologists are reluctant to join competence programmes, especially those that are not proposed by their own health authorities.  
3. To discuss the strategies that should be kept in mind before beginning a national competence programme in order to get radiologists compliance and participation.

**A-465 11:30**  
How to manage the incompetent professional?  
J.K. Bell; Manchester/UK

**Learning Objectives:**  
1. To define competence and how to identify radiologists in difficulty.  
2. To assess factors that lead to poor performance and what can be done to promote well-being.  
3. To outline processes for helping incompetent radiologists and managing those that cannot be helped.

11:45 Panel discussion: Overcoming heterogeneity in radiology competence across Europe: a dream or reality?

**PI 1 10:30 - 12:00 Room M 2**

**PIER @ ECR Session**

**PI 1 Establishing competence in radiology**

**Moderators:**  
J. McNulty; Dublin/IE  
P. Valdés Solís; Marbella/ES

**A-466 10:30**  
Chairperson's introduction  
J. Kramer; Linz/AT

**A-467 10:35**  
A. Post-traumatic  
A.P. Parkar; Bergen/NO

**Learning Objectives:**  
1. To identify the most common post-traumatic entities.  
2. To know the role of MR imaging and MR arthrography (direct/indirect).  
3. To differentiate post-traumatic changes from typical reasons for chronic pain.

**A-468 11:03**  
B. Chronic pain  
P. Van Dyck; Antwerp/BEL

**Learning Objectives:**  
1. To identify the most common entities leading to chronic pain.  
2. To know the role of MR imaging in evaluating cartilage (including new techniques).  
3. To differentiate entities leading to chronic pain from post-traumatic changes.

**A-469 11:31**  
C. Postoperative  
P.M. Jungmann; Zurich/CH

**Learning Objectives:**  
1. To identify the most common postoperative changes.  
2. To know the role of MR imaging and how to optimise protocols for postoperative imaging including the use of MR arthrography.  
3. To understand the different techniques of ligament reconstruction and meniscal repair and their complications.

12:15 - 13:00 Room A

**Education**

**IITY 15th Anniversary of Invest in the Youth**

**A-474 12:15**  
Chairperson's introduction  
M. Szczesna-Trojomska; Lublin/PL

**Learning Objectives:**  
1. To appreciate 15 years of the Invest in the Youth programme.  
2. To learn about molecular imaging in cancer management.  
3. To become familiar with the new possibilities in ischaemic stroke treatment.
A-475 12:17
An introduction by the ESR President
B. Hamm; Berlin/DE

A-476 12:20
Former participants (A) in the programme
C. Messina; San Donato Milanese/IT

A-477 12:25
Former participants (B) in the programme
M. Basta Nikolic; Novi Sad/RS

A-478 12:30
Molecular imaging in oncology
G. Cook; London/UK
Learning Objectives:
1. To learn about the clinical significance of early tumour detection.
2. To become familiar with the complementary roles of structural and functional molecular imaging in cancer management.
3. To understand importance of accurate tumour staging for appropriate therapy-planning and estimation of prognosis.

A-479 12:45
New era in ischaemic stroke treatment
K. Hausegger; Klagenfurt/AT
Learning Objectives:
1. To learn about the clinical significance of early ischaemic stroke detection.
2. To learn about indications for mechanical thrombectomy.
3. To become familiar with mechanical thrombectomy methods.

13:00 - 13:30 Room A
Headline Session

HL 2
Marie Curie Honorary Lecture
Presiding:
B. Hamm; Berlin/DE

A-486 13:00
Hybrid imaging: the story so far and what to expect next
K. Riklund; Umea/SE
Learning Objectives:
1. To learn about the development of hybrid imaging.
2. To understand the principles for molecular imaging exemplified in PET/CT and MR/PET.
3. To appreciate the combination of molecular and functional imaging.
4. To become familiar with a few clinical areas with high potential in hybrid imaging.

12:30 - 13:30 Room C
E³ - The Beauty of Basic Knowledge: Cardiovascular and Interventional Radiology

E³ 24C
Open and closed: the role of radiology in treatment of valvular heart disease
Moderator:
M. Gardarsdottir; Reykjavik/IS

A-483 12:30
How to approach valvular heart disease using MRI
A. Redheuil; Paris/FR
Learning Objectives:
1. To learn about the MR techniques available for functional assessment in valvular heart disease.
2. To understand possibilities and limitations of cardiac MR in valvular heart disease.
3. To appreciate the advantages of cardiac MR in valvular heart disease.

A-484 13:00
What to measure prior to transcatheter aortic valve implantation (TAVI)
R. Salgado; Antwerp/BE
Learning Objectives:
1. To learn about prerequisites prior to TAVI.
2. To understand the importance of accurate measurements for TAVI planning.
3. To appreciate the need for communication with implanting physicians.

12:30 - 13:30 Room D
E³ - The Beauty of Basic Knowledge: A Survival Guide to Musculoskeletal Imaging

E³ 25C
Bone tumours
Moderator:
V.N. Cassar-Pullicino; Oswestry/UK

A-485 12:30
Bone tumours
K. Wörtler; Munich/DE
Learning Objectives:
1. To become familiar with the imaging features of benign and malignant bone tumours.
2. To appreciate their imaging characteristic hallmarks on plain film radiography.
3. To learn how best to use imaging modalities in differential diagnosis.

12:00 - 12:45 Room Coffee & Talk
Coffee & Talk (open forum)

C 6
ESR audit pilot project

A-470 12:00
Chairperson’s introduction
E.J. Adams; London/UK
Session objectives:
1. To learn that clinical audit is a requirement from the BSS directive.
2. To understand how to implement clinical audit in practice.
3. To illustrate ESR’s work related to clinical audit.
Postgraduate Educational Programme

A-472 12:05
ESR audit pack
B.E. Kelly; Belfast/UK

Learning Objectives:
1. To become familiar with the ESR audit pack.
2. To understand how to use the audit templates.
3. To illustrate advantages of using the ESR audit pack.

A-473 12:15
Pilot project among EuroSafe Imaging Stars
L. Bonomo; Rome/IT

Learning Objectives:
1. To learn about the EuroSafe Imaging Stars network.
2. To become familiar with the audit pilot project carried out among the Stars.
3. To learn about the first results from the pilot project.

12:25
Open forum discussion

12:30 - 13:30 Sky High Stage
Special Focus Session

SF 10
Artificial intelligence (AI) applications

A-990 12:30
Chairperson’s introduction
A. Brady; Cork/IE

Learning Objectives:
1. To explain the likely future development of structured reporting.
2. To highlight the opportunities which will arise from availability of radiological data in formats which can be searched and used as imaging biobanks.
3. To discuss the data protection issues which arise from these developments.

A-991 12:35
Imaging biobanks
B. Gilbeaux; Rennes/FR

Learning Objectives:
1. To discuss the role that the imaging biobanks can play in providing the data necessary for machine learning and for the assessment of the performances of diagnostic tools.
2. To understand the role ontologies play in the standardisation of image annotations in imaging biobanks.
3. To understand the need to collaborate with the domain of (specimen) biobanking.

A-992 12:50
Big data and structured reporting
D. Pinto dos Santos; Cologne/DE

Learning Objectives:
1. To discuss the data requirements for artificial intelligence and big data.
2. To understand how structured reporting can facilitate research in machine learning.
3. To become familiar with informatics standards, relevant to structured reporting.

A-993 13:05
Data control in the era of AI: man or machine?
P.M.A. van Ooijen; Groningen/NL

Learning Objectives:
1. To understand the current and future role of data.
2. To understand the issues surrounding data control and ownership.
3. To discuss the role of AI in the future of radiology.

13:20
Discussion

13:30 - 14:00 Room Z
Professional Issues

EDiR
EDiR Teaser

A-492 13:30
EDiR Teaser
J. Vilar; Valencia/ES

Learning Objectives:
1. To become familiar with the EDiR examination structure. Live the EDiR experience.
2. To understand how to prepare for the EDiR. Get started now.
3. To learn about tips and tricks for a successful EDiR. Boost your examination results!

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13:00 - 14:00 Room Coffee & Talk
Coffee & Talk (open forum)

C 7
What is an imaging biobank and how can one be built?

A-487/A-488 13:00
Chairpersons’ introduction
M.H. Fuchsäger1, E. Neri2; 1Graz/AT, 2Pisa/IT

Session Objective:
1. To provide the basic knowledge about the strategy for development of an imaging biobank, in practice.

A-489 13:05
The basis: definition and content of an imaging biobank
H.-U. Kauczor; Heidelberg/DE

Learning Objectives:
1. To clarify the concept of imaging biobank.
2. To understand the difference between a biobank and a traditional imaging repository (PACS).
3. To learn how imaging biomarkers can be integrated and standardised.

A-490 13:13
Strategy/pipeline to develop an imaging biobank
D. Bos; Rotterdam/NL

Learning Objectives:
1. To learn the basic requirements for building a biobank.
2. To explore the necessary steps of the biobank set-up, from the clinical endpoint to the IT issues.
3. To discuss the integration in a BBMRI biobank.

A-491 13:21
Data protection of imaging data
C.D. Becker; Geneva/CH

Learning Objectives:
1. To understand the new EU general data protection regulation.
2. To discuss the impact of GDPR on the development of an imaging biobank.
3. To explore the potential implication on data sharing in imaging biobanks.

13:29
Open forum discussion: What are the pitfalls in building an imaging biobank and what will be its future benefits?
14:00 - 15:30 Room K

EFRS meets Switzerland and Portugal

EM 4

EFRS meets Switzerland and Portugal

Presiding:
J. McNulty; Dublin/IE
M. Mordasini; Berne/CH
J. Santos; Coimbra/PT

Moderators:
J. McNulty; Dublin/IE
I. Gremion; Lausanne/CH
J. Santos; Coimbra/PT

A-493 14:00 Introduction
J. McNulty; Dublin/IE

Session Objective:
1. The introductions will give a very short overview of the aim and history of the Meets sessions (EFRS president) and the characteristics of Portugal and Switzerland (association presidents).

A-494 14:05 Introduction: Across Switzerland
M. Mordasini; Berne/CH

Learning Objective:
1. The introductions will give a very short overview of the aim and history of the Meets sessions (EFRS president) and the characteristics of Portugal and Switzerland (association presidents).

A-495 14:10 Introduction: Across Portugal
J. Santos; Coimbra/PT

Learning Objective:
1. The introductions will give a very short overview of the aim and history of the Meets sessions (EFRS president) and the characteristics of Portugal and Switzerland (association presidents).

A-496 14:15 Radiographers in Switzerland: challenges and chances
Y. Jaermann; Vevey/CH

Learning Objectives:
1. To understand the curriculum of the Swiss radiographers’ education and CPD.
2. To acknowledge the competition with other professions and the need for new skills and activities.
3. To evaluate the next steps to professional independence.

A-497 14:30 The Portuguese NHS: the structural pillar that strengthens Portuguese democracy
G. Paulo; Coimbra/PT

Learning Objectives:
1. To learn about the development of the Portuguese NHS.
2. To understand the impact of the Portuguese NHS in the social development.
3. To learn about the role of radiology in improving the Portuguese health indicators.

A-498 14:45 (Helv)ethic: from a project to a new culture
F. Riondel; Geneva/CH

Learning Objectives:
1. To learn about a team building philosophy able to promote our profession and build new career opportunities.
2. To understand the central role of radiographers within the growth and promotion of the professional environment and within the profession itself.
3. To acknowledge the importance of patient care and human relationships in radiography.

A-499 15:00 MRI, the image modality for the future: hybrid, diagnostic and therapeutic
V. Silva; Porto/PT

Learning Objectives:
1. To recognise MRI as an image modality with great clinical potential for diagnosis.
2. To learn about MRI/PET opportunities, challenges and new directions in clinical practice.
3. To understand the MRI potential to improve radiotherapy planning and treatment.
4. To be aware of MRI safety considerations and risks to promote best practices.

15:15 Panel discussion

14:00 - 15:30 Room M 1

EuroSafe Imaging Session

EU 3

Clinical diagnostic reference levels for x-ray medical imaging

A-500/A-501 14:00 Chairpersons’ introduction and update on the project on clinical DRLs for x-ray medical imaging
J. Damilakis; G. Frija; Iraklion/GR, Paris/FR

Session Objectives:
1. To understand the general concept of diagnostic reference levels (DRLs), in particular clinical DRLs and the project on clinical DRLs for x-ray medical imaging.
2. To learn about the current status of DRLs in paediatric imaging.
3. To become familiar with the concept of local DRLs.

A-502 14:05 The concept of diagnostic reference levels (DRLs)
E. Vaño; Madrid/ES

Learning Objectives:
1. To understand the concept of DRLs in general.
2. To learn about the International Commission on Radiological Protection’s (ICRP) work and perspective.

A-503 14:20 The concept of clinical diagnostic reference levels (DRLs)
G. Frija; Paris/FR

Learning Objectives:
1. To become familiar with the concept of clinical DRLs.
2. To learn about the EUCLID project.
3. To learn about practical implications and advantages of clinical DRLs.

A-504 14:30 An update on current European diagnostic reference levels (DRLs) in adult imaging
J. Damilakis; Iraklion/GR

Learning Objectives:
1. To learn about the EUCLID project.
2. To learn about the current status of DRLs in adult imaging in Europe and beyond.
3. To understand why clinical DRLs are needed in adult imaging.

A-505 14:45 An update on current paediatric diagnostic reference levels (DRLs)
C. Granata; Genoa/IT

Learning Objectives:
1. To become familiar with paediatric DRLs.
2. To learn about the European Guidelines on DRLs for Paediatric Imaging (PDRL).
3. To learn about recent work undertaken by the ESR to establish paediatric DRLs.
The concept of local diagnostic reference levels (DRLs)
N. Saltybaeva; Zurich/CH

**Learning Objectives:**
1. To become familiar with the concept of local diagnostic reference levels (LDRLs).
2. To understand the key factors affecting LDRLs.
3. To learn how the LDRLs can be established and used for dose optimisation; what action should be taken if LDRLs are exceeded.

Panel discussion
J. Damilakis1, G. Frija2, E. Vaño3, J.N. Vassileva4, M. del Rosario Perez5;
1Iraklion/GR, 2Paris/FR, 3Madrid/ES, 4Sofia/BG, 5Geneva/CH

The landscape in radiology is changing: the radiologists need to adapt
P. Leander; Malmö/SE

**Learning Objectives:**
1. To understand the worldwide trends in workload change.
2. To appreciate the development of teleradiology and commoditisation of the radiology.
3. To become familiar with the role of information technologies in radiology.

Big-data, artificial intelligence, machine learning, deep learning etc.: what radiologists should know
K.J. Dreyer; Boston, MA/US

**Learning Objectives:**
1. To learn the basic principles of artificial intelligence.
2. To appreciate the current and future applications of artificial intelligence in radiology.
3. To become familiar with available tools of artificial intelligence in clinical and research radiology.

How to cope with the new IT developments: the developer's perspective
S. Tolle; Galway/IE

**Learning Objectives:**
1. To understand the market trends of IT and AI in healthcare.
2. To appreciate the clinical needs for IT, AI, machine learning and big-data analysis tools.
3. To understand the current business models and future trends of IT/AI products in healthcare.

The value of the radiologist in the evolving digital environment: challenges for leadership
C.D. Becker; Geneva/CH

**Learning Objectives:**
1. To review the impact of the digital environment on the radiologist's role.
2. To examine strategies to ensure the clinical relevance of the imaging specialist in the future.
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SF 12a  
My three top tips for abdominal imaging

<table>
<thead>
<tr>
<th>Session ID</th>
<th>Time</th>
<th>Title</th>
<th>Speaker</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>A-518</td>
<td>16:00</td>
<td>Chairperson's introduction</td>
<td>D.J.M. Tolan; Leeds/UK</td>
<td></td>
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<tr>
<td>A-519</td>
<td>16:05</td>
<td>Postoperative abdomen</td>
<td>D.J.M. Tolan; Leeds/UK</td>
<td></td>
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<tr>
<td>A-520</td>
<td>16:11</td>
<td>Appendicitis</td>
<td>J.B.C.M. Puylaert; The Hague/NL</td>
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<tr>
<td>A-521</td>
<td>16:17</td>
<td>Bile duct stones</td>
<td>J.A. Guthrie; Leeds/UK</td>
<td></td>
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<tr>
<td>A-522</td>
<td>16:29</td>
<td>Dilated pancreatic duct</td>
<td>R. Manfredi; Rome/IT</td>
<td></td>
</tr>
<tr>
<td>A-523</td>
<td>16:35</td>
<td>Liver biopsy</td>
<td>V. Vilgrain; Clichy/FR</td>
<td></td>
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<tr>
<td>A-524</td>
<td>16:41</td>
<td>Bowel ischaemia</td>
<td>M. Zing; Paris/FR</td>
<td></td>
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<tr>
<td>A-525</td>
<td>16:53</td>
<td>Colon polyp</td>
<td>F. Iafrate; Rome/IT</td>
<td></td>
</tr>
<tr>
<td>A-526</td>
<td>16:59</td>
<td>Acute pancreatitis</td>
<td>W. Schima; Vienna/AT</td>
<td></td>
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<tr>
<td>A-527</td>
<td>17:05</td>
<td>Crohn's disease</td>
<td>J. Rimola; Barcelona/ES</td>
<td></td>
</tr>
<tr>
<td>A-528</td>
<td>17:11</td>
<td>Liver metastases follow-up</td>
<td>Y. Menu; Paris/FR</td>
<td></td>
</tr>
</tbody>
</table>

**Session Objectives:**
1. To learn how to avoid common mistakes in abdominal radiology.
2. To understand how to get over an area of difficulty through the clinical expertise of selected abdominal radiologists.

**Learning Objectives:**
1. To learn how to optimise detection of anastomotic leaks on CT using radiological signs and positive luminal contrast.
2. To recognise material in the abdomen surgeons may leave deliberately.
3. To recognise material in the abdomen surgeons may leave by accident.

**Learning Objectives:**
1. To learn that US has a pivotal and unique role in appendicitis and should be done prior to CT.
2. To learn that US in acute abdomen allows the radiologist to get closer to the patient than CT and MRI.
3. To learn that US should be performed by abdominal radiologists, and not by clinicians or technicians.

**Learning Objectives:**
1. To learn that in patients with a high index of clinical suspicion of bile duct stone, MRCP should be employed early.
2. To know that 2D FAST/SS-FSE/FSE-ADA/FASE without fat saturation in two planes (oblique coronal and axial) will establish a diagnosis in most cases and are the „work horse” sequences in most patients.
3. To understand that FISP/GRASS/FFE/SARGE (which can be gated) are useful adjunct especially in those patients that have difficulty holding their breath.

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1. To learn that US has a pivotal and unique role in appendicitis and should be done prior to CT.
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**Learning Objectives:**
1. To learn how to quickly review different morphological aspects and „weapons” in the hand of radiologist to detect colonic polyps with CT colonography with small focus on correct preparation and the use of CAD.
2. To define large, small and intermediate polyp size and to review polyp pathology including the risk of cancer and high-grade dysplasia moreover in small and intermediate polyps.
3. To summarise the current debate with regard to intermediate polyps (conservative management vs polypectomy) and the rational for non-reporting of diminutive polyps.

**Learning Objectives:**
1. To learn about the proper timing of imaging studies in acute pancreatitis.
2. To learn about the imaging manifestations of necrotising pancreatitis.
3. To understand the different nature of fluid collections with regard to further therapy.

**Learning Objectives:**
1. To learn about useful signs indicating active Crohn's disease.
2. To understand the changes which occur after treatment of intestinal inflammation.
3. To become familiar with complications related to Crohn's disease.

**Learning Objectives:**
1. To learn how to quickly identify three most common systemic treatments of liver metastases (cytotoxic, targeted and immune), and to understand why knowledge of the regimen is essential for the radiological report.
2. To understand the rationale of international standards for the evaluation of response to treatment, and how to build accordingly a useful report.
3. To appraise the respective objectives of neoadjuvant and palliative chemotherapy, and to be able to explain the specific endpoints for each clinical situation.
16:00 - 17:30 Room C

**Chest**

**RC 1204**

**Pneumonia**

**A-529 16:00**

Chairperson's Introduction
I.E. Tyurin; Moscow/RU

**Session Objectives:**
1. To review the role of imaging in infectious lung diseases.
2. To understand the key role of multidisciplinary approach to diagnosis of lung infections.

**A-530 16:05**

**A. Community-acquired pneumonia**

I. Hartmann; Rotterdam/NL

**Learning Objectives:**
1. To appreciate the role of imaging in the management of community-acquired pneumonia.
2. To consolidate knowledge of how to discriminate from noninfectious diseases.

16:28

**B. Tuberculosis**

E. Castañer; Sabadell/ES

**Learning Objectives:**
1. To appreciate typical and atypical tuberculosis manifestations on imaging.
2. To differentiate between acute and chronic tuberculosis infection.

16:51

**C. Fungal pneumonia in immunocompromised hosts**

C.P. Heussel; Heidelberg/DE

**Learning Objectives:**
1. To learn the patterns of fungal lung infection depending on the type of immune depression.
2. To become familiar with CT signs suggesting angioinvasive fungal infection.

17:14

Panel discussion: What is the role of radiologists in the diagnosis and management of lung infections?

16:00 - 17:30 Room X

**E³ - ECR Master Class (Abdominal Viscera)**

**E³ 1226**

**Dual-energy CT of the abdomen: the time is now**

Moderator:
P. Vock; Berne/CH

**A-533 16:00**

**A. Basic principles and different approaches**

L.S. Guimaraes; Toronto, ON/CA

**Learning Objectives:**
1. To learn about the types of dual-energy scanners and principles of dual-energy CT.
2. To understand issues of radiation dose and image quality in comparison with single-energy CT.
3. To appreciate the possible advantages of this technology with its many post-processing applications.

16:30

**B. Applications for genitourinary system**

H. Ringl; Vienna/AT

**Learning Objectives:**
1. To learn about the role of dual-energy CT in the genitourinary system.
2. To understand the value of determination of renal stone composition with dual-energy CT.
3. To appreciate the ability of dual-energy CT to exactly quantify the iodine uptake in renal lesions.

17:00

**C. Applications for abdominal organs**

M. Karcaaltincaba; Ankara/TR

**Learning Objectives:**
1. To learn about the current applications of dual-energy CT in evaluating the abdominal viscera.
2. To understand the role of dual-energy CT for characterisation of incidental lesions discovered during routine abdominal CT.
3. To appreciate how dual-energy CT increases sensitivity for detecting both hypervascular and hypovascular liver and pancreatic lesions.

16:00 - 17:30 Room O

**Special Focus Session**

**SF 12b**

**Imaging of the brain in preterm infants**

**A-536 16:00**

Chairperson's introduction
P.C. Maly Sundgren; Lund/SE

**Session Objectives:**
1. To learn about different imaging techniques to study the preterm brain.
2. To understand the clinical importance of assessing the preterm brain.
3. To become familiar with novel imaging techniques and their clinical value.

16:05

**A. The role of cerebral ultrasound**

M.I. Argyropoulou; Ioannina/GR

**Learning Objectives:**
1. To learn about the technique and typical findings of cerebral ultrasound in preterm infants.
2. To understand indications for cranial ultrasound in neonates.
3. To discuss potential adverse effects and added value of US Doppler.

16:30

**B. The role of cerebral MRI: morphology and beyond**

F.M. Triulzi; Milan/IT

**Learning Objectives:**
1. To learn about protocol and typical findings in premature babies.
2. To understand indications and timing for MR exams in preterm infants.
3. To discuss the prognostic value of performing advanced MR techniques.

16:55

**C. US screening in preterm infants: prognostic value from a clinical point of view**

J.-P. Schenk; Heidelberg/DE

**Learning Objectives:**
1. To learn about the rationale for routine follow-up of the premature brain.
2. To understand the clinical impact of US findings in preterm infants.
3. To discuss the prognostic value of routine ultrasound screening of preterm infants.

17:15

Panel discussion: Can we afford the extensive screening programmes proposed today?
SF 12c
Head and neck emergencies

**A-540** 16:00
Chairperson's introduction
R. Kohler; Sion/CH

**Session Objectives:**
1. To become familiar with most emergencies of the head and neck in clinical routine.
2. To understand which imaging technique to use for a given indication.

**A-541** 16:05
What is broken?
E. Loney; Darlington/UK

**Learning Objectives:**
1. To know which imaging techniques to use in case of trauma.
2. To become familiar with base of skull fracture (including temporal bone and orbit).
3. To learn about maxillofacial fractures.
4. To get acquainted with the traumatic lesions of the larynx.

**A-542** 16:28
It is red and swollen ...
M. Becker; Geneva/CH

**Learning Objectives:**
1. To learn which imaging techniques to use in the case of an infection and inflammation in the emergency setting.
2. To become familiar with the infections of the base of skull.
3. To understand the diversity of infection patterns of soft tissues.
4. To appreciate the pathologies of the salivary glands that may present in the emergency setting.

**A-543** 16:51
It is bleeding ...
D.-A. Varoquaux; Marseille/FR

**Learning Objectives:**
1. To learn about the vascular blunt and penetrating traumatic injuries.
2. To appreciate the role of the interventional radiologist in the treatment of epistaxis and tumours (juvenile angiofibroma and squamous cell carcinoma) in the emergency setting.
3. To have notions of vascular malformations and their complications.
4. To acquire basic notions of endovascular treatments.

17:14
Panel discussion: Is the radiologist an essential component of the emergency team

**E¹ - Rising Stars Programme: EFRS Radiographers' Basic Session**

**BR 1**
Radiography research: a how to guide

**A-548** 16:00
Chairperson's introduction: Why is radiography research important
M. Hardy; Bradford/UK

**Session Objectives:**
1. To become familiar with common ethical issues arising in radiography research.
2. To understand the value of critical appraisal when reading research publications.
3. To identify good practices for constructing quality scientific abstracts and posters.

**A-549** 16:05
How to avoid ethical issues
B. Andersson; Lund/SE

**Learning Objectives:**
1. To understand the importance of ethics in medical research and the role of research ethics committees.
2. To become familiar with common ethical pitfalls in research design.
3. To appreciate strategies for avoiding ethical problems in research.

**A-550** 16:23
How to critically appraise a research article
B. Kraus; Vienna/AT

**Learning Objectives:**
1. To appreciate the role of the literature review in the research process.
2. To identify strengths and weaknesses in each section of a research report.
3. To critically appraise the overall value of a research report.
**How to write a good scientific abstract**

*R. Decoster; Brussels/BE*

*Learning Objectives:*
1. To understand general qualities of good scientific abstracts.
2. To be aware of typical formats of scientific abstracts.
3. To consider tips for success.

**How to produce a high-quality scientific or educational poster**

*L.A. Rainford; Dublin/IE*

*Learning Objectives:*
1. To become familiar with poster formats and layouts.
2. To consider good practices in poster design.
3. To appreciate important considerations when designing a poster.

**Panel discussion: Ask the experts**

**Panel discussion: Ask the experts**

**MRI for early detection, staging and management of breast cancer**

*A-553 16:00*

*Chairperson's introduction*

J. Camps Herrero; Valencia/ES

*Session Objectives:*
1. To understand the contribution of MRI to preoperative staging and the context within it should be recommended.
2. To learn about the different MRI biomarkers and in which clinical setting they are of value.
3. To recognise the steps required to move to abbreviated MRI for high-risk screening.

*A-554 16:05*

*A. Preoperative staging with MRI: did the MIPA trial solve all issues?*

F. Sardanelli; San Donato Milanese/IT

*Learning Objectives:*
1. To learn about the evidence for and against the use of MRI in preoperative staging.
2. To understand the background, design and early results of the MIPA trial.
3. To be able to explain the role of preoperative MRI during multidisciplinary tumour board meetings.

*A-555 16:28*

*B. MR imaging biomarkers for the clinical setting*

E.A. Morris; New York, NY/US

*Learning Objectives:*
1. To learn about the different biomarkers that are available and the evidence for using them in patients with breast cancer.
2. To understand in which clinical settings biomarkers might be of value.
3. To appreciate the newer techniques that are being developed and tested clinically.

*A-556 16:51*

*C. Screening with abbreviated protocols*

C.K. Kuhl; Aachen/DE

*Learning Objectives:*
1. To learn about the evidence for abbreviated MRI and the comparison with standard protocols.
2. To understand the different protocols for abbreviated MRI and the merits of each sequence used.
3. To appreciate the advantages and limitations for abbreviated MRI.

Panel discussion: Why are some recommendations not adopted and how can we change practice?

**RC 1211**

**Inflammatory and infectious CNS pathology**

*A-557 16:00*

*Chairperson's introduction*

E.T. Tali; Ankara/TR

*Session Objectives:*
1. To understand the role of imaging in the diagnosis and monitoring of inflammatory and infectious diseases of the central nervous system.
2. To learn about the different MRI biomarkers and in which clinical settings they are of value.
3. To appreciate the added value of imaging in addition to the clinical findings and laboratory tests including CSF analysis.

*A-558 16:05*

*A. Autoimmune encephalitis*

P. Demaerel; Leuven/BE

*Learning Objectives:*
1. To learn about the imaging pattern of autoimmune encephalitis.
2. To understand the limited role of conventional MRI and the need for advanced imaging techniques in the diagnostic process.
3. To appreciate the role of imaging in a multidisciplinary and multimodality approach.

*A-559 16:28*

*B. Infectious encephalitis*

K.D. Kurz; Stavanger/NO

*Learning Objectives:*
1. To learn about the correct choice of imaging modalities and image acquisition parameters for the detection and monitoring of infectious diseases.
2. To understand the benefits and challenges of image pattern recognition for diagnostic purposes.
3. To appreciate the heterogeneity of the disease spectrum and challenges to interpret imaging findings in the context of the clinical presentation and possible comorbidities.

*A-560 16:51*

*C. Inflammatory and infectious myelitis*

M.M. Thurnher; Vienna/AT

*Learning Objectives:*
1. To learn about the spectrum of infectious diseases of the spinal cord level and their most characteristic imaging features.
2. To understand the difficulties in image acquisition and image interpretation.
3. To appreciate the clinical relevance of early diagnosis and therapeutic intervention.

Panel discussion: Ask the expert: Is imaging the key diagnostic modality for an early and specific diagnosis of infectious diseases, leading to a better functional outcome?
**ESR/ESOR 3**

Radiologic anatomy: neuro

*Moderator: M. Lucic; Sremska Kamenica/RS*

**A-561** 16:00
Cortical anatomy and primary functional areas

*T.A. Yousry; London/UK*

**Learning Objectives:**
1. To understand the basic concepts of cortical subdivision.
2. To be able to identify critical cortical structures.
3. To learn to localise primary functional areas.

**A-562** 16:30
Vascular distribution territories: arterial and venous

*T. Engelhorn; Erlangen/DE*

**Learning Objectives:**
1. To become familiar with a comprehensive vascular anatomy of the brain.
2. To recognise patterns of various pathologies attributed to vascular distribution territories.
3. To recognise the different imaging patterns in stroke and their prognostic value.

**A-563** 17:00
The basal ganglia of the brain revisited

*D. Zlatareva; Sofia/BG*

**Learning Objectives:**
1. To recall the basal ganglia nuclei and their topography.
2. To identify the classic functional organisation of the basal ganglia and its current concepts.
3. To elucidate the pathophysiology of various movement disorders.

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**A-564** 16:00
Chairperson’s introduction: Screening for cancer: lessons learned and future challenges

*S. Törnberg; Stockholm/SE*

**Session Objectives:**
1. To understand the basic idea behind cancer screening protocols.
2. To learn about potential harms and benefits of screening protocols.
3. To explain why epidemiological data are so important for successful screening programmes.

**A-565** 16:05
A. Lung cancer screening: the evidence

*H.-U. Kauczor; Heidelberg/DE*

**Learning Objectives:**
1. To learn about risk populations for lung cancer screening.
2. To understand the benefits and potential drawbacks of a lung cancer screening programme.
3. To explain why epidemiological data are important for successful screening programmes.

**A-566** 16:28
B. Colorectal cancer screening: what is the radiologist’s role?

*S. Halligan; London/UK*

**Learning Objectives:**
1. To learn about already existing clinical screening tools for CLC.
2. To understand the concept of radiological screening tools for CLC.
3. To appreciate the benefit and clinical applications for new imaging-based screening tools.

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**A-567** 16:51
C. Breast cancer: to screen or not to screen

*P. Skaane; Oslo/NO*

**Learning Objectives:**
1. To learn about the existing mammography screening programmes.
2. To understand the potential add-on of MR for breast cancer screening (e.g. MR).
3. To balance harm/cost against benefit for new screening programmes.

**A-568** 16:00
Chairperson’s introduction

*I. Boric; Zabok/HR*

**Session Objectives:**
1. To understand the level of expertise that patients expect for adequate performance and reading of shoulder MRI.
2. To gain insight into differentiating normal age-related changes from clinical relevant MR features.

**A-569** 16:05
A. The normal MRI: techniques and anatomy

*E. Llopis; Valencia/ES*

**Learning Objectives:**
1. To become familiar with MRI techniques for imaging the shoulder.
2. To understand normal MRI shoulder anatomy, and normal variants seen.

**A-570** 16:28
B. Rotator cuff tears: what are they and what do they look like?

*K.-F. Kreitner; Mainz/DE*

**Learning Objectives:**
1. To become familiar with the anatomical basis of rotator cuff tears.
2. To learn about the MRI findings of rotator cuff pathology.

**A-571** 16:51
C. Patterns of instability: what does the MRI show?

*A.J. Grainger; Leeds/UK*

**Learning Objectives:**
1. To become familiar with patterns of abnormality seen in shoulder instability.
2. To learn about the MRI findings of shoulder instability.

**A-572** 16:00
Chairperson’s introduction

*O. Clément; Paris/FR*

**Session Objectives:**
1. To understand what radiomics is.
2. To appreciate the clinical potential of radiomics in radiology.
3. To address the professional challenges of radiomics.
Postgraduate Educational Programme

A-573 16:03
Radiomics: what is it and how does it work?
L.S. Fournier; Paris/FR

**Learning Objectives:**
1. To learn about new methods of image analysis derived from '-omics' methods.
2. To understand processing of big data derived from images.
3. To become familiar with new vocabulary such as radiomics, radiogenomics, clusters, heat map, etc.

A-574 16:21
Radiomics: technical validation
R. Leijenaar; Maastricht/NL

**Learning Objectives:**
1. To learn about the robustness and reproducibility of radiomics features.
2. To understand the differences and similarities between radiomics software.
3. To understand that quality of big data is the key.

A-575 16:39
Radiomics: biological correlation
E. Sala; Cambridge/UK

**Learning Objectives:**
1. To understand how radiomics features relate to the underlying biology.
2. To learn what information radiomics can give on tumour heterogeneity.
3. To become familiar with potential added value of radiomics in predicting treatment response and outcome.

A-576 16:57
Radiomics: clinical challenges
T. Penzkofer; Berlin/DE

**Learning Objectives:**
1. To understand the potential role in oncological and non-oncological clinical settings.
2. To define prerequisites for the integration into clinical workflows, including: patient acceptance, legal challenges and quality control.
3. To appreciate the future roadmap and its impact on training of young radiologists.

17:15
Panel discussion: Radiomics, the new holy grail in radiology?

A-578 16:05
So whose role is it? What different professionals can and should do
G. Paulo; Coimbra/PT

**Learning Objectives:**
1. To understand the importance of teamwork to improve communication skills when informing about radiation risk.
2. To learn about the importance of the radiographers' role in the healthcare setting.
3. To become familiar with the European Basic Safety Standards challenges for the different health professionals involved in patient clinical pathway.

A-579 16:30
What do patients want to hear and need to be told?
J. Portelli; Msida/MT

**Learning Objectives:**
1. To learn about the information and communication needs of patients attending for a medical imaging examination.
2. To appreciate that patients may have different expectations, perceptions and concerns when attending for a medical imaging examination.

A-580 16:55
How to effectively communicate radiation risks
L.R. O'Hora; Dublin/IE

**Learning Objectives:**
1. To understand dose metrics.
2. To appreciate the difference between diagnostic dose metrics and effective dose.
3. To understand the concept of “lifetime risks” associated with specific effective doses.
4. To become familiar with relating specific procedure dose to understandable concepts such as equivalent periods of environmental radiation.

17:20
Panel discussion: Speaking a common language: how best to work together to inform patients

16:00 - 17:30 Room M 1

ESHI Session

**Non-oncological hybrid imaging: case-based**

Moderators:
O. Ratib; Geneva/CH
K. Riklund; Umea/SE

A-581 16:00
Cardiac hybrid imaging indications: case-based
C. Rischpler; Munich/DE

**Learning Objectives:**
1. To learn about indications of hybrid imaging in cardiology.
2. To appreciate cardiac indications of different hybrid imaging modalities.

A-582 16:30
Non-oncological intracranial indications for hybrid imaging: case-based
A. Drzezga; Cologne/DE

**Learning Objectives:**
1. To learn about non-oncological indications of hybrid imaging in the brain.
2. To become familiar with non-oncological radiopharmaceuticals for brain imaging.

A-583 17:00
Hybrid imaging in inflammation: case-based
A. Signore; Rome/IT

**Learning Objectives:**
1. To learn about indications of hybrid imaging in inflammatory diseases.
2. To appreciate hybrid imaging for therapy response assessment in inflammatory diseases.
PIR @ ECR Session

PIR 3
Value-based radiology

Moderators:
P. Mildenberger; Mainz/DE
G. McGinty; New York, NY/US

A-584 16:00
Basic concepts of value-based radiology: US perspective
J.A. Brink; Boston, MA/US

Learning Objectives:
1. To understand basic concepts of value-based radiology.
2. To be informed of the current state of value-based radiology in the US.
3. To explain professional implications of value-based radiology.

A-585 16:20
Basic concepts of value-based radiology: European perspective
L. Donoso; Barcelona/ES

Learning Objectives:
1. To discuss possible concepts of value-based radiology in the European environment.
2. To discuss possible strategies leading from volume-based to value-based radiology in Europe.
3. To explain implications of value-based radiology on quality.

A-586 16:40
New metrics are required for value-based radiology
G. McGinty; New York, NY/US

Learning Objectives:
1. To understand the limitations of current metrics.
2. To understand how to effectively develop metrics around value-based radiology.
3. To understand the connection between metrics and payment.

17:00
Panel discussion: A European - US debate on the value of “value-based radiology

Interventional Radiology

RC 1209
Pulmonary embolism: a joint challenge for diagnostic and interventional radiology!

A-587 16:00
Chairperson's introduction
A.G. Ryan; Waterford City/IE

Session Objectives:
1. To appreciate the value of imaging in therapy planning and follow-up.
2. To learn about patient selection and evidence in catheter directed therapies for PE.
3. To learn about recent and ongoing trials in the endovascular treatment of PE.

A-588 16:05
A. Imaging algorithm for pulmonary embolism
B. Ghaye; Brussels/BE

Learning Objectives:
1. To learn how clinical findings influence the selection of the imaging strategy in PE.
2. To learn about the follow-up after treatment.
3. To learn how imaging may predict the outcome of the patient.

A-589 16:28
B. What is new in the recently published guidelines for pulmonary embolism treatment?
R. Uberoi; Oxford/UK

Learning Objectives:
1. To learn about the recently published guidelines for PE treatment in stable patients.
2. To learn about the recently published guidelines for PE treatment in unstable patients.
3. To learn about recent therapeutic algorithms in PE treatment.

A-590 16:51
C. Updates on the endovascular treatment of massive and submassive pulmonary embolism
S.C. Spiliopoulos; Athens/GR

Learning Objectives:
1. To learn about the rationale of recent and ongoing trials.
2. To learn about the level of evidence for interventional radiology techniques in PE treatment.
3. To learn about clinical results and possible further developments.

17:14
Panel discussion: Appropriate diagnosis and risk stratification in the management of acute massive and acute submassive pulmonary embolism

Gadolinium: image wisely

Moderators:
P.M. Parizel; Antwerp/BE
A. Rovira-Cañellas; Barcelona/ES

A-591 16:00
A. Intracranial gadolinium deposition: update and perspectives
H.A. Rowley; Madison, WI/US

Learning Objectives:
1. To evaluate intracranial gadolinium deposition with direct assessment of gadolinium accumulation in neuronal tissues of patients previously exposed to multiple doses of intravenous gadolinium.
2. To explore the relationship between intracranial gadolinium deposition, the type of contrast agent and renal function.

A-592/A-593 16:20
B. Do we need gadolinium in imaging MS? Pros and cons
C. Lukas1, W. Van Hecke2; 1Bochum/DE, 2Antwerp/BE

Learning Objectives:
1. To review the role of Gd-enhanced follow-up MRI for management of patients with multiple sclerosis.
2. To explore alternative imaging techniques for assessment of disease progression in order to avoid gadolinium deposition.

A-594/A-595 16:50
C. Do we need gadolinium in imaging vestibular schwannomas? Pros and cons
B. Verbist1, F.B. Pizzini2; 1Leiden/NL, 2Verona/IT

Learning Objectives:
1. To determine whether Gd-enhanced MRI offers advantages in the initial diagnosis and follow-up of patients with (suspected) vestibular schwannoma.
2. To assess the diagnostic accuracy of high-resolution T2-weighted scans as an alternative to Gd-enhanced T1-weighted scans.

17:10
Discussion on the pros and con
16:00 - 17:30 Room M 5

Special Focus Session

SF 12e
Memorable cases in cardiovascular imaging: how to avoid common mistakes

A-596 16:00
Chairperson's introduction
K. Nikolaou; Tübingen/DE

Session Objectives:
1. To learn how to avoid common mistakes in cardiac imaging.
2. To understand how to systematically review complex cardiac cases.
3. To appreciate the importance of clinical context and clinical knowledge for solving differential diagnoses in cardiac imaging.

A-597 16:06
Coronary fistula mimicking a cystic paracardial tumour
C. Loewe; Vienna/AT

Learning Objectives:
1. To learn how to avoid the most common pitfalls in image interpretation of the coronary arteries.
2. To understand how to systematically review (complex) coronary artery anatomy/disease.
3. To appreciate the importance of clinical context for solving differential diagnoses in coronary imaging.

A-598 16:20
Right ventricular myocarditis diagnosed with CMR: the great imitator
M. Francone; Rome/IT

Learning Objectives:
1. To learn how to avoid the most common pitfalls in image interpretation of myocarditis and inflammatory heart diseases.
2. To understand how to systematically review (complex) inflammatory myocardial cases.
3. To appreciate the importance of clinical context for solving differential diagnoses in myocardial imaging.

A-599 16:34
Congenital elastic band of the aortic valve: a "multimodality" diagnosis
K. Pagonidis; Iraklion/GR

Learning Objectives:
1. To learn how to avoid the most common pitfalls in image interpretation of the valves.
2. To understand how to systematically review (complex) valvular cases.
3. To appreciate the importance of clinical context for solving differential diagnoses in valvular imaging.

A-600 16:48
Dyspnea with an abnormal right ventricle: role of MR imaging
A. Jacquier; Marseille/FR

Learning Objectives:
1. To learn how to avoid most common pitfalls in image interpretation of the right ventricle.
2. To understand how to systematically review right heart function and morphology.
3. To appreciate the importance of clinical context for solving differential diagnoses in the right heart.

A-601 17:02
Misleading CMR LGE artefact in cardiomyopathies
M. Gutberlet; Leipzig/DE

Learning Objectives:
1. To learn how to avoid the most common pitfalls in image interpretation of LGE images.
2. To understand how to systematically review (complex) LGE datasets.
3. To appreciate the importance of clinical context for solving differential diagnoses in myocardial and LGE imaging.

A-602 17:16
Hypertrabeculation vs non-compaction of the left ventricle: treat or don't touch?
K. Gruszczynska; Katowice/PL

Learning Objectives:
1. To learn how to avoid most common pitfalls in image interpretation of left ventricular function and morphology.
2. To understand how to systematically review the causes of reduced cardiac function.
3. To appreciate the importance of clinical context for solving differential diagnoses of the left ventricle.
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<td>16:45 - 17:30</td>
<td>Room Coffee &amp; Talk</td>
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**Coffee & Talk (open forum)**

**C 14 Young radiologists in Europe**

**Moderator:**
O. Dzaye; Berlin/DE

**A-998 16:45**
"Junge Radiologen": establishing networking between young radiologists
O. Dzaye; Berlin/DE

**Learning Objectives:**
1. To become familiar with the concept of „Junge Radiologen“.
2. To learn about its aims.
3. To understand why networking among medical students, residents and young radiologists is important.

**A-999 16:50**
Communication among young radiologists: structures and possibilities
M. Selbach; Mainz/DE

**Learning Objectives:**
1. To present existing communication structures for young radiologists and to explain to what extent they communicate with each other.
2. To outline possibilities of an intensive network, especially in the fields of training, research and career.

**A-1000 16:55**
Network among young radiologists in Europe: presence and borderless future
T.A. Auer; Berlin/DE

**Learning Objectives:**
1. To learn about already existing international inner-European ways of networking between young radiologists.
2. To present some ideas for better communication that may play a key role in future.

17:00
Open forum discussion with Prof. Hamm: Voice of young radiologist in Europe
**E³ 1321**  
Oncologic imaging

**A-603 08:30**  
A. Lung cancer: key signs in the new TNM  
A.R. Larici; Rome/IT  

**Learning Objectives:**  
1. To learn about the new staging system for lung cancer.  
2. To highlight the differences in the meaning of CT findings between the new system and the previous one.

**A-604 09:15**  
B. Incidental findings in oncologic patients  
M.-P. Revel; Paris/Fr  

**Learning Objectives:**  
1. To recognise the importance of different incidental findings in patients with cancer.  
2. To learn how to manage patients with incidental findings.

**RC 1301**  
Difficult challenges in imaging the acute abdomen

Moderator:  
S.K. Puri; New Delhi/IN  

**A-605 08:30**  
A. Perforation of the GI tract  
V. Maniatis; Aabenraa/DK  

**Learning Objectives:**  
1. To learn about the main causes and clinical symptoms of GI tract perforation.  
2. To become familiar with the imaging methods used to detect GI tract perforation and with relevant diagnostic algorithms.  
3. To appreciate the important imaging appearances indicative of GI tract perforation. What should radiologists not miss?

**A-606 09:00**  
B. Bowel obstruction  
A.J.B.S. Madureira; Porto/PT  

**Learning Objectives:**  
1. To learn about the different types and causes of bowel obstruction.  
2. To become familiar with relevant imaging signs in both small and large bowel obstruction including complications.  
3. To appreciate the most widely used imaging approach for detection and evaluation of bowel obstruction.

**A-607 09:30**  
C. Acute biliary conditions  
C.D. Becker; Geneva/CH  

**Learning Objectives:**  
1. To learn about the most common pathologies leading to acute biliary conditions.  
2. To become familiar with the relevant multimodality imaging appearances in this group of patients.  
3. To appreciate the role of interventional radiology in the management of these conditions.

**Special Focus Session**

**SF 13a**  
Chest imaging of cystic fibrosis: from infants to adults

**A-608 08:30**  
Chairperson's introduction  
M.O. Wielpütz; Heidelberg/DE  

**Session Objectives:**  
1. To learn about the imaging appearance of cystic fibrosis lung disease.  
2. To appreciate the advantages and drawbacks of available imaging modalities.  
3. To appreciate the role of repeated surveillance imaging in cystic fibrosis.  
4. To understand the current developments in cystic fibrosis lung imaging.

**A-609 08:35**  
X-ray: is there still a value in CF?  
C. Owens; London/UK  

**Learning Objectives:**  
1. To learn about the typical imaging appearance of cystic fibrosis on radiography.  
2. To become familiar with semi-quantitative scoring methods.  
3. To appreciate radiography’s role in imaging of the cystic fibrosis lung.

**A-610 08:55**  
CT: information content vs dose?  
P. Ciet; Rotterdam/NL  

**Learning Objectives:**  
1. To learn about the typical imaging appearance of cystic fibrosis on CT.  
2. To become familiar with semi-quantitative scoring and quantitative CT.  
3. To appreciate CT’s role in imaging of the cystic fibrosis lung.

**A-611 09:20**  
MRI: value of routine MRI?  
F. Doellinger; Berlin/DE  

**Learning Objectives:**  
1. To learn about the typical imaging appearance of cystic fibrosis on MRI.  
2. To become familiar with semi-quantitative scoring and quantitative MRI.  
3. To appreciate MRI’s role in imaging of the cystic fibrosis lung.

09:50  
Panel discussion: X-ray, CT or MRI, or a combination?

**Joint Session of the ESR and the BBMRI-ERIC**  
(Biobanking and BioMolecular resources Research Infrastructure - European Research Infrastructure Consortium)

**Linking imaging biobanks to -omics: the role of BBMRI and ESR**  
Moderators:  
A. Van der Lugt; Rotterdam/NL  
E. Steinfelder; Graz/AT  

**A-612 08:30**  
Introduction to BBMRI biobanking and biomolecular resources research infrastructure  
E. Steinfelder; Graz/AT  

**Learning Objectives:**  
1. To learn about biobanking and BBMRI.  
2. To understand the diversity of human disease, biological samples and corresponding data.  
3. To appreciate the benefits provided by biobanks for personalised medicine.
**A-613 08:40**
Secondary use of existing data: ethical issues, sharing and data protection
M.T. Mayrhofer; Graz/AT

**Learning Objectives:**
1. To understand the rationale for patient rights the Code of Conduct for responsible use of human biomaterial and data.
2. To consolidate knowledge about the implementation of anonymization and pseudonymisation.
3. To learn about the sharing data and the General Data Protection Regulation.

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**A-614 09:00**
Types of biobanks in the BBMRI network
P. Holub; Graz/AT

**Learning Objectives:**
1. To learn about the aims of BBMRI and the existing biobanks.
2. To understand how to offer and obtain easy access to samples, data and images.
3. To learn about quality assurance in biobanks.

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**A-615 09:20**
Radiomics: enhancing the value of images by standardised feature extraction
S. Trattnig; Vienna/AT

**Learning Objectives:**
1. To learn how image features can be extracted.
2. To discuss how radiomics can be integrated in “omics” analysis.
3. To explore the potential of radiomics analysis in care.

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**A-616 09:40**
Integrating an imaging biobank in a BBMRI biobank
B. Glibaud; Rennes/FR

**Learning Objectives:**
1. To understand the requirements for a clinical imaging bank.
2. To learn about the intra-operability of clinical image biobank and other data repositories.
3. To consolidate knowledge about “Minimum Information About Biobanking Sharing” (MIABIS) 2.0.

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**E3 1326a**
Cardiac MRI: from sequence to bedside

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**A-617 08:30**
Chairperson’s introduction
L. Natale; Rome/IT

**Session Objectives:**
1. To become familiar with different ways of treatment.
2. To understand post-surgical and post-RT complications.
3. To know how to follow-up patients in order to depict early recurrence.

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**A-618 08:35**
A. 4D flow imaging: how and when can it help?
A.A. Azarine; Paris/FR

**Learning Objectives:**
1. To learn about technical requirements to perform 4D flow imaging.
2. To understand what the strength and limitations of 4D flow are compared to 2D flow assessment.
3. To learn about potential clinical applications of 4D flow imaging.

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**A-619 09:00**
B. Spectroscopy: implications of myocardial metabolism?
H.J. Lamb; Leiden/NL

**Learning Objectives:**
1. To learn about technical requirements and how to perform proton spectroscopy and multinuclear spectroscopy.
2. To understand what has been learned from cardiac spectroscopy.
3. To learn about potential clinical applications of spectroscopy.

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**A-620 09:25**
C. Feature tracking: what to conclude from strain and torsion?
J. Lotz; Göttingen/DE

**Learning Objectives:**
1. To learn about a new MRI method to assess myocardial deformation.
2. To understand the strength of MRI feature tracking compared to other methods.
3. To learn about potential clinical applications of feature tracking.

09:50
Panel discussion: Is it time to include these MRI techniques in routine practice?

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**E1’ - ECR Master Class (Cardiac)**

**A-621 08:30**
Chairperson’s introduction
H.B. Eggesbo; Oslo/NO

**Session Objectives:**
1. To get acquainted with changes in tissues during and after radiotherapy.
2. To understand expected changes after radiotherapy in CT and MR imaging.
3. To recognise treatment complications from expected tissue changes after radiotherapy.

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**A-622 08:35**
A. Normal findings after radiotherapy
R. Hermans; Leuven/BE

**Learning Objectives:**
1. To get acquainted with changes in tissues during and after radiotherapy.
2. To understand expected changes after radiotherapy in CT and MR imaging.
3. To recognise treatment complications from expected tissue changes after radiotherapy.

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**A-623 08:58**
B. Normal findings after surgery
A. Trojanowska; Lublin/PL

**Learning Objectives:**
1. To get acquainted with most frequent surgical procedures in head and neck.
2. To understand how to evaluate post-surgical patients.
3. To learn how to assess microvascular flaps.

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**A-624 09:21**
C. Treatment monitoring for early detection of recurrence
A.D. King; Hong Kong/CN

**Learning Objectives:**
1. To get acquainted with problem of recurrence in imaging studies.
2. To understand how to estimate signs of recurrence on CT and MRI.
3. To learn about false positive and false negative findings.

09:44
Panel discussion: What are the challenges in differentiating post-treatment changes from tumour recurrence?
Postgraduate Educational Programme

08:30 - 10:00 Studio 2018

Genitourinary

RC 1307
Management of incidental findings in the genitourinary tract
Moderator: R.H. Oyen; Leuven/BE

**A-625 08:30**
A. Adrenals
L.E. Derchi; Genoa/IT

**Learning Objectives:**
1. To understand the definition of incidental findings in adrenal pathology.
2. To learn about the imaging characteristics of common adrenal incidental masses.
3. To become familiar with the algorithm approach and evidence-based recommendations for management of adrenal incidentalomas.

**A-626 09:00**
B. Kidneys
H.C. Thoeny; Berne/CH

**Learning Objectives:**
1. To understand the definition of incidental findings in renal pathology.
2. To learn about the imaging characteristics of common renal incidental masses, namely cystic.
3. To become familiar with the algorithm approach and evidence-based recommendations for management of renal incidentalomas.

**A-627 09:30**
C. Adnexa
C.S. Balleyguier; Villejuif/FR

**Learning Objectives:**
1. To understand the definition of incidental findings in adnexal pathology.
2. To learn about the imaging characteristics of common adnexal incidental masses.
3. To become familiar with the algorithm approach and evidence-based recommendations for management of adnexal incidentalomas.

08:30 - 10:00 Room L 8

E3 - Rising Stars Programme: EFRS Radiographers' Basic Session

BR 2
Radiation protection from A to Z

**A-628 08:30**
Chairperson's introduction: The radiographers' role in radiation protection
D. Catania; Milan/IT

**Session Objectives:**
1. To understand radiographers' current legal responsibilities regarding radiation protection.
2. To consider the role radiographers play in application of the justification principle.
3. To review recent optimisation techniques for projection radiography.
4. To appreciate how radiographers can best communicate risk-benefit information to patients.

A-629 08:35
The Basic Safety Standards Directive: all you need to know
S.J. Foley; Dublin/IE

**Learning Objectives:**
2. To discuss the additional responsibilities of radiographers and radiologists under the Directive.
3. To consider how the BSS Directive can improve the culture of radiation safety in clinical practice.

A-630 08:53
The importance of justification
D. Katsifarakis; Athens/GR

**Learning Objectives:**
1. To appreciate the key role of justification within radiation protection.
2. To be familiar with the role radiographers can play in justification.
3. To consider initiatives for improving adherence to the principle of justification.

A-631 09:11
The latest optimisation techniques in conventional radiography
P.H. Hogg; Salford/UK

**Learning Objectives:**
1. To discuss the limitations of image quality as a parameter for use in optimising dose in medical imaging examinations.
2. To discuss a range of visual and physical techniques that can be used to assess medical image quality.
3. To discuss a range of practical measures which might be implemented to minimise radiation dose whilst maintaining a level of image quality that is fit for purpose.

A-632 09:29
The radiographers' role in benefit-risk communication
J. Portelli; Msida/MT

**Learning Objectives:**
1. To understand new legislative requirements under the BSS Directive.
2. To be aware of the key role radiographers play in benefit-risk communication.
3. To understand key principles for appropriate benefit-risk communication.

09:47
Panel discussion: Teamwork in radiation protection

08:30 - 10:00 Room E1

Breast

RC 1302
Rethinking ductal carcinoma in situ (DCIS)
Moderator: C. Van Ongeval; Leuven/BE

**A-633 08:30**
A. New radiologic-pathologic knowledge on DCIS
A. Frigerio; Turin/IT

**Learning Objectives:**
1. To learn about different types of DCIS.
2. To become familiar with risk of developing cancer.
3. To appreciate radiologic-pathologic correlations.

A-634 09:00
B. Diagnosing DCIS
S. Schrading; Aachen/DE

**Learning Objectives:**
1. To understand the evidence on MRI for evaluating DCIS.
2. To become familiar with different imaging appearances of DCIS.
3. To appreciate the value added of MRI for diagnosis.
A-635 09:30
C. Reducing overtreatment of DCIS
M.G. Wallis; Cambridge/UK

Learning Objectives:
1. To learn about the risk of overdiagnosis and overtreatment.
2. To become familiar with the risk of avoiding surgery.
3. To appreciate the level of evidence required to change future practice.

08:30 - 10:00  Room E2

Neuro

RC 1311
Altered mental state

A-636 08:30
Chairperson's introduction
M.A. van Buchem; Leiden/NL

Session Objectives:
1. To learn about the complex spectrum disease entities presenting with cognitive decline.
2. To understand the role of standardised imaging and reporting in the context of diagnosis and monitoring of patients with neurocognitive disorders.
3. To appreciate importance of multimodal imaging approaches in the diagnosis of neurocognitive disorders.

A-637 08:35
A. Patterns of referrals
N.N.

Learning Objectives:
1. To learn about the broad spectrum of clinical presentation of cognitive decline.
2. To understand the role of imaging in the context of the clinical presentation and other biomarkers (e.g. CSF) in the diagnosis of cognitive impairment.
3. To appreciate the heterogeneity of primary and secondary pathologies presenting to the memory clinic.

A-638 08:58
B. Imaging in altered mental state
A.J. Bastos-Leite; Porto/PT

Learning Objectives:
1. To learn about the role of imaging in the diagnosis of neurocognitive diseases: from the exclusionary approach to the inclusionary approach.
2. To understand the challenges to diagnose neurocognitive disease in a very early stage using imaging.
3. To appreciate the complexity of differential diagnosis of neuroimaging in cognitively affected individuals and the crucial need for other biomarkers to support the clinical diagnosis.

A-639 09:21
C. MRI in the diagnosis of Alzheimer's disease
A. Krainik; Grenoble/France

Learning Objectives:
1. To learn about the imaging features and possible comorbidities of Alzheimer’s dementia.
2. To understand the complexity of differential diagnosis.
3. To appreciate the crucial and so far unmet medical need to use quantitative MRI techniques in the diagnosis of Alzheimer’s disease.

09:44
Panel discussion: Ask the expert: How can I standardise my image reading and reporting in order to support the clinical process in cognitively impaired patients?

08:30 - 10:00  Room F1

E³ - European Diploma Prep Session

E³ 1323
Cardiac and vascular

A-640 08:30
Chairperson's introduction
R. Vliegenthart; Groningen/NL

Session Objectives:
1. To understand the basic principles and techniques of cardiovascular imaging including CT and MRI of the heart and great vessels.
2. To become familiar with the imaging presentations of disorders of the endocardium, the pericardium and the cardiac valves.
3. To understand the MR imaging presentation of disorders of the myocardium.

A-641 08:36
A. Cardiovascular imaging: the basics
M. Gutberlet; Leipzig/DE

Learning Objectives:
1. To understand the anatomy, normal variants and abnormalities of the heart and great vessels.
2. To describe the technical aspects and methodology of cardiac and vascular CT.
3. To describe the technical aspects and methodology of cardiac and vascular MRI.

A-642 09:04
B. Cardiovascular imaging: valves, endocardium and aorta
C. Loewe; Vienna/Austria

Learning Objectives:
1. To recognise the imaging presentation of the different forms of valvular disease.
2. To understand the causes and imaging presentations of endocarditis.
3. To describe the diagnostic evaluation and imaging presentation of common diseases of the great vessels, including aortic dissection and aneurysms.

A-643 09:32
C. Cardiovascular imaging: myocardium and pericardium
J. Bogaert; Leuven/Belgium

Learning Objectives:
1. To describe the diagnostic evaluation and imaging presentation of ischaemic heart disease.
2. To understand the diagnostic evaluation and imaging presentation of myocarditis.
3. To become familiar with the causes and imaging presentations of pericardial effusion.

08:30 - 10:00  Room F2

Emergency Imaging

RC 1317
Imaging of 'foreign bodies'

A-644 08:30
Chairperson's introduction
M. Pezzullo; Brussels/Belgium

Session Objectives:
1. To be familiar with names and image characteristics of commonly used surgical, and orthopaedic devices and materials.
2. To learn their proper positioning and early signs of postoperative complications.
3. To understand the imaging pathway in management of ingested foreign bodies.
A-645 08:35  
A. Surgical and orthopaedic devices: are they really properly positioned?  
E. Dick; London/UK  

Learning Objectives:  
1. To become familiar with different types of commonly used surgical, neurosurgical and orthopaedic devices in clinical practice.  
2. To understand how to evaluate their proper positioning.  
3. To be familiar with imaging signs of incorrect implementation of neurosurgical and orthopaedic devices.

A-646 09:00  
B. Foreign bodies in the gastrointestinal tract: the role of radiographs, US and CT  
J.B.C.M. Puylaert; The Hague/NL  

Learning Objectives:  
1. To be familiar with characteristics of commonly ingested abdominal foreign bodies.  
2. To understand which imaging modalities are best suited for detection of foreign bodies in different clinical scenarios.  
3. To recognise the first signs of early complications resulting from ingested abdominal foreign bodies.

A-647 09:25  
C. Body packing: what to know about imaging and when should we suspect early complications?  
M.K. Scherr; Munich/DE  

Learning Objectives:  
1. To be familiar with the phenomenon of drug smuggling by body packing and its medical/legal issues.  
2. To learn about imaging modalities and their limitations in case of body packing and variants.  
3. To recognise potential or manifested complications in body packing.

Panel discussion: Common language with clinicians: how to report 'foreign bodies' presence 09:50

08:30 - 10:00  Room D  
Special Focus Session  
SF 13b  
Paediatric MRI: can we make gadolinium superfluous?  

A-648 08:30  
Chairperson's introduction  
M. Alison; Paris/FR  

Session Objectives:  
1. To learn about the risk of gadolinium injection in paediatric patient.  
2. To learn about the alternative sequences to study vessels or perfusion.  
3. To appreciate the indication of intravenous gadolinium in common paediatric diseases.

A-649 08:35  
Safety issues of intravenous gadolinium in children  
F.E. Avni; Lille/FR  

Learning Objectives:  
1. To learn about the existing literature on potential side effects of intravenous contrast in children.  
2. To understand how underlying conditions may influence the risk for side effects.  
3. To discuss the implications of the new knowledge for clinical practice in paediatric radiology.

A-650 08:53  
The role of intravenous gadolinium in paediatric oncology  
P.D. Humphries; London/UK  

Learning Objectives:  
1. To learn about the existing literature on the usefulness of intravenous MRI contrast in paediatric oncology.  
2. To understand how protocols can be optimised to avoid the use of intravenous gadolinium in the diagnosis and follow-up of children with cancer.  
3. To discuss how non-enhanced MRI sequences could replace gadolinium-enhanced sequences.

A-651 09:11  
Assessment of musculoskeletal disorders: when is intravenous gadolinium necessary?  
M. Maas; Amsterdam/NL  

Learning Objectives:  
1. To discuss what are the indications of gadolinium injection in musculoskeletal disorders.  
2. To understand how novel techniques may replace intravenous gadolinium-enhanced sequences for some indication (i.e. depiction of synovitis or ischaemia).  
3. To discuss current knowledge and future potential of non-enhanced MRI techniques in detecting and grading of synovitis.

A-652 09:29  
Brain imaging: when is intravenous gadolinium necessary?  
K. Karli Oguz; Ankara/TR  

Learning Objectives:  
1. To learn about the indications of intravenous gadolinium for brain imaging.  
2. To understand the role of non-enhanced sequences for brain vascular imaging.  
3. To understand the role of non-enhanced sequences for brain perfusion imaging.

Panel discussion: How can we reduce our use of intravenous gadolinium in children? 09:47

08:30 - 10:00  Room G  
Physics in Medical Imaging  
RC 1313  
Motion artefacts and their management in medical imaging  

A-653 08:30  
Chairperson's introduction  
T. Beyer; Vienna/AT  

Session Objectives:  
1. To learn about the origins of motion management in medical imaging.  
2. To understand motion-related artefacts in medical imaging.  
3. To learn about solutions and work-arounds.

A-654 08:35  
A. Managing motion in CT: conventional approaches and motion compensating techniques  
M. Kachelriess; Heidelberg/DE  

Learning Objectives:  
1. To learn about conventional techniques for motion compensation in CT.  
2. To learn about new methods for motion compensation in CT.  
3. To contrast the available and up-and-coming motion compensation methods in CT.
Postgraduate Educational Programme

A-655 08:58
B. Managing motion in cone-beam CT (CBCT): conventional approaches and motion compensating techniques
P. Payyan; Baden−Dättwil/CH

Learning Objectives:
1. To learn about conventional techniques for motion compensation in CBCT.
2. To learn about new methods for motion compensation in CBCT.
3. To contrast the available and up-and-coming motion compensation methods in CBCT.

A-656 09:21
C. Motion compensation in MR and PET imaging
C. Kolbitsch; Berlin/DE

Learning Objectives:
1. To learn about motion measurement and compensation in MR.
2. To understand how patient motion affects PET images.
3. To learn about how MR data can be used to motion-compensate PET images, in MR/PET.

09:44
Panel discussion: How to optimise motion management in different imaging modalities?

08:30 - 10:00 Room K
Professional Challenges Session

PC 13
Closing the gap between education and clinical practice for radiographers

A-657/A-658 08:30
Chairpersons’ introduction
K.G. Vikestad1, M. Raissaki2; 1Oslo/NO, 2Iraklion/GR

Session Objectives:
1. To understand the need for updated methods of training radiographers in the context of modern technology.
2. To discuss existing differences and controversies in the education system and teaching methods.
3. To explore possible ways of collaboration between academic institutions and hospitals for optimal education.

A-659 08:35
Education vs clinical practice
A. Bjørnstad; Oslo/NO

Learning Objectives:
1. To understand the different perspectives of theoretical education and practical training of radiographers.
2. To appreciate means of rapid acquisition of clinical skills during education.
3. To discuss the possibility and potential of sub-specialisation during education.

A-660 08:58
How can new teaching methods be implemented?
E. Wolters van der Weij; Groningen/NL

Learning Objectives:
1. To understand the different pedagogical methods available for the education of radiographers.
2. To discuss the advantages and disadvantages of expert lectures for education.
3. To demonstrate how EBP can be integrated into the training curriculum.

A-661 09:21
Tools for success: academic and clinical practice working together
L.A. Rainford; Dublin/IE

Learning Objectives:
1. To emphasise variation of combined education and training among different academic institutions.
2. To explore collaboration between hospitals and universities for the preparation of radiographers.
3. To discuss how undergraduate research can enhance academic/c clinical relationships.

09:44
Panel discussion: What is the motivation for change?

08:30 - 10:00 Room M 1
Vascular

RC 1315
US and vascular disease: a perfect match

A-662 08:30
Chairperson’s introduction
T. Jarquejo; Lublin/PL

Session Objectives:
1. To review advantages and disadvantages of US.
2. To identify the role of imaging modalities in vascular disease.
3. To understand the role of US in post-treatment follow-up.

A-663 08:35
A. Abdominal aorta
D.A. Clevert; Munich/DE

Learning Objectives:
1. To learn how to perform the examination and its role in diagnostic assessment.
2. To understand US findings in AAA treatment planning and post-treatment evaluation.
3. To appreciate the role of CEUS and technological innovations in routine practice.

A-664 08:58
B. Upper and lower limb: arterial district
B. Brkljačić; Zagreb/HR

Learning Objectives:
1. To understand how to perform the examination and its role in diagnostic assessment.
2. To understand US findings for diagnosis and follow-up.
3. To underline tips and tricks to start your activity.

A-665 09:21
C. Upper and lower limb: venous district
H. Hoppe; Berne/CH

Learning Objectives:
1. To understand how to perform the examination and its role in diagnostic assessment.
2. To understand US findings for diagnosis and follow-up.
3. To underline tips and tricks to start your activity.

09:44
Panel discussion: When do we need additional imaging and which modality is best suited for the scenario?

08:30 - 10:00 Room M 2
E3 - ECR Master Class (Neuro)

E3 1326b
Stroke: emergent large vessel occlusion (ELVO)

Moderator:
M. Pavia; Brescia/IT

A-666 08:30
A. Selecting ELVO patients for endovascular therapy
T. van der Zijden; Antwerp/BE

Learning Objectives:
1. To learn about the correct indication/patient for endovascular therapy.
2. To understand the importance of clinical and neuroradiological work-up prior to the intervention.
3. To appreciate clinical relevance in terms of outcome measures applying state of the endovascular treatment for the right patient.
A-667 09:00
B. Advanced thrombectomy techniques
O. Jansen; Kiel/DE

Learning Objectives:
1. To learn about the spectrum of new and upcoming thrombectomy techniques.
2. To understand the importance of applying correct technique in individual patients.
3. To appreciate the increasing role of thrombectomy in ischaemic stroke therapy.

A-668 09:30
C. Is endovascular thrombectomy and medical therapy better than medical therapy alone?
S. Bisdas; London/UK

Learning Objectives:
1. To learn about the current data and medical evidence of the available therapies.
2. To understand the role of individualised therapy concepts.
3. To appreciate the importance of interdisciplinary approach for ischaemic stroke therapy.

SF 13c
Drug elution or drug illusion in vascular disease

A-669 08:30
Chairperson’s introduction
R.W. Günther; Berlin/DE

Session Objectives:
1. To learn more about drug elution and biological reaction.
2. To show the pros and cons of drug elution devices in coronaries, infrainguinal arteries and haemodialysis fistulas.
3. To critically analyse the published data and summarise the current evidence and indications regarding treatment.

A-670 08:35
Drug-eluting balloons and stents, technology and biological interaction: lessons learned from the coronaries
F. Kleber; Berlin/DE

Learning Objectives:
1. To learn about the individual components of drug-coated balloon catheters and their importance.
2. To summarise key messages from non-clinical studies with coronary balloons and stents.
3. To gain an overview of the key lessons from randomised clinical trials in coronary.

A-671 08:50
Drug-eluting balloons and stents in femoropopliteal and crural lesions: pro
F. Fanelli; Rome/IT

Learning Objectives:
1. To learn about the differences between the various drug-eluting platforms and medication.
2. To understand the difference between technical success, patency and clinical outcome in patients treated with endovascular technologies.
3. To understand the advantages of drug-eluting balloons and stents in femoropopliteal and crural lesions.
4. To learn which patients and which lesions derive the most benefit from their use.

A-672 09:10
Drug-eluting balloons and stents in femoropopliteal and crural lesions: contra
J.A. Reekers; Amsterdam/NL

Learning Objectives:
1. To understand the limitations of drug-eluting balloons and stents in femoropopliteal and crural lesions.
2. To be familiar with potential complications from their use.
3. To become familiar with a critical review of the current literature and to understand how marketing of new endovascular technologies works.

A-673 09:30
Effect of drug-eluting balloons and stents in haemodialysis access lesions: where is the evidence?
K. Katsanos; Patras/GR

Learning Objectives:
1. To understand the pathophysiology of restenosis and mode of failure of haemodialysis circuits.
2. To analyse amassed clinical evidence about drug-coated balloons and stents in haemodialysis fistulas.
3. To learn about the limitations of current drug-coated balloon technologies.

Panel discussion: Scientific evidence and consequences for daily practice

E³ - ECR Academies: Tips and Tricks in Pancreatic and GI Tract Imaging

E³ 1322
New challenges of pancreatitis

A-674 08:30
Chairperson’s introduction
G. Zamboni; Verona/IT

A-675 08:35
A. Understanding the Atlanta 2012 classification of acute pancreatitis
W. Schima; Vienna/AT

Learning Objectives:
1. To be aware of the new terminology for the evaluation of acute pancreatitis.
2. To learn about how to report imaging findings.
3. To understand the relationship between imaging findings and prognosis.

A-676 09:03
B. Autoimmune pancreatitis and its relatives
G. Morana; Treviso/IT

Learning Objectives:
1. To understand the various forms of autoimmune pancreatitis, especially cases that are associated with extra pancreatic disease.
2. To learn about the usual and unusual appearance of autoimmune pancreatitis.
3. To understand the principles of the follow-up.

A-677 09:31
C. Tough clinical cases of cystic pancreatic lesions
M.A. Bali; Sutton/UK

Learning Objectives:
1. To understand how to report a cystic pancreatic lesion, including recommendation for imaging strategy.
2. To become familiar with the most common cystic neoplasms of the pancreas.
3. To learn how to differentiate neoplasms and inflammatory cystic lesions of the pancreas.
Transatlantic Course of ESR and RSNA (Radiological Society of North America): Sports Imaging

TC 1328
Upper extremity sports injuries
Moderators:
L.W. Bancroft; Orlando, FL/US
A.J. Grainger; Leeds/UK

A-678 08:30
A. Shoulder injuries in the throwing athlete
L. Steinbach; San Francisco, CA/US

Learning Objectives:
1. To understand the biomechanics of throwing forces as they relate to the shoulder.
2. To become familiar with rotator cuff and labroligamentous injury patterns caused by overhead sports.
3. To appreciate pathologic and normal developmental changes in skeletally immature throwing athletes.

A-679 09:00
B. Soft tissue wrist injury in the athlete
C.W.A. Pfirrmann; Zurich/CH

Learning Objectives:
1. To learn about the patterns of injury seen at the wrist in athletes.
2. To understand the advantages and disadvantages of different modalities for imaging the athlete's wrist.
3. To recognise the imaging appearances of cartilage and ligamentous injury at the wrist.

A-680/A-681 09:30
C. Interactive case discussion
L. Steinbach1, C.W.A. Pfirrmann2; 1San Francisco, CA/US, 2Zurich/CH

Learning Objectives:
1. To appreciate common patterns of athletic injury in the shoulder and wrist.
2. To become familiar with the techniques available and imaging appearances of shoulder and wrist athletic injury.
3. To consolidate the knowledge gained from the session with interactive cases of upper limb athletic injury.

C 13
Why should radiologists care about IHE (Integrating the Healthcare Enterprise)?

A-994 08:30
Chairperson's introduction: IHE at a glance
P. Mildnerberger; Mainz/DE

Learning Objectives:
1. To become familiar with IHE’s initiative.
2. To understand the principles of IHE profiles.
3. To learn, how to influence the development of profiles and how to use them.

A-995 08:35
The IHE concept for structured reporting
E. Kotter; Freiburg/DE

Learning Objectives:
1. To become familiar with the concept of structured reporting.
2. To understand the principles of the profile on „Management of Radiology Reporting Templates“.
3. To learn about the opportunities for value-based radiology and research using MRRT.

A-996 08:42
The IHE concept for dose exposure management
A. Schroeder; Erlangen/DE

Learning Objectives:
1. To become familiar with the IHE profile on radiation exposure management (REM).
2. To understand the implementation and requirements of REM.
3. To learn about the potential for establishing dose registries and radiation protection.

A-997 08:48
P. Mildnerberger; Mainz/DE

Learning Objectives:
1. To become familiar with the IHE concept for eHealth networks, the IHE XDS world (Cross Enterprise Document Sharing).
2. To understand how IHE XDS could be used to connect with other physicians and patients.
3. To learn about the benefits and how to avoid the problems with patient-CDs or -DVDs.

Open forum discussion 08:55

E³ 1421
Brain tumours
A-682 10:30
A. Paediatric brain tumours
M.I. Argyropoulou; Ioannina/GR

Learning Objectives:
1. To become familiar with different paediatric brain tumours.
2. To learn the imaging criteria for differentiation.

A-683 11:15
B. Adult brain tumours
P.C. Maly Sundgren; Lund/SE

Learning Objectives:
1. To become familiar with the different types of brain tumours.
2. To learn the imaging criteria for differentiation.

ESR meets Portugal

EM 2
Discovering Portuguese radiology: past, present, future
Presiding:
F. Caseiro Alves; Coimbra/PT
B. Hamm; Berlin/DE

A-684 10:30
Introduction: SPRMN President address
F. Caseiro Alves; Coimbra/PT

Session Objectives:
1. To revisit the major Portuguese contribution for radiological sciences.
2. To provide a selection of present and future clinical research on imaging.
3. To explain and display the musical heritage through the Portuguese guitar.
A-685 10:35
Imaging biomarkers for diffuse liver disease
M.M. Franca, Porto/PT

Learning Objectives:
1. To understand the need for non-invasive imaging biomarkers to accurately detect and quantify hepatic steatosis, iron overload and fibrosis, in different diffuse liver diseases.
2. To review the different MR imaging techniques to evaluate and to quantify imaging biomarkers of liver steatosis, iron overload and fibrosis.
3. To discuss the role and clinical relevance of MR imaging biomarkers for the evaluation of diffuse liver diseases, in different clinical scenarios.

A-686 10:55
Prostate artery embolisation (PAE) for benign prostate obstruction (BPO): the paradigm shift
T. Bithlo; Lisbon/PT

Learning Objectives:
1. To learn about the anatomy of male pelvic arteries relevant for selective embolisation of the prostate.
2. To understand what imaging modalities can be used for guidance inside the pelvis to find the prostate arteries.
3. To become familiar with clinical outcome and predictors of treatment response after prostate artery embolisation.

A-687 11:15
Cardiac CT from anatomy to functional information: comprehensive CAD evaluation
H. Marques; Lisbon/PT

Learning Objectives:
1. To learn and understand the different anatomic information regarding CAD derived from coronary CTA and its prognostic relevance.
2. To review different cardiac CT techniques to access functional relevance from anatomic stenosis and its clinical evidence.
3. To integrate cardiac CT derived data for a comprehensive CAD evaluation.

A-688 11:35
The soul of Portugal: Facts and sounds of the Portuguese guitar
F. Caseiro Alves, B. Costa, R. Silva, N. Botelho; Coimbra/PT

10:30 - 12:00
Room O

TF - Radiology Trainees Forum

Highlighted Lectures

Moderators:
Z. Snoj; Ljubljana/SI
T.G. Teneva; Varna/BG

A-689 10:30
Routine cartilage evaluation and novel approaches
V. Salapura; Ljubljana/SI

Learning Objectives:
1. To learn about normal cartilage morphology and structure.
2. To understand the principles of cartilage imaging.
3. To learn about standard imaging techniques of cartilage.
4. To investigate novel approaches to cartilage imaging.

A-690 11:00
Non-occlusive mesenteric ischaemia: CT diagnosis and signs of reperfusion
M. Mazzeo; Siena/IT

Learning Objectives:
1. To investigate imaging/pathological and experimental model correlation in NOMI with and without reperfusion.
2. To gain awareness about the CT findings of NOMI with and without a reperfusion event.
3. To learn where to look for reperfusion signs.
4. To understand the potential clinical impact of imaging in treatment planning.

A-691 11:30
Imaging of paediatric gastrointestinal emergencies
D. Baleva; Mistelbach/AT

Learning Objectives:
1. To discuss the relevant imaging approach and modalities in the setting of acute gastrointestinal pathology.
2. To review the imaging findings in the most common and important emergencies of the paediatric GIT.
3. To specially emphasise upon the typical clinical setting of the different entities.

10:30 - 12:00
Room L 8

ESR Patient Advisory Group (ESR-PAG)

PA 1
Patient-doctor relationship and interdisciplinary communication in the radiology department

A-692/A-693 10:30
Chairpersons’ introduction
N. Bedlington; M.H. Fuchsberger; Vienna/AT, Graz/AT

Session Objectives:
1. To understand the patient-doctor relationship and influencing factors, as well as how to improve the relationship.
2. To learn basic principles of communication between the patient and the radiologist or radiographer, as well as the impacts of good and bad communication.

A-694 10:40
A radiologist’s point of view
D.-G. Carrié; Toulouse/FR

Learning Objectives:
1. To understand the patient-doctor relationship from a radiologist’s view.
2. To learn about effective communication and how to avoid miscommunication and misunderstanding.
3. To understand the impact of good communication strategies for the patient’s journey.

A-695 10:55
A radiographer’s point of view
B.T. Andersson; Lund/SE

Learning Objectives:
1. To understand the patient-doctor relationship from a radiographer’s view.
2. To learn about effective communication and how to avoid miscommunication and misunderstanding.
3. To understand the impact of good communication strategies for the patient’s journey.

A-696/A-697 11:10
Patients’ point of view
J. Birch; D. Walsh; Poole/UK, Dublin/IE

Learning Objectives:
1. To understand the patient-doctor relationship from patients’ view.
2. To learn about effective communication and useful information for patients.
3. To learn that an overload of information is equally detrimental to a safe feeling as no information.

A-698 11:30
The radiologist as a patient
R. Stern Padovan; Zagreb/HR

Learning Objectives:
1. To understand the patient-doctor relationship from patients’ view.
2. To learn about effective communication and useful information for patients.
3. To learn that an overload of information is equally detrimental to a safe feeling as no information.

11:40
Panel discussion: How can we improve communication in the department and avoid misunderstanding?

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10:30 - 12:00 Room F1

E³ - European Diploma Prep Session

E³ 1423
Head and neck

A-699 10:30
Chairperson’s introduction
M.G. Mack; Munich/DE

Session Objectives:
1. To become familiar with the anatomy and imaging presentation of the most common disorders of the temporal bone and skull base.
2. To understand the imaging presentation of common inflammatory and neoplastic disorders of the nose, paranasal sinuses and nasopharynx.
3. To describe the typical imaging features of the most common neoplastic disorders of the oral cavity, oropharynx, hypopharynx and larynx.

A-700 10:36
A. Temporal bone and skull base
A. Trojanowska; Lublin/PL

Learning Objectives:
1. To differentiate the anatomy, normal variants and congenital disorders of the temporal bone.
2. To understand the causes and imaging features of hearing and vestibular disorders.
3. To describe the imaging presentation of the most common tumours of the skull base.

A-701 11:04
B. Nose, paranasal sinuses and nasopharynx
C. Czerny; Vienna/AT

Learning Objectives:
1. To describe the anatomy and normal variants of the nose, paranasal sinuses and nasopharynx.
2. To differentiate the imaging features of acute and chronic inflammatory changes of the nose and paranasal sinuses.
3. To understand the imaging features of benign and malignant tumours of the nose, paranasal sinuses and nasopharynx.

A-702 11:32
C. Oral cavity, oro- and hypopharynx and larynx
M. Becker; Geneva/CH

Learning Objectives:
1. To describe the normal imaging anatomy of the oral cavity, oropharynx, hypopharynx and larynx.
2. To understand the imaging features of tumours of the oral cavity and oropharynx.
3. To describe the imaging features of tumours of the hypopharynx.
4. To understand the imaging features of tumours of the larynx.

10:30 - 12:00 Room M 4

E³ - ECR Academies: Tips and Tricks in Pancreatic and GI Tract Imaging

E³ 1422
Pancreatic tumours

A-703 10:30
Chairperson’s introduction
R. Pozzi-Mucelli; Verona/IT

A-704 10:35
A. Staging adenocarcinoma
N. Kartalis; Stockholm/SE

Learning Objectives:
1. To understand the rationale behind local staging of pancreatic adenocarcinoma.
2. To learn about the respective role of CT, MRI and PET/CT.
3. To become familiar with the principle of postoperative follow-up.

A-705 11:03
B. Neuroendocrine tumours
R. Manfredi; Rome/IT

Learning Objectives:
1. To understand the basics of histological classification of neuroendocrine tumours.
2. To learn about the natural history of these tumours.
3. To become familiar with the usual appearance and imaging specificities of neuroendocrine tumours.

A-706 11:31
C. Tough clinical cases
T.C. Lauenstein; Essen/DE

Learning Objectives:
1. To be able to define diagnostic probabilities when facing an unknown case of solid mass in the pancreas.
2. To understand the role of multimodality approach, including endosonography and biopsy.

10:30 - 12:00 Room M 5

Transatlantic Course of ESR and RSNA (Radiological Society of North America): Sports Imaging

TC 1428
Lower extremity sports injuries

Moderators:
L.W. Bancroft; Orlando, FL/US
A.J. Grainger; Leeds/UK

A-707 10:30
A. Sports-related injuries of the knee: what does the orthopaedic surgeon need to know?
T.T. Miller; New York, NY/US

Learning Objectives:
1. To learn about what to include in knee MRI dictation templates.
2. To understand the most common sports-related injury patterns in the knee.
3. To appreciate which specific orthopedic indications should prompt additional information in the dictation.

A-708 11:00
B. Multimodality imaging of foot and ankle injuries in the athlete
A.J. Grainger; Leeds/UK

Learning Objectives:
1. To appreciate the different and often contributory roles that imaging modalities have in the foot and ankle.
2. To recognise the most common ligamentous and tendon injuries in the ankle.
3. To understand how common patterns of injury relate to the mechanisms involved.

A-709/A-710 11:30
C. Interactive case discussion
T.T. Miller1, A.J. Grainger2; 1New York, NY/US, 2Leeds/UK

Learning Objectives:
1. To appreciate common patterns of athletic injury in the knee.
2. To become familiar with the techniques available and imaging appearances of knee, foot and ankle athletic injury.
3. To consolidate the knowledge gained from the session with interactive cases of lower limb athletic injury.
12:15 - 12:45 Room A

Headline Session

HL 3
Josef Lissner Honorary Lecture
Presiding:
B. Hamm; Berlin/DE

A-714 12:15
Human papilloma virus and head and neck cancer: the new face of malignancy
A. Trojanowska; Lublin/PL

Learning Objectives:
1. To describe the behavior of human papilloma virus.
2. To understand the specific biology and imaging features of HPV - positive cancer of the head and neck.
3. To become familiar with effective diagnostic imaging procedures, treatment and follow-up of these tumour.

12:30 - 13:30 Room C

E³ - The Beauty of Basic Knowledge: Cardiovascular and Interventional Radiology

E³ 24D
CT of the heart made easy
Moderator:
C. Loewe; Vienna/AT

A-718 12:30
Cardiovascular risk estimation made easy: CA-scoring
R. Vliegenthart; Groningen/NL

Learning Objectives:
1. To learn about importance of risk estimation in coronary artery disease.
2. To understand the principle of CA-scoring quantification.
3. To appreciate the value of “zero calcium” as well as of “high calcium”.

A-719 13:00
Non-invasive coronary (CT) angiography made easy
F. Bamberg; Tübingen/DE

Learning Objectives:
1. To learn about optimised examination technique of non-invasive coronary CT angiography.
2. To understand the need for structured approach to coronary CT angiography.
3. To appreciate clinical value of non-invasive coronary CT angiography.

12:30 - 13:30 Room D

E³ - The Beauty of Basic Knowledge: A Survival Guide to Musculoskeletal Imaging

E³ 25D
Acute trauma: patterns in the peripheral skeleton
Moderator:
V.N. Cassar-Pullicino; Oswestry/UK

A-720 12:30
Acute trauma: patterns in the peripheral skeleton
J. Teh; Oxford/UK

Learning Objectives:
1. To become familiar with the imaging manifestations of common important injuries in the upper and lower limb.
2. To understand the underlying mechanism that result in combination of injuries.
3. To learn how to best employ imaging modalities in their diagnosis.

12:30 - 13:45 Room M 1

New Horizons Session

NH 14
The new horizon for radiology

A-721/A-722 12:30
Chairpersons’ introduction

Session Objectives:
1. To become familiar with the challenges and opportunities of artificial intelligence.
2. To become familiar with the Department of Diagnostics of the future.
3. To learn from experts how to organise integrated diagnostics.
4. To learn about integrated diagnostics from the European and American experience.

A-723 12:35
What will the radiologist’s job look like in 2025?
W. Kim; Los Angeles, CA/US

Learning Objectives:
1. To appreciate why some radiologists fear artificial intelligence (AI).
2. To learn about the role AI can play beyond interpretation of images.
3. To learn about how AI can augment radiologists and what we can do to maximise its positive potential.

A-724 12:50
Transforming the integrated diagnosis (ID) opportunity into the Diagnostic Institute (DI) innovative change management
P. Ros; Cleveland, OH/US

Learning Objectives:
1. To learn the concept of integrated diagnosis (ID) combining the practices of radiology, pathology and genomics into an innovative diagnostic tool.
2. To understand how the computational resolution provides the technology basis for the cross-disciplinary implementation of ID.
3. To share the early experience of first Diagnostic Institute established in a large Academic Health System in the US in 2017.

A-725 13:05
Medical imaging and clinical laboratories: a fruitful liaison
J.E. Wildberger; Maastricht/NL

Learning Objectives:
1. To understand why we should cluster the entire diagnostic chain.
2. To learn how "unity in diversity" can be achieved in a clinical setting.
3. To become familiar with the opportunities of this approach for bioinformatics, data sciences and artificial intelligence.

12:00 - 13:00 Room Coffee & Talk

Coffee & Talk (open forum)

C 8
Radiation protection of patients and staff in fluoroscopy-guided interventions

A-711 12:00
Chairperson's introduction
W.R. Jaschke; Innsbruck/AT

Learning Objectives:
1. To learn basic standards for radiation protection in fluoroscopy-guided interventions (FGI).
2. To understand that optimising procedures and imaging protocols is important for radiation safety.
3. To learn about the opportunities of this approach for bioinformatics, data sciences and artificial intelligence.

A-712 12:05
Radiation protection in the era of artificial intelligence
A. Kueppers; Berlin/DE

Learning Objectives:
1. To learn about the role of AI in radiation protection.
2. To understand the challenges and opportunities of integrating AI in radiation protection.

A-713 12:10
Radiation protection in images of the future
A. Liedtke; Heidelberg/DE

Learning Objectives:
1. To learn about the impact of technological advancements on radiation protection.
2. To understand the role of imaging modalities in the future.
12:05 | Postgraduate Educational Programme | A-712
Dose management in angio suites: the dos and don'ts
E. Vaño; Madrid/ES

Learning Objectives:
1. To learn how to estimate dose to patients and staff in angio suites.
2. To understand the role of real time dosimetry for radiation protection of patients and staff.
3. To learn how to implement a radiation protection culture.

12:15 | A-713
Radiation protection of staff: apparel and shielding
G. Barta; Kfar-Saba/IL

Learning Objectives:
1. To learn about radiation protection apparel and shielding.
2. To learn how to use ceiling mounted glass shields, table drapes and mobile protection tools.
3. To understand that good practice in planning and performing procedures is a very powerful radiation protection tool.

12:25 | Open forum discussion

13:00 - 14:00 | Room Coffee & Talk

Coffee & Talk (open forum)

C 12
Scaling up IT infrastructure in imaging departments: learn from the 1st DIAM Stage 6 awarded hospital
Moderator: P. Mildenberger; Mainz/DE

A-730 13:30
Setting the scene: ESR’s support in planning and implementing imaging IT
B. Brkljačić; Zagreb/HR

A-733 13:35
The Digital Imaging Adoption Model (DIAM) in brief
J. Studzinski; Leipzig/DE

A-734 13:40
IT development in radiology: how to use DIAM for strategic planning
P. Mildenberger; Mainz/DE

A-1001 13:45
Our experience: King Abdulaziz Medical City Riyadh; DIAM Stage 6 Hospital
N.N.

A-728 13:50
Handover of ESR „Letter of Recognition“
B. Brkljačić; Zagreb/HR

13:55 | Open forum discussion

14:00 - 15:30 | Room A

E³ - ECR Academies: Interactive Teaching Sessions for Young (and not so Young) Radiologists

E³ 1521
Paediatric radiology for the general radiologist

A-731 14:00
A. Fractures in children
K.J. Johnson; Birmingham/UK

Learning Objectives:
1. To become familiar with different traumatic fracture types.
2. To identify possible criteria for child abuse.

A-732 14:15
B. Typical MRI applications in paediatric musculoskeletal imaging
K. Rosendahl; Bergen/NO

Learning Objectives:
1. To learn indications of paediatric MRI.
2. To become familiar with MR imaging findings in children.

14:00 - 15:30 | Room B

Professional Challenges Session

PC 15
Artificial intelligence and big data in medical imaging

A-733 14:00
Chairperson's introduction
W.J. Niessen; Rotterdam/NL

Session Objectives:
1. To learn about the disruptive role that big data and artificial intelligence can play in medical imaging.
2. To appreciate that these technologies are key to realise the full potential of precision medicine.
3. To appreciate where the big challenges and opportunities are.

A-734 14:15
IT infrastructure, data sharing methods and data analysis aspects
A. Alberich-Bayarri; Valencia/ES

Learning Objectives:
1. To understand the importance of creating IT infrastructures for the management of quantitative medical image analysis solutions, both for research and clinical applications.
2. To become familiar with the main storage and computational requirements for high performance infrastructures.
3. To learn about how to move from research to clinical application in the field of quantitative imaging and biomarkers.

A-735 14:40
Machine learning in the biomedical domain: challenges and opportunities
M. de Bruijne; Rotterdam/NL

Learning Objectives:
1. To learn about machine learning concepts used for diagnosis, prognosis, and quantitative analysis of medical imaging data.
2. To understand the challenges to introduce these techniques in clinical practice.
3. To appreciate the potential of machine learning in radiology.

A-736 15:05
How will AI change radiology
K.J. Dreyer; Boston, MA/US

Learning Objectives:
1. To learn about the current big data and AI initiatives.
2. To discuss the current stage and future of AI in radiology.
3. To discuss the role of the radiologist/radiology department in the AI era.
E³ 1526a
Patterns of pulmonary toxicity
Moderator: J.E. Roos; Lucerne/CH

A-737 14:00
A. Drug-induced lung disease
C.M. Schaefer-Prokop; Amersfoort/NL

Learning Objectives:
1. To learn about the various CT patterns of lung injury.
2. To understand the role of imaging in their recognition.
3. To discuss differential diagnoses.

A-738 14:30
B. Smoking-related lung disease
S.R. Desai; London/UK

Learning Objectives:
1. To learn about the classification of smoking-related lung diseases.
2. To understand the most common CT patterns.
3. To highlight newly recognised entities.

A-739 15:00
C. Inhalation lung injury beyond smoking
J.A. Verschakelen; Leuven/BE

Learning Objectives:
1. To learn about the various causes of environmental lung diseases.
2. To understand the changes related to acute lung injury.
3. To describe the long-term sequelae of inhalation lung injury.

14:00 - 15:30 Room C
E³ - ECR Master Class (Chest)

Special Focus Session
SF 15a
Hybrid imaging in oncology

A-740 14:00
Chairperson's introduction
M.E. Mayerhöfer; Vienna/AT

Session Objectives:
1. To identify key clinical applications for hybrid imaging in oncology.
2. To compare PET/CT and MR/PET for tumour detection, staging and restaging.
3. To discuss the use of established and novel radiotracers and functional MR sequences for tumour characterisation and treatment response assessment.

A-741 14:05
Role of hybrid imaging in thoracic malignancies
G. Cook; London/UK

Learning Objectives:
1. To become familiar with the PET tracers used in thoracic malignancies.
2. To learn the interpretation of PET/CT in lung cancer, mesothelioma, and neuroendocrine tumours of the lungs.
3. To discuss the possible benefits of tumour heterogeneity assessment on hybrid imaging.

A-742 14:23
Prostate cancer: the „killer application“ for MR/PET?
M.R. Makowski; Berlin/DE

Learning Objectives:
1. To learn pelvic MR/PET acquisition protocols, normal anatomy, and pitfalls.
2. To become familiar with interpretation of MR/PET in the settings of prostate cancer.
3. To understand strengths and weaknesses of MR/PET applied to prostate cancer.

A-743 14:41
MR/PET of breast tumours
K. Pinker-Domenig; Vienna/AT

Learning Objectives:
1. To understand the principle of multimodality multiparametric functional imaging of breast tumours with MR/PET.
2. To identify the potential and challenges of multiparametric breast MR/PET using different quantitative functional parameters.
3. To realise the potential of novel tracers for personalised medicine.

A-744 14:59
MR/PET of pelvic cancers
P.R. Ros; Cleveland, OH/US

Learning Objectives:
1. To learn pelvic MR/PET acquisition protocols, normal anatomy, and pitfalls.
2. To become familiar with interpretation of MR/PET in the settings of pelvic cancers.
3. To understand strengths and weaknesses of MR/PET applied to pelvic cancers.

15:17
Panel discussion: Does the multiparametric approach have a clinical benefit?

14:00 - 15:30 Room N
Cardiac

RC 1503
What a radiologist needs to know about imaging of myocardial viability

A-745 14:00
Chairperson's introduction
C. Peebles; Southampton/UK

Session Objectives:
1. To understand what viability means.
2. To understand current state-of-the-art knowledge about the principle of viability.
3. To understand shortcomings of echo and SPECT compared to other techniques.

A-746 14:05
A. MRI
J. Bogaert; Leuven/BE

Learning Objectives:
1. To learn about how MR should be performed to assess viability.
2. To understand the strength and weaknesses of MR compared to other techniques.
3. To learn how to report MRI for viability assessment.

A-747 14:28
B. Hybrid imaging
O. Ratib; Geneva/CH

Learning Objectives:
1. To learn about how hybrid imaging should be performed to assess viability.
2. To understand the strength and weaknesses of hybrid imaging compared to other techniques.
3. To understand how hybrid imaging could be developed in clinical practice.

A-748 14:51
C. CT
F. Bamberg; Tübingen/DE

Learning Objectives:
1. To learn about the potential of CT to assess viability.
2. To understand the strength and weaknesses of CT imaging compared to other techniques.
3. To understand how to report CT for viability assessment.

15:14
Panel discussion: What imaging test in which patient?
**Overview of Session: E3 - ECR Master Class (Genitourinary)**

**E3 1526b**

**Update on functional genitourinary MRI**

**Moderator:** M. Studniarek; Gdansk/PL

**A-749 14:00**

**A. Kidney**

N. Grenier; Bordeaux/FR

**Learning Objectives:**
1. To learn about the renal physiology and the pharmacokinetics of contrast agents.
2. To understand the clinical and imaging features of renal disorders.
3. To appreciate the incremental value of functional imaging in differential diagnosis.

**A-750 14:30**

**B. Prostate**

G.M. Villeirs; Ghent/BE

**Learning Objectives:**
1. To understand the clinical and imaging features of prostatic disorders.
2. To appreciate the incremental value of functional imaging in differential diagnosis.
3. To become familiar with MRI-guided prostate biopsies.

**A-751 15:00**

**C. Uterus**

E. Sala; Cambridge/UK

**Learning Objectives:**
1. To understand the clinical and imaging features of uterine disorders.
2. To appreciate the incremental value of functional imaging in differential diagnosis.
3. To learn about the imaging features of the treated uterus.

**SF 15b**

**Contrast-enhanced spectral mammography**

**A-752 14:00**

**Chairperson’s introduction**

A. Athanasiou; Athens/GR

**Session Objectives:**
1. To understand the technical principles of contrast-enhanced spectral mammography.
2. To be familiar with the current indications in clinical practice and current published data on overall performance of contrast-enhanced spectral mammography.
3. To appreciate future perspectives in screening and diagnostics setting.

**A-753 14:05**

**Technique and comparative approaches**

M.B.I. Lobbes; Maastricht/NL

**Learning Objectives:**
1. To understand the technical considerations of contrast-enhanced spectral mammography.
2. To be familiar with the pitfalls and limitations of the technique.
3. To have an overview of different comparative approaches.

**SF 15c**

**My three top tips for neuroimaging**

**A-756 14:00**

**Chairperson’s introduction**

J. Van Goethem; Antwerp/BE

**Session Objectives:**
1. To learn practical tips and tricks usable in daily neuroimaging practice.
2. To avoid common pitfalls in neuroimaging.
3. To learn how to tackle common diagnostic problems in neuroimaging.

**A-757 14:05**

**Leukodystrophies**

B. Ertl-Wagner; Munich/DE

**Learning Objectives:**
1. To learn about imaging protocols for the diagnostic evaluation of leukodystrophies.
2. To become familiar with typical imaging patterns of the most common leukodystrophies.
3. To gather an understanding of typical pitfalls in imaging leukodystrophies.

**A-758 14:11**

**Hydrocephalus**

S. Kumar; Singapore/SG

**Learning Objectives:**
1. To learn to distinguish communicating from non-communicating hydrocephalus.
2. To identify the DESH pattern of chronic communicating hydrocephalus.
3. To discern ventricular dilatation due to atrophy from chronic communicating hydrocephalus.
Acute ischaemic stroke  
P.M. Parizel; Antwerp/BE

**Learning Objectives:**
1. To learn how to recognise acute infarct on NECT.
2. To know when to use advanced imaging in acute stroke.
3. To learn the indications for thrombectomy depending on NECT findings.

Low back pain  
M. Muto; Naples/IT

**Learning Objectives:**
1. To learn how to match clinical and imaging findings.
2. To understand how to use multimodality imaging in evaluating low back pain.
3. To learn the possibilities of percutaneous treatments in low back pain.

Movement disorders  
T.A. Yousry; London/UK

**Learning Objectives:**
1. To be able to categorise movement disorders.
2. To know the value of MRI in movement disorders.
3. To learn how to differentiate different entities causing movement disorders.

Dementia  
S. Haller; Carouge/CH

**Learning Objectives:**
1. To understand how ASL might improve confidence of diagnosing dementia, notably at early stages.
2. To understand how SWI might contribute to the diagnosis of dementia with Lewy bodies.
3. To understand that in many cases dementia has mixed degenerative and vascular pathology.

Multiple sclerosis  
A. Rovira-Cañellas; Barcelona/ES

**Learning Objectives:**
1. To know the recommended brain and spinal cord MRI protocol in multiple sclerosis.
2. To be familiar with the typical radiological features of multiple sclerosis.
3. To learn how to use MRI for monitoring and predicting treatment response in multiple sclerosis.

Non-enhancing brain tumours  
M. Smits; Rotterdam/NL

**Learning Objectives:**
1. To learn the differential diagnosis of non-enhancing brain tumours.
2. To learn the added value of advanced imaging techniques in non-enhancing brain tumours.
3. To learn the most important pitfalls in assessing non-enhancing brain tumours.

Ring-enhancing brain lesions  
M.M. Thurnher; Vienna/AT

**Learning Objectives:**
1. To know the top differential diagnosis of ring-enhancing lesions.
2. To recognise less common pathology giving rise to ring-enhancing lesions.
3. To understand the value of advanced imaging in ring-enhancing lesions.

Assessment of tumour response/progression  
P.C. Maly Sundgren; Lund/SE

**Learning Objectives:**
1. To understand the importance of appropriate clinical information to be able to comment on response or progression.
2. To understand the indications for diffusion and perfusion imaging in assessing response or progression.
3. To be able to discuss the value of advanced imaging in the assessment of response or tumour progression.

Questions and discussion  

Gynaecological and obstetrics

Chairperson's introduction  
K. Kinkel; Chêne-Bougeries/CH

**Session Objectives:**
1. To understand the imaging presentation of the most common benign and malignant disorders of the uterus.
2. To become familiar with inflammatory and neoplastic disorders of the adnexa.
3. To understand the principles of foetal images and the imaging presentation of the most common foetal disorders.

A. Imaging of the uterus  
R.A. Kubik-Huch; Baden/CH

**Learning Objectives:**
1. To comprehend the imaging anatomy of the uterus and its changes throughout life and during pregnancy.
2. To understand typical imaging features and the local imaging-based staging of cervical cancer.
3. To become familiar with the typical imaging features of benign disorders of the uterus, especially uterine leiomyomas, adenomyosis and endometriosis.

B. Disorders of the adnexa  
T.M. Cunha, M. Horta; Lisbon/PT

**Learning Objectives:**
1. To describe the imaging features of benign tumours of the ovaries.
2. To understand the diagnostic evaluation and imaging features of malignant tumours of the ovaries.
3. To explain the imaging features of inflammatory disorders of the Fallopian tubes.

C. Fundamentals of foetal imaging  
D. Prayer; Vienna/AT

**Learning Objectives:**
1. To describe the methodology and technical principles of foetal MR imaging.
2. To understand the imaging presentation of common pathologies of the foetal central nervous system.
3. To understand the imaging presentation of common pathologies of the foetal body.
Joint Session of the ESR and EU Commission

ESR/EU

eHealth in radiology: policies, practices, pitfalls, potential

A-771 14:00
Chairperson’s introduction
K. Riklund; Umea/SE

Session Objectives:
1. To learn about the ESR’s eHealth policy positions, initiatives and tools.
2. To understand the European Union’s eHealth policies.
3. To understand the complementarity of and tensions between eHealth policy and practice.
4. To learn about the present status and future outlook for eHealth in radiology from the policy makers’ and practitioners’ perspectives.

A-772 14:05
ESR eHealth SC and eHealth policy positions
E. Neri; Pisa/IT

Learning Objectives:
1. To learn about the ESR eHealth SC activities.
2. To understand the role of eHealth tools within radiology.
3. To learn about the ESR policy positions on eHealth issues.

A-773 14:20
EU Strategy for Digital Transformation of Health and Care
T. Piha; Brussels/EU

Learning Objectives:
1. To learn about the EU’s eHealth policies.
2. To understand the EU Digital Single Market Strategy.
3. To understand how EU policies impact radiology.

A-774 14:35
Member States Joint Action on eHealth
C.M. Auer; Vienna/AT

Learning Objectives:
1. To learn about the EU Member States Joint Action on eHealth.
2. To understand the links between European Commission and Member State eHealth activities.

A-775 14:45
ESR eHealth tools
B. Brkljačić; Zagreb/HR

Learning Objectives:
1. To learn about the ESR’s clinical decision support initiative ESR iGuide.
2. To learn about the ESR-RSNA cooperation regarding structured reporting.
3. To understand how the ESR views the use of eHealth tools in clinical practice.

A-776 14:55
ESR-HIMSS Digital Imaging Adoption Model
J. Studzinski; Leipzig/DE

Learning Objectives:
1. To understand the concept of the Digital Imaging Adoption Model (DIAM).
2. To learn about the benefits in participating in the DIAM.
3. To learn about the DIAM stages, survey and certification.

A-777 15:05
Patient perspective on EU eHealth policies
N. Bedlington; Vienna/AT

Learning Objectives:
1. To learn about the ESR-PAG view of eHealth policy in the EU.
2. To understand how patients can benefit from eHealth tools.
3. To learn about concerns about the adoption of eHealth from the patient’s view.

15:15
Panel discussion: The role of medical societies in implementing EU eHealth policy
Physics in Medical Imaging

RC 1513
Dose reduction and image quality implications of iterative image reconstruction in CT

A-782 14:00
Chairperson's introduction
K.N. Bolstad; Bergen/NO

Session Objectives:
1. To learn about the origins of dose reduction using iterative image reconstruction in CT.
2. To understand dose reduction using iterative image reconstruction in CT.
3. To learn about solutions and workarounds.

A-783 14:05
A. Basics of iterative image reconstruction in CT
M. Kortesniemi; Helsinki/FI

Learning Objectives:
1. To learn about the basic aspects of iterative reconstruction.
2. To learn about potential dose reduction via iterative reconstruction.
3. To compare iterative reconstruction with other techniques.

A-784 14:28
B. Iterative image reconstruction in clinical practice (dos and don'ts)
H. Alkadhi; Zurich/CH

Learning Objectives:
1. To understand the radiologist’s requirements for image reconstruction.
2. To learn about current best practice in image reconstruction for clinical CT.
3. To learn about the potential benefits and pitfalls of using iterative reconstruction in clinical CT.

A-785 14:51
C. Image quality assessment of iterative reconstruction: pitfalls and future directions
E. Same; Durham, NC/US

Learning Objectives:
1. To learn about basic image quality metrics employed in CT.
2. To understand why image quality assessment is difficult with iterative reconstruction.
3. To learn about up-and-coming methods for image quality assessment.

15:14
Panel discussion: How low can we go?

14:00 - 15:30 Room K

EFRS Workshop

EFRS WS
Making the most of social media

A-786 14:00
Chairperson's introduction: Social media in healthcare
J. McNulty; Dublin/IE

Session Objectives:
1. To consider the wide range of use of social media in healthcare, healthcare education, and research.
2. To highlight the importance of all health professionals being aware of best practice in professional social media use.

14:00 - 15:30 Room G

A-787 14:05
Enhancing communication and collaboration through social media
M.J. Diaz Candamio; Ferrol/ES

Learning Objectives:
1. To explore how social media allows us to enhance communication and collaboration between colleagues and patients.
2. To consider the importance of establishing clear guidance on the use of social media for radiologists and radiographers.
3. To gain some top tips on the dos and don’ts of professional social media use.

A-788 14:20
#MedRadJClub: a Twitter journal club
N.H. Woznitzka; London/UK

Learning Objectives:
1. To understand how Twitter can be used as an alternative to face to face journal clubs.
2. To learn how #MedRadJClub works, what it offers over conventional journals clubs, and why radiographers should participate.
3. To appreciate the impact of #MedRadJClub.

A-789 14:35
The value of social media to professional societies
E. Alfayate Saez1, M.A. de la Cámara Egea2, N.I. Vega de Andrea3; 1Madrid/ES, 2Jaen/ES, 3Girona/ES

Learning Objectives:
1. To learn why a young professional society has developed a major social media presence.
2. To appreciate what is required for a professional society to develop a successful approach to using social media.
3. To understand the value of social media to societies for their members and their wider audience.

A-790/A-791 14:50
Social media at ECR
S. Lee, K. Friedrich; Vienna/AT,

Learning Objectives:
1. To learn how social media can be used effectively to enhance engagement in a congress.
2. To explore the scale and impact of social media at ECR 2017.
3. To consider what more social media can add to ECR.

A-792 15:05
Improving patient engagement through social media
L. Robinson; Salford/UK

Learning Objectives:
1. To explore how social media can be used to improve patient engagement with imaging services.
2. To learn about social media use in the Word of Mouth Mammogram e-Network (WoMMeN).
3. To appreciate the impact of online interactions with patients.

15:20
Panel discussion: Making better use of social media: what should we consider?
14:00 - 15:30 Room M 4
E3 - ECR Academies: Tips and Tricks in Pancreatic and GI Tract Imaging

E3 1522
The anal canal: does MRI make it easy?

A-793 14:00
Chairperson's introduction
S. Halligan; London/UK

A-794 14:05
A. MRI of the anal canal: from normal anatomy to local tumour staging
C. Hoeffel; Reims/FR

Learning Objectives:
1. To learn the relevant sequences for MRI of the anal canal.
2. To understand the anatomy as demonstrated by MRI.
3. To become familiar with the staging of primary tumour, before and after treatment.

A-795 14:33
B. Fistulae-in-ano: detect, stage, classify
D.J.M. Tolan; Leeds/UK

Learning Objectives:
1. To learn about the relevant MRI sequences in patients suspected of fistulae-in-ano.
2. To understand the most common classification of fistulae.
3. To become familiar with the questions asked by the clinician before treatment.

A-796 15:01
C. My tough cases
F. Maccioni; Rome/IT

Learning Objectives:
1. To learn from clinical experience the unusual presentation of diseases of the anal canal.
2. To understand how to report on MRI after treatment.

14:00 - 15:30 Room M 5
Transatlantic Course of ESR and RSNA (Radiological Society of North America): Sports Imaging

TC 1528
Musculoskeletal interventional procedures
Moderators:
L.W. Bancroft; Orlando, FL/US
A.J. Grainger; Leeds/UK

A-797 14:00
A. Diagnostic and therapeutic injections in the athlete: pearls and pitfalls
P. Peetrons; Brussels/BE

Learning Objectives:
1. To become familiar with the most common requests and indications for sports-related injections.
2. To learn about technical considerations for performing MSK injections.
3. To understand reasons to delay injections or avoid certain injectables.

A-798 14:30
B. Injectables, percutaneous tendon fenestration and tenotomy: clinical outcomes and current evidence
J. Jacobson; Ann Arbor, MI/US

Learning Objectives:
1. To be aware of the indications and benefits of available injectables used to treat sports-related injuries.
2. To learn about technical considerations for performing tendon fenestration and tenotomy.
3. To become familiar with the current evidence on results of MSK procedures in the literature.

A-799/A-800 15:00
C. Interactive case discussion
P. Peetrons1, J. Jacobson2; 1Brussels/BE, 2Ann Arbor, MI/US

Learning Objectives:
1. To learn the targeted approach to injecting joints, ligaments, tendons and tendon sheaths.
2. To appreciate pitfalls to avoid in MSK procedures for treatment of sports-related injuries.
3. To understand evidence-based data on various MSK procedures in order to give patients realistic expectations after treatment.

A-801 14:00
Chairperson's introduction
L.E. Derchi; Genoa/IT

Session Objectives:
1. To understand the concepts of value-based healthcare.
2. To learn about the challenges of developing and implementing a value-based approach to healthcare.
3. To understand the ESR's view on value-based radiology.

A-802 14:06
What is „value“ in radiology and how can it be measured?
A. Brady; Cork/IE

Learning Objectives:
1. To discuss about the meaning of „value“ in radiology.
2. To learn how value-based metrics are created.
3. To understand the difference between volume-driven and value-driven metrics.

A-803 14:12
What really matters to patients
J. Birch; Poole/UK

Learning Objectives:
1. To suggest new metrics from a patient perspective.
2. To understand which outcomes are most important for the patients.
3. To understand the complexity of linking costs to outcome.

A-804 14:18
What is value from an industry perspective?
N. Denjoy; Brussels/BE

Learning Objectives:
1. To understand about COCIR's value-based industry initiative.
2. To understand the industry's priorities for value-based healthcare.
3. To learn about the potential for cooperation between industry and healthcare professionals.

14:24
Open forum discussion

16:00 - 17:30 Room A
E3 - ECR Academies: Interactive Teaching Sessions for Young (and not so Young) Radiologists

E3 1621
Errare humanum est

A-805 16:00
A. Errors in chest radiograph
J. Cáceres; Barcelona/ES

Learning Objectives:
1. To learn to recognise ambiguous signs in plain films.
2. To learn to avoid the most common pitfalls in reading plain chest films.
**A-806 16:45**  
B. Errors in CT of the chest  
J. Villar; Valencia/ES

**Learning Objectives:**  
1. To learn to interpret ambiguous chest signs.  
2. To learn to avoid the most common pitfalls in reading chest CT images.

16:00 - 17:30  
Room B

**Abdominal Viscera**

**RC 1601**  
**Tumour response assessment in abdominal imaging**

**Moderator:**  
S.M. Erturk; Istanbul/TR

**A-807 16:00**  
A. Colorectal liver metastases  
S.K. Venkatesh; Rochester, MN/US

**Learning Objectives:**  
1. To learn about different methods to assess the tumour response in the colorectal metastases.  
2. To understand usefulness and limitation of techniques and the role of different contrast media.  
3. To appreciate variable response pattern of colorectal liver metastases.

**A-808 16:30**  
B. Rectal carcinoma  
M.J. Lahaye; Amsterdam/NL

**Learning Objectives:**  
1. To learn about the rationale for neoadjuvant treatment in rectal cancer and the impact on subsequent surgery.  
2. To understand why imaging is needed to assess response to neoadjuvant therapy, what to look for when judging response, and where the challenges lie.  
3. To appreciate when surgery can be deferred or avoided and how best to follow-up these patients.

**A-809 17:00**  
C. Pancreatic adenocarcinoma  
M. Zins; Paris/FR

**Learning Objectives:**  
1. To understand the rationale for neoadjuvant treatment in pancreatic adenocarcinoma.  
2. To learn the limitations of CT in assessing treatment response.  
3. To learn how to accurately select patients for curative-intent surgery after neoadjuvant therapy.

**A-810 16:00**  
A. Beautiful cases from clinical practice: coronary arteries  
S. Feger; Berlin/DE

**Learning Objectives:**  
1. To learn about cardiac CT acquisition techniques, pitfalls, and dose-reduction strategies.  
2. To summarise current indications and clinical applications of CT coronary angiography.  
3. To review the diagnostic performance of CT for the diagnosis of coronary artery disease.  
4. To learn how to make a structured report of the coronary CT angiography.

**Cardiac**

**RC 1603**  
**Coronary CT angiography: how to start practice, perform and evaluate the exam?**

**Moderator:**  
M. Hrabak Paar; Zagreb/HR

**A-811 16:35**  
B. Staff training and technical requirements  
S. Harden; Southampton/UK

**Learning Objectives:**  
1. To become familiar with technical prerequisites and post-processing tools for coronary CT angiography.  
2. To discuss a necessary team setup and training modules for radiologists and technical staff.  
3. To evaluate the role of coronary CT angiography and requirements for the radiological team in routine imaging and in emergencies.

**A-812 16:55**  
C. Beautiful cases from clinical practice: stents and bypasses  
G. Bastarrika; Pamplona/ES

**Learning Objectives:**  
1. To emphasise the value of coronary CT angiography after coronary interventions.  
2. To outline CT acquisition protocols and contrast administration strategies to evaluate coronary stents and coronary artery bypass grafts (CABG) in individuals undergoing coronary revascularisation.  
3. To describe usefulness and limitations of different post-processing techniques in assessing stent and CABG patency.

16:00 - 17:30  
Room N

**Special Focus Session**

**SF 16**  
**Placental imaging: how, when and why?**

**A-813 16:00**  
Chairperson's introduction  
M. Weston; Leeds/UK

**Session Objectives:**  
1. To understand the new imaging modalities available to assess the placenta.  
2. To recognise the signs of abnormal placentation.  
3. To learn about new interventional techniques in the management of postpartum haemorrhage.

**A-814 16:05**  
**Modern MRI of the placenta**  
N. Siauve; Colombes/FR

**Learning Objectives:**  
1. To describe how the vascularisation and the oxygenation of the placenta can be explored, using functional MRI.  
2. To list and explain the different parameters of each functional MRI technique that is available.  
3. To give an overview of the potential applications in normal and pathologic pregnancies.

**A-815 16:30**  
**Placental abnormalities, timing of imaging, methods and diagnosis**  
G. Masselli; Pamplona/ES

**Learning Objectives:**  
1. To discuss the arterial supply to the uterus and its importance in haemorrhage control in abnormal placentation.  
2. To understand the role of US and MR in making the diagnosis.  
3. To appreciate the imaging signs and pitfalls.

**A-816 16:55**  
**Abnormally invasive placenta: vascular anatomy and interventional radiology approaches to management**  
C. Hammond; Leeds/UK

**Learning Objectives:**  
1. To discuss the arterial supply to the uterus and its importance in haemorrhage control in abnormal placentation.  
2. To discuss the options for haemorrhage control and evidence to support each approach.  
3. To examine the logistics and infrastructure required to provide an obstetric haemorrhage service.

17:20  
Panel discussion: Is MR scan now a prerequisite for the modern management of placental problems?
Learning Objectives:
1. To understand the importance of big data in medical imaging and related implications for patients, radiologists, and radiographers.
2. To understand the need for data protection and cyber security to combat the vulnerability of healthcare.
3. To learn practical examples.

A-819 16:10
Implications of protection of medical imaging data: a European perspective
C.D. Becker; Geneva/CH

Learning Objectives:
1. To understand the impact of the new data protection regulation for processing and sharing of imaging data.
2. To understand the need to find a balance between protection of individual health data and data use in the interest of public health and research projects including “big data”.
3. To discuss safeguards for data processing in the context of research and public health projects, including “big data”.

A-820 16:25
Cyber security in radiology
J. Sosna; Jerusalem/IL

Learning Objectives:
1. To understand what cyber security is and its implications for radiology.
2. To learn a practical example from Israel and lessons learnt.

A-821 16:40
Importance of data protection from a patient’s view
E. Briers; Hasselt/BE

Learning Objectives:
1. To understand the importance of data sharing and protection of patient data.
2. To learn implications of misuse of patient data.
3. To understand the necessity of data sharing to improve the patient journey through her/his disease.

A-822 16:55
Experiences from the US
J.A. Brink; Boston, MA/US

Learning Objectives:
1. To discuss the status of data protection and cyber security in the US.
2. To learn a practical example of data misuse, implications and lessons learnt.

17:10
Panel discussion: What is the future direction of data protection and cyber security in medical imaging?
A-826  17:00
Thyroid
G. Mauri; Milan/IT

Learning Objectives:
1. To learn about new results and application of ultrasound-guided interventional procedures: thyroid malignancy FNA, thyroid nodule ablation.
2. To understand consolidated and new indications to ultrasound-guided interventional procedures: FNA, RFA.
3. To appreciate accuracy of ultrasound-guided interventional procedures from consolidated to new applications: US imaging, fusion imaging, elastosonographic imaging for thyroid malignancy FNA.

16:00 - 17:30 Room E2
Multidisciplinary Session

MS 16
Psychoradiology: a blend of molecular, functional and structural imaging with a taste of psychology

A-827  16:00
Chairperson's introduction
B. Ertl-Wagner; Munich/DE

Session Objectives:
1. To become familiar with the interdisciplinary aspects of psychoradiology.
2. To learn about the methodological principles of structural, functional and molecular imaging of the brain.
3. To understand the pathophysiological concepts underlying psychiatric disorders.

A-828  16:05
A psychiatrist's view on neuroimaging
F. Padberg; Munich/DE

Learning Objectives:
1. To understand the important role of imaging in the diagnostic evaluation of psychiatric patients.
2. To become familiar with important imaging patterns that may be encountered in patients with psychiatric disorders.
3. To understand future trends in neuroimaging of patients with psychiatric disorders.

A-829  16:23
Advanced imaging techniques: their role in neuropsychiatric disorders
S. Stockler; Munich/DE

Learning Objectives:
1. To become familiar with the principles and practice of using structural and volumetric methods in patients with neuropsychiatric disorders.
2. To understand methods and applications of task-based and resting-state functional MR imaging techniques in neuropsychiatric patients.
3. To learn about the role of spectroscopy and molecular imaging in patients with neuropsychiatric disorders.

A-830  16:41
Can images predict psychiatric diagnosis and treatment response?
N. Koukoulev; Munich/DE

Learning Objectives:
1. To become familiar with the principles of imaging-based prediction methods.
2. To understand the role of neuroimaging in predicting neuropsychiatric diagnoses.
3. To learn about imaging-based methods to predict treatment response in psychiatry.

A-831  16:59
Neuroimaging and neuromodulation: where are we heading
D. Keeser; Munich/DE

Learning Objectives:
1. To understand the principles of neuromodulation.
2. To become familiar with methods of imaging-based neuromodulation.
3. To become familiar with future prospects of neuroimaging and neuromodulation.

17:17 Interdisciplinary case discussion

16:00 - 17:30 Room F1
E³ - European Diploma Prep Session

E³ 1623
Urogenital

A-832  16:00
Chairperson's introduction
R.H. Oyen; Leuven/BE

Session Objectives:
1. To become familiar with the imaging presentation of common neoplastic and infectious disorders of the kidneys.
2. To describe the typical imaging features of calculous and neoplastic disorders of the ureter and bladder.
3. To understand the imaging presentation of benign and malignant disorders of the prostate.

A-833  16:06
A. Renal and adrenal imaging
N. Grenier; Bordeaux/FR

Learning Objectives:
1. To describe the normal imaging anatomy and variants of the kidney and adrenal.
2. To understand the imaging features of benign and malignant tumours of the kidneys.
3. To understand the imaging presentation of benign and malignant tumours of the renal arteries.
4. To explain the imaging features of inflammatory disorders of the kidneys.

A-834  16:34
B. Imaging of the ureter and bladder
M.N. Özmen; Ankara/TR

Learning Objectives:
1. To explain the imaging anatomy and variants of the ureter and bladder.
2. To understand the diagnostic evaluation and imaging features of calculi of the ureter and bladder.
3. To describe the imaging features of benign and malignant tumours of the ureter and bladder.
4. To explain the imaging features of inflammatory disorders of the ureters.

A-835  17:02
C. Prostate imaging
H.C. Thoeny; Berne/CH

Learning Objectives:
1. To explain the PIRADS system in prostate imaging.
2. To describe the imaging features of benign prostatic hypertrophy.
3. To understand the imaging features of prostate cancer.
4. To describe the imaging features of inflammatory changes of the prostate.
16:00 - 17:30  Room F2

Emergency Imaging

RC 1617
Why do I miss fractures in emergency?

A-836 16:00
Chairperson's introduction
S. Wirth; Munich/DE

Session Objectives:
1. To learn the typical constellations and findings of missed fractures.
2. To understand the potential complications resulting from missing fractures.
3. To appreciate direct and indirect fracture signs with different imaging modalities.

A-837 16:05
A. Missed fractures in children
A.C. Offiah; Sheffield/UK

Learning Objectives:
1. To become familiar with the common fractures in childhood.
2. To understand the choice of the best-suited imaging modality.
3. To learn about atypical imaging findings in different clinical scenarios.

A-838 16:30
B. Missed fractures in adults
A. Pinto; Naples/IT

Learning Objectives:
1. To become familiar with the most common fractures in adult patients.
2. To understand which additional data will influence the choice of the correct imaging modality.
3. To learn about atypical imaging findings in adult patients after trauma.

A-839 16:55
C. Missed musculoskeletal injuries in whole-body MDCT examinations
T. Ruder; Whangarei/NZ

Learning Objectives:
1. To become familiar with the most common musculoskeletal injuries in patients after polytrauma.
2. To understand the clinical impact of missed subtle injuries on clinical outcome of the trauma victims.
3. To be familiar with less typical imaging findings in musculoskeletal injuries.

A-841 16:05
A. Radiographs and ultrasound
L.M. Sconfienza; Milan/IT

Learning Objectives:
1. To learn about the value of radiography and US in the diagnostic work-up of MSK tumours.
2. To be familiar with the most recent advances and trends in the development of US technology, including contrast-enhanced US and elastography.

A-842 16:28
B. MRI and whole-body MRI
S.L.J. James; Birmingham/UK

Learning Objectives:
1. To learn how to perform an advanced clinical MR protocol for MSK tumours.
2. To explore the potential of new MR techniques.
3. To learn the impact of MR imaging and whole-body techniques in MSK tumour imaging.

A-843 16:51
C. CT and hybrid imaging
T. Bäuerle; Erlangen/DE

Learning Objectives:
1. To learn about the role of CT and hybrid imaging in the evaluation of MSK tumours.
2. To understand how hybrid imaging allows the intrinsic combination of functional and anatomical image information.
3. To be aware of the future developments of novel PET tracers and integrated PET/CT and MRI/PET in MSK tumours.

17:14
Panel discussion: How to reduce the rate of missed fractures most effectively and efficiently

16:00 - 17:30  Room G

Musculoskeletal

RC 1613
Demystifying MRI: things you always wanted to know

Moderator:
I. Seimenis; Alexandropolis/GR

A-844 16:00
A. Basic MR: the building blocks of pulse sequences
D.G. Norris; Nijmegen/NL

Learning Objectives:
1. To learn about how NMR signals are produced.
2. To understand the basic concepts of relaxation.
3. To learn about the operation of inversion-recovery and spin-echo pulse sequences.

A-845 16:30
B. MR imaging basic concepts: how to turn signals into images
D.J. Lurie; Aberdeen/UK

Learning Objectives:
1. To learn how magnetic field gradients encode spatial information.
2. To understand the main ways in which field gradients are used.
3. To appreciate the basic concepts of data collection and image reconstruction in MRI.

A-846 17:00
C. Practical MRI: a toolkit of standard MR pulse sequences
G. Hashberg; Tübingen/DE

Learning Objectives:
1. To learn about common types of MR pulse sequence.
2. To understand the difference between gradient-echo and spin-echo.
3. To appreciate the factors influencing choice of pulse sequence.
Radiographers

RC 1614

Optimising computed tomography

A-847/A-848

Chairpersons’ introduction
U. Nikupaavu, 1 Helsinki/Fi, 2 Bucharest/RO

Session Objectives:
1. To review the importance of availability and appropriate CT techniques for the diagnosis and treatment of stroke patients.
2. To appreciate practical measures to optimise both, radiation dose and image quality in CT.
3. To understand how intravenous contrast agent delivery can best be optimised in CT to maximise diagnostic capability.

A-849

A. Optimising access to CT in stroke
G. Ioannidis; Larissa/GR

Learning Objectives:
1. To review injection and patient related factors that affect intravenous contrast medium (IV CM) enhancement during computer tomography (CT).
2. To understand the effect of different tube potential settings and its impact on IV CM enhancement during CT.
3. To appreciate challenges involved in providing timely access to CT and the need for multidisciplinary collaboration.
4. To become familiar with optimal CT protocols for diagnosis and therapy of stroke.

A-850

B. Optimising radiation dose and image quality
R. Booij; Rotterdam/NL

Learning Objectives:
1. To enhance our understanding of the challenge of balancing image quality and dose reduction.
2. To review the options available to users for image quality and dose optimisation.
3. To consolidate knowledge to effectively use scan parameters and innovative technologies to optimise CT protocols.
4. To learn how to improve patient positioning and its effect on radiation dose.

A-851

C. Optimising contrast delivery with MDCT
A. Svensson; Stockholm/SE

Learning Objectives:
1. To review injection and patient related factors that affect intravenous contrast medium (IV CM) enhancement during computer tomography (CT).
2. To understand the effect of different tube potential settings and its impact on IV CM enhancement during CT.
3. To gain knowledge about different aspects of individualised IV CM dosage.
4. To appreciate practical „tips and tricks“ for successful CT angiography examinations.

Panel discussion: How to create an optimisation team in CT?

16:00 - 17:30 Room M 1

ESR Audit and Standards Session

Audit across Europe: directive and perspective

A-852/A-853

Chairpersons’ introduction
A. Brady¹, D.C. Howlett²; ¹Cork/IE, ²Eastbourne/UK

Session Objectives:
1. To understand the principles of Clinical Audit (CA).
2. To appreciate the distinction between CA and external inspection.
3. To review what is new in terms of techniques and devices.

A-854

The Esperanto Audit Project: results from the pilot project and roll out
B.E. Kelly; Belfast/UK

Learning Objectives:
1. To learn about the nature of the pilot project.
2. To understand the pilot’s significance with regard to the EU 2013/59 Directive.
3. To appreciate the necessity of Clinical Audit.

A-855

Engaging in the Pilot: The Eurosafe Imaging Star Perspective
G. Paulo; Coimbra/PT

Learning Objectives:
1. To learn about participation in the pilot project.
2. To understand the audit template.
3. To appreciate the advantage of performing Clinical Audit.

A-856

Quality improvement and change management: Audit in industry
S. Lee; Amsterdam/NL

Learning Objectives:
1. To learn about the duality of the process.
2. To understand the role of the inspector.
3. To appreciate the differences between Inspection and Clinical Audit.

Panel discussion: Does Audit make the patient journey safer?

16:00 - 17:30 Room M 2

E³ - ECR Master Class (Interventional Radiology)

E³ 1626a

Interventional radiology in the venous system: vessel and eye opening

Moderator:
C. Binkert; Winterthur/CH

A-858

A. Varicose vein
L. Oguzkurt; Istanbul/TR

Learning Objectives:
1. To learn about clinical and imaging assessment.
2. To understand the role of thermal and non-thermal devices.
3. To review the role of foam sclerotherapy and mini-phlebectomy for ancillary therapies.

A-859

B. Lower limb acute deep vein thrombosis
J. Kettenbach; St. Pölten/AT

Learning Objectives:
1. To learn about clinical and imaging assessment.
2. To understand the necessity of Clinical Audit.
3. To appreciate the advantage of performing Clinical Audit.

A-860

C. Lower limb chronic deep vein occlusion
R. de Graaf; Maastricht/NL

Learning Objectives:
1. To learn about clinical and imaging assessment.
2. To understand the evidence supporting endovascular therapy.
3. To review what is new in terms of techniques and devices.
### E³ 1626b
Quantitative imaging in oncology

<table>
<thead>
<tr>
<th>A-861</th>
<th>16:00</th>
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<tbody>
<tr>
<td>Chairperson’s introduction</td>
<td>J. O’Connor; Manchester/UK</td>
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**Session Objectives:**
1. To understand the impact of tumour heterogeneity on diagnosis and treatment.
2. To learn the basics of quantitative imaging of heterogeneity.
3. To approach the future impact of quantitative imaging of heterogeneity.

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<thead>
<tr>
<th>A-862</th>
<th>16:05</th>
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<tbody>
<tr>
<td>A. Intra- and interindividual tumour heterogeneity and the impact for cancer diagnostics</td>
<td>M. Eisenblätter; Münster/DE</td>
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**Learning Objectives:**
1. To learn about tumour heterogeneity.
2. To review current strategies to explore biological heterogeneity.
3. To understand how this heterogeneity impacts diagnosis and treatment.

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<tr>
<th>A-863</th>
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<tr>
<td>B. Quantitative image biomarkers for targeted tumour therapies</td>
<td>R. García Figueiras; Santiago de Compostela/ES</td>
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</tbody>
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**Learning Objectives:**
1. To learn how heterogeneity can be quantified from images.
2. To understand how the main types of heterogeneity features.
3. To review limits and pitfalls of features extraction.

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<tr>
<th>A-864</th>
<th>16:41</th>
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<tbody>
<tr>
<td>C. Requirements for quantitative data extraction and analysis</td>
<td>H.K. Hahn; Bremen/DE</td>
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**Learning Objectives:**
1. To learn how to optimise acquisition of images for quantitative imaging.
2. To understand image processing which may impact quantification.
3. To become familiar with the concepts behind quantification.

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<th>A-865</th>
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<tr>
<td>D. Imaging heterogeneity and genomic variability in ovarian cancer</td>
<td>E. Sala; Cambridge/UK</td>
</tr>
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</table>

**Learning Objectives:**
1. To learn about an application of imaging tumour heterogeneity.
2. To understand how imaging heterogeneity may relate to biological heterogeneity.
3. To become familiar with new imaging concepts such as imaging phenotypes and signatures.

### E³ 1622
Peritoneum and mesentery

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<th>A-866</th>
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<tr>
<td>Chairperson’s introduction</td>
<td>A. Ba-Ssalamah; Vienna/AT</td>
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<th>A-867</th>
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<tbody>
<tr>
<td>A. Understanding primary tumours</td>
<td>C. Dromain; Lausanne/CH</td>
</tr>
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</table>

**Learning Objectives:**
1. To become familiar with the spectrum of tumours of the mesentery and peritoneum.
2. To understand how imaging helps in narrowing the differential of mesenteric and peritoneal masses.
3. To learn the role of percutaneous or surgical biopsy.

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<thead>
<tr>
<th>A-868</th>
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<tbody>
<tr>
<td>B. Peritoneal carcinomatosis</td>
<td>P.K. Prassopoulos; Alexandroupolis/GR</td>
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</tbody>
</table>

**Learning Objectives:**
1. To become familiar with the usual origin and spread of peritoneal carcinomatosis.
2. To learn about the role of CT, MRI and PET for the detection and staging of peritoneal carcinomatosis.
3. To understand how imaging helps the clinician for the evaluation of response to treatment.

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<tr>
<th>A-869</th>
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<tbody>
<tr>
<td>C. From misty mesentery to mesenteritis</td>
<td>G.A. Krombach; Giessen/DE</td>
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**Learning Objectives:**
1. To become familiar with the differential between incidental mesenteric abnormalities, tumour infiltration and true mesenteritis.
2. To learn that mesenteritis can be associated with other organs lesions in case of systemic disease.
3. To learn which imaging (CT, MRI, PET) is relevant for the detection and follow-up of inflammatory diseases.

### Transatlantic Course of ESR and RSNA (Radiological Society of North America): Sports Imaging

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<tr>
<th>A-870</th>
<th>16:00</th>
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<tbody>
<tr>
<td>A. Postoperative shoulder MRI after instability surgery</td>
<td>L.W. Bancroft; Orlando, FL/US</td>
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</table>

**Moderators:**
L.W. Bancroft; Orlando, FL/US  
A.J. Grainger; Leeds/UK

**Learning Objectives:**
1. To become familiar with the expected and abnormal MR imaging findings after labral repair.
2. To learn about the postoperative imaging features after capsular shift/capsulorrhaphy.
3. To appreciate normal imaging and complications after remplissage and laterjet/Bristow procedures.
A-871 16:30
B. ACL reconstruction and cartilage repair
C. Weidekamm; Vienna/AT

**Learning Objectives:**
1. To review the common and uncommon ACL reconstruction techniques.
2. To appreciate the expected and abnormal MR imaging findings after ACL reconstruction.
3. To understand common cartilage repair techniques, and corresponding normal and abnormal postoperative MRIs.

A-872/A-873 17:00
C. Interactive case discussion
L.W. Bancroft1, C. Weidekamm2; 1Orlando, FL/US, 2Vienna/AT

**Learning Objectives:**
1. To learn how to differentiate normal and failed labral repairs with MRI.
2. To become familiar with the diagnostic features of failed ACL reconstructions.
3. To understand the imaging features of intact and failed cartilage repair.
E³ 1721
Cardiac imaging

A-874 08:30
A. Grown-ups with congenital heart disease
A.M. Taylor; London/UK

Learning Objectives:
1. To be familiar with the clinical and radiologic presentations of these patients.
2. To learn about imaging findings and management options.

A-875 09:15
B. Imaging cardiac valves
R. Salgado; Antwerp/BE

Learning Objectives:
1. To understand the impact of imaging.
2. To know the limitations and potential pitfalls of CT and MR techniques.
3. To learn about the imaging technique.

08:30 - 10:00 Room A
E³ - ECR Academies: Interactive Teaching Sessions for Young (and not so Young) Radiologists

Abdominal Viscera

RC 1701
Abdominal MRI: from standard to advanced protocols

A-876 08:30
Chairperson's introduction
F. Caseiro Alves; Coimbra/PT

Session Objectives:
1. To learn the importance of MR protocolling for different abdominal conditions.
2. To become familiar with both dedicated and advanced MR imaging.
3. To learn through a case-based approach its impact on report quality.

A-877 08:35
A. Suspected pancreatic tumour
R. Manfredi; Rome/IT

Learning Objectives:
1. To learn about the role of MRI in the assessment of a patient with suspected pancreatic tumour.
2. To become familiar with the optimal MRI protocols including the role of DWI and secretin in this group of patients.
3. To appreciate the advantages and limitations of MRI in comparison with other imaging techniques.

A-878 08:58
B. Inflammatory bowel disease
S.A. Taylor; London/UK

Learning Objectives:
1. To learn about the role of MRI in patients with IBD.
2. To become familiar with the optimal MRI protocols including bowel distension in this group of patients.
3. To appreciate the role of functional imaging techniques for assessment of IBD.

A-879 09:21
C. Pelvic floor disorder
D. Weishaupt; Zurich/CH

Learning Objectives:
1. To learn about the clinical relevance of MRI in the management of patients with pelvic floor disorders.
2. To become familiar with the optimal patient preparation and MRI protocols in this group of patients.
3. To appreciate the advantages of MRI relative to other imaging modalities including conventional defecography.

09:44
Panel discussion: How to create an efficient MR protocol in abdominal diseases

08:30 - 10:00 Room B

Chest

RC 1704
Thoracic manifestations of systemic disease
Moderator:
A. Chodorowska; Wroclaw/PL

A-880 08:30
A. Systemic sclerosis
N. Sverzellati; Parma/IT

Learning Objectives:
1. To learn about the typical radiological appearances.
2. To be aware of the clinical relevance of scoring.
3. To know how vascular complications affect patient prognosis.

A-881 09:00
B. Granulomatosis and polyangiitis
S. Bayraktaroglu; Izmir/TR

Learning Objectives:
1. To learn about the radiological appearances of small-vessels vasculitis.
2. To learn how clinical and radiological features help in differential diagnosis.
3. To appreciate the actual role of imaging in assessing disease activity.

A-882 09:30
C. Early manifestations in children and young adults
M.P. Garcia-Peña; Barcelona/ES

Learning Objectives:
1. To learn about the radiological manifestations in children.
2. To review the most adapted scanning protocols.
3. To appreciate the role of imaging to monitor the effects of treatment.

08:30 - 10:00 Room X

Joint Session of the ESR and ESTRO

New imaging approaches for radiotherapy

A-883/A-884 08:30
Chairpersons' introduction
V. Valentin1, M.H. Fuchsberger2; Rome/IT, Graz/AT

Session Objectives:
1. To understand the increasing importance of imaging in radiation oncology techniques.
2. To learn about the cooperation opportunities between radiologists and radiation oncologists.
3. To become familiar with the most modern radiotherapy technologies.
A-885 08:35
Dual-energy CT: what are the benefits for radiotherapy?
P. Wohlfahrt, C. Richter, C. Möhler, S. Greilich; Dresden/DE, Heidelberg/DE

Learning Objectives:
1. To learn about technical aspects of dual-energy CT acquisition.
2. To understand the strengths and limitations of the dual-energy CT applications in oncology.
3. To appreciate the benefits relative to the use of dual-energy CT in the radiotherapy workflow.

A-886 08:55
Ultrasound imaging in radiotherapy: „old“ technology with new applications in RT?
E. Harris; Sutton/UK

Learning Objectives:
1. To learn about ultrasound applications in radiotherapy.
2. To understand the clinical advantage of using ultrasound based techniques.
3. To appreciate the modern perspectives of this technique.

A-887 09:15
MR-LINAC technological advances and potential usability in clinical setting
O. Jäkel; Heidelberg/DE

Learning Objectives:
1. To learn about the technological advances of MRI-LINAC technology.
2. To understand the physical principles of hybrid treatment units.
3. To appreciate the clinical advantages of this technology of this use.

A-888 09:35
Multiparametric MR-PET for differentiation of residual disease vs treatment-induced inflammatory changes
M. Becker; Geneva/CH

Learning Objectives:
1. To learn about hybrid imaging based tissue characterisation techniques.
2. To understand the challenges of hybrid imaging use after oncologic treatments.
3. To appreciate the performance of hybrid MR-PET techniques in differential diagnosis.

A-891 09:30
C. Imaging in hypoxic-ischaemic injury and hypothermia: an update
F.M. Triulzi; Milan/IT

Learning Objectives:
1. To discuss the role of US, (CT) and MRI in hypoxic-ischaemic injury (including advanced MR techniques).
2. To give an overview of common imaging findings in hypoxic-ischaemic injury (HIE).
3. To understand the importance of timing and prognostic value of imaging in HIE.

A-892 08:30
New treatment paradigms in orthopaedic oncology
M.A.J. van de Sande; Leiden/NL

Learning Objectives:
1. To understand the impact of treatment choices on survival chances and quality of life.
2. To learn about the influence of imaging, patient and disease characteristics on developing new treatment options.

A-893 08:35
New treatment paradigms in orthopaedic oncology
M.A.J. van de Sande; Leiden/NL

Learning Objectives:
1. To understand the demand for new treatment concepts.
2. To understand how multimodality imaging can influence therapeutic balancing between tumour control and quality of life.

A-894 08:58
Multimodality imaging in treating and monitoring bone sarcoma
M.-A. Weber; Rostock/DE

Learning Objectives:
1. To learn how to use multimodality imaging in personalised treatment planning aimed at survival and preserving quality of life.
2. To learn how to use multimodality imaging in monitoring response to neo-adjuvant therapy.

A-895 09:21
Multimodality imaging in treatment and surveillance of soft tissue sarcoma
C. Messiou; London/UK

Learning Objectives:
1. To learn how to use multimodality imaging in personalised treatment planning aimed at survival and preserving quality of life.
2. To learn how to use multimodality imaging in surveillance strategies.

09:44
Panel discussion: Increasing quality of life in sarcoma patients without decreasing survival. What is needed from an imaging perspective to allow and support this?

Paediatric

RC 1712
Understanding paediatric neuroradiology
Moderator:
E. Vázquez; Barcelona/ES

A-889 08:30
A. Imaging of the premature brain
S.M. Aukland; Bergen/NO

Learning Objectives:
1. To discuss the roles of US, (CT) and MRI in preterm imaging.
2. To give an overview of the different imaging findings in the preterm brain related to age.
3. To discuss the prognostic role preterm brain imaging.

A-890 09:00
B. Abusive head trauma: the role of CT and MRI
R. Van Rin; Amsterdam/NL

Learning Objectives:
1. To discuss the role of CT and MRI in imaging of abusive head trauma (AHT).
2. To give an overview of common CT and MRI findings in AHT.
3. To understand the strengths and limitations of CT and MRI in imaging AHT.
Sunday

08:30 - 10:00 Studio 2018

Genitourinary

RC 1707

Imaging strategies in renal tumours

A-896 08:30
Chairperson's introduction
C. Nicolau; Barcelona/ES

Session Objectives:
1. To become familiar with current and emerging renal imaging modalities.
2. To learn about the capabilities of renal imaging in diagnosis and staging of renal tumours.

A-897 08:35
A. Imaging methods, CT and MRI: the best out of two
M.A. Cova; Trieste/IT

Learning Objectives:
1. To become familiar with the optimal CT and MRI protocols for renal imaging.
2. To understand the best choice of CT or MRI according to the clinical need.
3. To illustrate the advantages and disadvantages of CT and MRI.

A-898 08:58
B. Differential diagnosis of renal masses
N. Grenier; Bordeaux/FR

Learning Objectives:
1. To learn about the histologic spectrum of renal tumours.
2. To understand the capabilities of imaging for renal tumour characterisation.
3. To become familiar with functional techniques applied to characterise renal tumours.

A-899 09:21
C. Staging and organ-preserving strategies
P. Asbach; Berlin/DE

Learning Objectives:
1. To understand the TNM-staging system for renal tumours.
2. To become familiar with optimal staging protocols and imaging findings in staging of renal tumours.
3. To learn about actual organ-preserving strategies.

09:44
Panel discussion: How to implement an optimal renal imaging protocol?

08:30 - 10:00 Room L 8

Special Focus Session

SF 17b

Abdominal emergencies: friends and enemies

A-900 08:30
Chairperson's introduction
I. Arkhipova; Moscow/RU

Session Objectives:
1. To learn about the main radiological features of life-threatening non-traumatic emergencies in abdomen.
2. To become familiar with the most frequent requests and expectations of surgeons.
3. To be familiar with interpretation of cases in emergency imaging.
4. To find out possible points that could be useful in daily radiological practice in emergency department.
5. To discuss and understand diagnostic strategy for high-quality and faster diagnosis at the end of the session.

A-901 08:35
Abdominal vascular emergencies: no time to lose
V.E. Sinitsyn; Moscow/RU

Learning Objectives:
1. To learn about types and aetiology of non-traumatic abdominal vascular emergencies.
2. To be familiar with the appropriate imaging protocols.
3. To know about CT findings in various acute life-threatening abdominal vascular diseases.
4. To understand modern approach to diagnostic work-up and reporting in vascular emergencies.

A-902 08:50
When to call the interventional radiologist and when to call the surgeon?
K.K. Pyra; Lublin/PL

Learning Objectives:
1. To learn about differences in clinical and radiological presentations of vascular emergencies.
2. To demonstrate examples of usual and unusual emergencies of the abdominal vessels.
3. To become familiar with the endovascular methods of treatment.
4. To learn how to choose appropriate treatment strategy.

A-903 09:02
Closed loop obstruction: a challenging diagnosis
M. Zins; Paris/FR

Learning Objectives:
1. To be able to differentiate simple mechanical small-bowel obstruction from closed loop obstruction (CLO) at CT.
2. To learn about atypical presentation of CLO at CT.
3. To become familiar with the most specific CT signs of ischaemia complication CLO.
4. To learn new insights in clinical outcome of CLO related to adhesive bands.

A-904 09:17
Expected and unexpected emergencies of abdominal viscera: radiology before surgery?
C. Stoupis; Männedorf/CH

Learning Objectives:
1. To demonstrate examples of usual and unusual emergencies of the upper abdominal organs (liver, pancreas, spleen, adrenal).
2. To learn about differences in clinical and radiological presentations of those entities.
3. To learn about imaging strategies (time, cost, efficiency, protocols).
4. To learn about the potential of interventional radiological procedures as treatment choice.

A-905 09:32
Life teaches us case by case
M.-L. Riibak; Tallinn/EE

Learning Objectives:
1. To recognise the signs of pathology in non-traumatic acute abdomen.
2. To recognise common finding „as friends” in not so common „unfriendly” situations and vice versa.
3. To become familiar with what the clinician might be interested to know besides the diagnosis.

09:44
Panel discussion: Every imaging sign could matter!
Learning Objectives:
1. To learn about different types of high-risk lesions.
2. To become familiar with the risk of developing a cancer.
3. To appreciate the different imaging modalities for diagnosis.

A-907 09:00
B. Value of breast MRI. Rate of underestimation and impact on treatment decision: is breast MRI increasing the number of high-risk lesions?
R.M. Mano; Nijmegen/NL

Learning Objectives:
1. To learn about the evidence on MRI for evaluating high-risk lesions.
2. To become familiar with various imaging appearances of high-risk lesions.
3. To appreciate the added value for diagnosis and treatment decision.

A-908 09:30
C. Can surgery be avoided?
S.J. Vinnicombe; Dundee/UK

Learning Objectives:
1. To learn about the different non-invasive modalities to excise high-risk lesions.
2. To become familiar with the risk of avoiding surgery.
3. To appreciate the standard protocols in different countries.

08:30 - 10:00 Room E1
E³ 1726a
The high-risk patient enigma
Moderator:
F. Kiburn-Toppin; Cambridge/UK

A-906 08:30
A. Lesions with an elevated risk for breast cancer
G. Forrai; Budapest/HU

Learning Objectives:
1. To learn about different types of high-risk lesions.
2. To become familiar with the risk of developing a cancer.
3. To appreciate the different imaging modalities for diagnosis.

A-907 09:00
B. Value of breast MRI. Rate of underestimation and impact on treatment decision: is breast MRI increasing the number of high-risk lesions?
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08:30 - 10:00 Room E2
Neuro
RC 1711
Diffuse low-grade gliomas: new things you should know
Moderator:
P.W. Cartes-Zumelzu; Innsbruck/AT

A-909 08:30
A. Molecular basis for classification, treatment and predicting outcome in low-grade gliomas
V.C. Keil; Bonn/DE

Learning Objectives:
1. To learn about the role of imaging in the context of histopathology regarding the prediction of outcome.
2. To understand the role of conventional and quantitative beyond diagnosis.
3. To appreciate the translational approach of diagnosis and monitoring of glial tumour based on the histopathological background.

A-910 09:00
B. Imaging patterns suggestive of different (molecular) subtypes of low-grade gliomas
M. Smits; Rotterdam/NL

Learning Objectives:
1. To learn about whether there is a change of pattern recognition based on conventional and quantitative imaging approaches.
2. To understand the heterogeneity of low-grade gliomas based on histopathology and imaging.
3. To appreciate the perspectives and challenges of diagnostic imaging in phenotyping low-grade gliomas.

A-911 09:30
C. Advanced imaging in low-grade gliomas
N. Bulakbasi; Mersin/TR

Learning Objectives:
1. To learn about the spectrum and diagnostic value of the available advanced imaging techniques in neuro-oncology.
2. To understand the added value and possible pitfalls using quantitative MRI techniques in addition to conventional MRI.
3. To appreciate the importance of standardisation of advanced MR image acquisition in the clinical practice of neuro-oncology.
**Oncologic Imaging**

**RC 1716**

**A multidisciplinary approach to prostate cancer: can we make a difference?**

A-916 08:30

Chairperson's introduction

A. Baur; Berlin/DE

**Session Objectives:**

1. To understand the pathophysiological properties of prostate cancer and its impact on diffusion-weighted imaging and dynamic contrast-enhanced MRI.
2. To understand the necessity of functional MRI (compared with mere morphological MRI) in the assessment of prostate cancer.
3. To learn about PI-RADS classification system.
4. To learn about the role of MRI in selecting patient-tailored therapy.
5. To learn about the option of active surveillance vs immediate treatment.

A-917 08:35

A. The urologist: evidence-based clinical decision making

N. Mottet; St Etienne/FR

**Learning Objectives:**

1. To understand how a diagnosis is established by PSA evaluation and biopsy.
2. To learn about different treatment options: surgery, radiotherapy, local ablative and hormonal treatment; as well as active surveillance.
3. To learn how imaging impacts treatment selection.
4. To understand what the urologist needs to know from the radiologist.

A-918 08:58

B. The radiologist: evidence-based use of multiparametric MRI

H.-P. Schlemmer; Heidelberg/DE

**Learning Objectives:**

1. To learn how to perform and interpret multiparametric MRI.
2. To become familiar with the PI-RADS classification system.
3. To become familiar with the role of imaging for patient stratification and treatment planning.

A-919 09:21

C. The radiation oncologist

D. Georg; Vienna/AT

**Learning Objectives:**

1. To learn the rationale and scientific basis for focal therapies for prostate cancer.
2. To learn how focal therapies are performed in prostate cancer.
3. To learn through personal experience and from literature how multiparametric MRI can guide focal therapies of the prostate.

09:44

Panel discussion: Prostate cancer: evidence-based multidisciplinary approach to imaging and treatment

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**Musculoskeletal**

**RC 1710**

**MR imaging of the knee**

Moderator: M. Tzalonikou; Athens/GR

A-920 08:30

A. Cruciate ligaments: what to know and do

A. Alcalá-Galiano; Madrid/ES

**Learning Objectives:**

1. To review the normal anatomy and MR imaging appearances of ACL and PCL and discuss pitfalls.
2. To learn about the imaging appearances of ACL and PCL pathology and discuss imaging sequences and protocols.

A-921 09:00

B. Meniscal tears: obvious and subtle

P. Omoumi; Lausanne/CH

**Learning Objectives:**

1. To review the anatomy of the menisci and the classification of meniscal tear.
2. To familiarise with unusual imaging appearances of meniscal tears and discuss potential pitfalls.

A-922 09:30

C. Looking around the corners: posteromedial and posterolateral

U. Aydingoz; Ankara/TR

**Learning Objectives:**

1. To review the relevant anatomical structures of both posteromedial and posterolateral corners.
2. To discuss imaging signs of pathology affecting the aforementioned areas.

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**Physics in Medical Imaging**

**RC 1713**

**Patient-specific dosimetry**

A-923 08:30

Chairperson's introduction

E. Samara; Sion/CH

**Session Objectives:**

1. To understand the needs for personalised dosimetry.
2. To learn about existing and new methodologies used for patient dosimetry.
3. To understand the challenges for the implementation of patient-specific dosimetry.

A-924 08:35

A. Breast imaging dosimetry

I. Sechopoulos; Nijmegen/NL

**Learning Objectives:**

1. To understand the current method to estimate organ dose in mammography and its limitations.
2. To understand breast dosimetry in emerging modalities.
3. To learn about upcoming approaches in breast dosimetry.

A-925 08:58

B. Patient dosimetry in CT and CBCT

S. Edyvean; London/UK

**Learning Objectives:**

1. To understand what is estimated.
2. To learn how to measure it.
A-926 09:21
C. Patient dose in fluoroscopy and interventional
A. Trianni; Udine/IT

Learning Objectives:
1. To review the fundamental patient dosimetry quantities.
2. To learn about calculation of patient dose for interventional procedures.
3. To learn about real time patient dose monitoring strategies.

09:44
Panel discussion: The future of patient-specific dosimetry

08:30 - 10:00 Room K
E3 - Rising Stars Programme: EFRS Radiographers' Basic Sessions

BR 3
Planning your career

A-927 08:30
Chairperson's introduction: What employers are looking for from new graduates
S. Huber; Munich/DE

Session Objectives:
1. To understand how best to prepare your professional profile using various platforms.
2. To appreciate the potential for radiographers to work in various jurisdictions.
3. To consider the utility of professional development planning in achieving your professional goals.

A-928 08:35
The dos and don'ts of preparing your curriculum vitae
E. Kelly; Galway/IE

Learning Objectives:
1. To understand qualities of a well-designed curriculum vitae.
2. To become familiar with common mistakes to avoid when preparing your CV.
3. To be aware of the potential of social media platforms such as LinkedIn, ResearchGate, EFRS RRN for your professional profile.

A-929 08:58
Radiography: your passport to travel
R. Caroço; London/UK

Learning Objectives:
1. To be aware of the potential to use your radiography qualification in various jurisdictions.
2. To consider barriers to practicing as a radiographer abroad.
3. To appreciate the potential for charitable/voluntary work in developing countries.

A-930 09:21
Planning your professional development
A. Wareing; Aberdeen/UK

Learning Objectives:
1. To understand the importance of professional development planning for radiographers in maintaining, developing and improving radiographer competencies.
2. To be aware of the essential role of CPD and further education for radiographers.
3. To appreciate how best to prepare for promotion opportunities.

09:44
Panel discussion: My best career advice

08:30 - 10:00 Room M 1
ESR Publications Committee Session

How to write a scientific paper and how to get it published
Moderators:
R.G.H. Beets-Tan; Amsterdam/NL
F. Sardanelli; San Donato Milanese/IT

A-931 08:30
The study design and the structure of an original article
F. Sardanelli; San Donato Milanese/IT

Learning Objectives:
1. To understand that the core of an original article is the study design.
2. To understand the structure of an original article and the logics of the blocks of the abstract and of the body text.
3. To learn how systematic reviews and meta-analyses are a particular case of original articles.
4. To learn how to avoid the typical errors that candidate a manuscript for rejection.

A-932 08:50
The review process in radiology
Y. Menu; Paris/FR

Learning Objectives:
1. To know the variety of the review processes in radiological journals.
2. To be aware of pros and cons of the double blinded review.
3. To know how the Editor handles your manuscript.
4. To learn how to answer to reviewers' criticisms.

A-933 09:10
The review process in other clinical journals
R. Madoff; Minneapolis, MN/US

Learning Objectives:
1. To know the variety of the review processes in clinical journals.
2. To be aware of pros and cons of single-blinded or unblinded review.
3. To know how the Editor handles your manuscript.
4. To learn how to answer to reviewers' criticisms.

A-934 09:30
Important papers other than original articles
L. Martí-Bonmatí; Valencia/ES

Learning Objectives:
1. To know the variety of the review processes in clinical journals.
2. To be aware of pros and cons of single-blinded or unblinded review.
3. To know how the Editor handles your manuscript.
4. To learn how to answer to reviewers' criticisms.

09:50
Discussion
### A-936 08:33
**Guidelines and game changers: the radiologist's perspective**
M. Brink; Nijmegen/NL

**Learning Objectives:**
1. To be updated on current, most relevant guidelines on trauma imaging.
2. To discuss the most relevant CT parameters that can be tailored in the setting of polytrauma.

### A-937 08:40
**The primary survey: talking ABC**
J. Peters; Nijmegen/NL

**Learning Objectives:**
1. To learn how to communicate effectively within the trauma team according to ATLS principles.
2. To understand which traumatic diagnoses can be game changers during the primary survey.
3. To discuss radiology in the trauma room: how to optimise logistics in the acute setting.

### A-938 08:55
**The secondary survey: from head to toe**
M. Holla; Nijmegen/NL

**Learning Objectives:**
1. To get to know how orthopaedic surgeons approach polytrauma extremity trauma.
2. To understand how to report secondary survey findings to the surgeon.
3. To learn from diagnostic pitfalls in orthopaedic injuries and how to avoid them.

### A-939 09:15
**The neuroradiologist's perspective**
F.J.A. Meijer; Nijmegen/NL

**Learning Objectives:**
1. To learn a structured approach for image interpretation of head trauma.
2. To learn about the clinical relevance of imaging findings in head trauma.
3. To give the updated on current knowledge and imaging guidelines, with emphasis on blunt cerebrovascular injuries.

### E3 1726b
**Emergencies following tumour therapy**

#### A-940 08:30
**Chairperson's introduction: The role of imaging in the early detection of complications in oncologic treated patients**
D.R. Kool; Amsterdam/NL

**Session Objectives:**
1. To learn about different approaches in tumour therapy.
2. To understand the radiological appearance of complications.
3. To appreciate the role of different imaging modalities in further management of patients.

#### A-941 08:35
**A. Neuro**
C. Calli; Izmir/TR

**Learning Objectives:**
1. To be familiar with different strategies in CNS tumour therapy.
2. To understand the most common imaging findings in emergent clinical scenarios.
3. To learn how to recognise life-threatening complications.

### A-942 09:00
**B. Chest**
H. Prosch; Vienna/AT

**Learning Objectives:**
1. To be familiar with modern approach to malignant chest tumour therapy.
2. To learn how to differentiate clinically important complications.
3. To understand how to look for the early signs of severe and urgent conditions.

### A-943 09:25
**C. Abdomen**
R. Basilico; Chieti/IT

**Learning Objectives:**
1. To learn about different techniques used in abdominal tumour therapy.
2. To be familiar with possible complications.
3. To understand the effectiveness of imaging modalities in evaluation of emergent complications.

### E3 1821
**Advances in musculoskeletal techniques: whole-body MR**

#### A-944 10:30
**A. Oncologic application**
F.E. Lecouvet; Brussels/BE

**Learning Objectives:**
1. To become familiar with the technical aspects of whole-body MR.
2. To learn the role of whole-body MR in the management of oncologic patients.

#### A-945 11:15
**B. Non-oncologic applications**
M. Faruch; Toulouse/FR

**Learning Objectives:**
1. To become familiar with the indications for whole-body MR in non-oncologic patients.
2. To learn the role of whole-body MR in the management of non-oncologic musculoskeletal disorders.

### E3 - ECR Master Class (Emergency Imaging)

#### E3 1821
**Advances in musculoskeletal techniques: whole-body MR**

#### A-944 10:30
**A. Oncologic application**
F.E. Lecouvet; Brussels/BE

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1. To become familiar with the technical aspects of whole-body MR.
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### E3 - ECR Academies: Interactive Teaching Sessions for Young (and not so Young) Radiologists

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M. Faruch; Toulouse/FR

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1. To become familiar with the indications for whole-body MR in non-oncologic patients.
2. To learn the role of whole-body MR in the management of non-oncologic musculoskeletal disorders.

### ESR meets China

#### EM 3
**A glance of China through images**

**Presiding:**
B. Hamm; Berlin/DE
Z.Y. Jin; Beijing/CN

#### A-946 10:30
**Introduction**
Z.Y. Jin; Beijing/CN

**Session Objectives:**
1. To give an overview of the current situation and trend of radiology in the mainland of China.
2. To show a few examples of the diversity of clinical radiological researches in China.
3. To introduce the special focuses of Chinese radiological society.

#### 10:39
**Interlude 1: Experience of Chinese traditional music**
A-947 10:42
Multiparametric analysis in imaging liver disease
F.-H. Yan; Shanghai/CN

Learning Objectives:
1. To give an introduction to the imaging features of common liver diseases in China.
2. To understand the advantages of multiparametric analysis of liver imaging.
3. To show some interesting cases.
4. To discuss the clinical application of multiparametric analysis in abdominal pathologies.

A-948 10:57
Multimodality imaging for insulinoma detection
H.-D. Xue; Beijing/CN

Learning Objectives:
1. To give a review of “insulinoma imaging” in the past.
2. To understand the advantages of perfusion CT, multiparametric MR and PET/CT with special tracers.
3. To discuss the potential clinical workflow and decision tree for imaging patients with suspected insulinomas and other functional pancreatic endocrine tumours.

A-949 11:12
Interventional therapy for hepatocellular carcinoma: Chinese experiences
X.-G. Li; Beijing/CN

Learning Objectives:
1. To learn the epidemiology and special features of hepatocellular carcinoma in China.
2. To review the various interventional procedures and compare their efficacies in treating patients with hepatocellular carcinoma.
3. To understand the indications and clinical applications of interventional procedures to treat hepatocellular carcinoma.

A-950 11:30
Application of artificial intelligence in prostate imaging
X.-Y. Wang; Beijing/CN

Learning Objectives:
1. To learn about the basics and feasibility of applications of artificial intelligence.
2. To understand the clinical value of applying artificial intelligence in detection, prognosis and treatment evaluation of prostate cancer.
3. To learn the technique and clinical application of artificial intelligence in abdominal pelvic imaging.

A-951 11:45
Radiomics nomogram to predict lymph node metastasis in colorectal cancer
Z. Liu; Guangzhou/CN

Learning Objectives:
1. To learn about the basics of radiomics and feasibility of clinical applications.
2. To understand the clinical value of radiomics nomogram in predicting lymph node metastasis in colorectal cancer.
3. To learn the potential applications of radiomics in various oncological studies.

A-952 10:30
Chairperson’s introduction
V. Donoghue; Dublin/IE

Session Objectives:
1. To understand the imaging features of the most common congenital and neoplastic disorders of the brain in children and adolescents.
2. To describe the imaging presentations of the most common disorders of the lung and mediastinum in the paediatric age group.
3. To become familiar with the imaging features of important acute disorders of the abdomen in children and adolescents.

A-953 10:36
A. Paediatric neuro imaging
M.I. Argyropoulou; Ioannina/GR

Learning Objectives:
1. To describe the normal development of the brain.
2. To explain the most common congenital disorders of the brain.
3. To understand the most common brain tumours in children and adolescents.

A-954 11:04
B. Paediatric chest imaging
C. Owens; London/UK

Learning Objectives:
1. To describe the normal development of the lung and mediastinum.
2. To explain imaging features of congenital disorders of the lung and mediastinum.
3. To understand the imaging manifestations of respiratory distress and bronchopulmonary dysplasia in infants.
4. To describe the most common tumours of the chest in children.

A-955 11:32
C. Paediatric abdominal imaging
S.G.F. Robben; Maastricht/NL

Learning Objectives:
1. To understand the imaging features of congenital disorders of the abdomen.
2. To describe the diagnostic evaluation and imaging presentation of appendicitis in children.
3. To describe the diagnostic evaluation and imaging presentation of volvulus and intussusception in children.
4. To understand the imaging presentation of the most common oncologic disorders of the abdomen in children.

C 10
EuroSafe Imaging Stars

A-956 11:00
Chairperson’s introduction
L. Bonomo; Rome/IT

Session Objectives:
1. To understand the experience and the lessons learned after the first two years of implementation.
2. To become familiar with the possible ways for the improvement of the EuroSafe Imaging Stars initiative.
Postgraduate Educational Programme

A-957 11:05  
EuroSafe Imaging Stars network  
T. De Bondt; Antwerp/BE

**Learning Objectives:**
1. To become familiar with the new online self-evaluation form to be completed by applicant departments.
2. To gain an insight in the network of imaging departments committed to best practice in radiation protection for future cooperation in projects.

A-958 11:15  
Radiation protection of patients  
S.J. Foley; Dublin/IE

**Learning Objectives:**
1. To clarify the concept of optimisation in relation to the clinical indication.
2. To understand what actions are needed to enhance radiation protection of patients.

11:25  
Open forum discussion

12:30 - 13:30 Room C  
E³ - The Beauty of Basic Knowledge: Cardiovascular and Interventional Radiology

E³ 24E  
The heart of the matter: imaging the myocardium  
Moderator: T. Yalynska; Kiev/UA

A-959 12:30  
MR in ischaemic cardiomyopathies  
F. Cademartiri; Monastier di Treviso/IT

**Learning Objectives:**
1. To learn about the MR derived imaging biomarkers in ischaemic cardiomyopathy.
2. To understand the value of cardiac MR to indicate and guide revascularisation in ischaemic cardiomyopathy.
3. To appreciate the potential of cardiac MR to predict the outcome of revascularisation.

A-960 13:00  
MR in non-ischaemic cardiomyopathies  
C. Peebles; Southampton/UK

**Learning Objectives:**
1. To learn about the MR derived imaging biomarkers in non-ischaemic cardiomyopathies.
2. To understand the role of cardiac MR in primary and secondary cardiomyopathies.
3. To appreciate the discriminatory power of cardiac MR in cardiomyopathies.

12:30 - 13:30 Room D  
E³ - The Beauty of Basic Knowledge: A Survival Guide to Musculoskeletal Imaging

E³ 25E  
Infective/inflammatory disorders  
Moderator: V.N. Cassar-Pullicino; Oswestry/UK

A-961 12:30  
Infective/inflammatory disorders  
F.M.H.M. Vanhoenacker; Antwerp/BE

**Learning Objectives:**
1. To learn about the pathomechanisms involved in inflammatory and infections disorders.
2. To understand the imaging appearances and their differential diagnosis in the acute, sub-acute and chronic phases of infection.
3. To become familiar with the spectrum of imaging features of inflammatory disorders in the axial and peripheral skeleton.

14:00 - 15:30 Room A  
E³ - ECR Academies: Interactive Teaching Sessions for Young (and not so Young) Radiologists

E³ 1921  
Imaging of abdominal tumours  
A-967 14:00  
A. Liver tumours  
T. Denecke; Berlin/DE

**Learning Objectives:**
1. To become familiar with the differential diagnosis.
2. To identify the key imaging findings.

A-968 14:45  
B. Pancreatic tumours  
C. Matos; Lisbon/PT

**Learning Objectives:**
1. To become familiar with the differential diagnosis.
2. To identify the key imaging findings.

14:00 - 15:30 Room F1  
E³ - European Diploma Prep Session

E³ 1923  
Interventional  
A-970 14:00  
Chairperson's introduction  
T. Struffert; Erlangen/DE

**Session Objectives:**
1. To understand the principles and techniques of angiography and image-guided interventions.
2. To become familiar with the different methods of hepatobiliary interventions.
3. To describe the most common vascular interventions.

A-971 14:06  
A. Basic principles of angiography and image-guided interventions  
T.K. Helmberger; Munich/DE

**Learning Objectives:**
1. To describe the normal anatomy and normal variants of the arterial and venous vascular system.
2. To understand diagnostic and interventional angiographic techniques.
3. To explain basic percutaneous image-guided techniques including abscess drainage and biopsy taking.
A-972 14:34
B. Image-guided interventions in oncology
J.J. Bilbao, Pamplona/ES

Learning Objectives:
1. To describe the basic technical and methodological principles of imaging-guided interventions in oncological disorders.
2. To understand the principles of and indications for vascular interventions in cancer, e.g. transarterial (chemo)embolisation techniques of the liver.
3. To become familiar with the principles of and indications for percutaneous image-guided interventions in oncological disorders including thermal ablation techniques.

A-973 15:02
C. Vascular interventions
J.A. Reekers, Amsterdam/NL

Learning Objectives:
1. To explain endovascular treatment options of atherosclerotic diseases.
2. To understand common angioplasty procedures, such as renal, iliac and femoral angioplasties.
3. To describe indications and techniques for arterial stenting procedures.
4. To explain techniques of arterial embolisation and coiling.
SCIENTIFIC SESSIONS, MY THESIS IN 3 MINUTES AND CLINICAL TRIALS IN RADIOLOGY (B)

Scientific session numbers are prefixed by SS. My Thesis in 3 Minutes session numbers are prefixed by MY. Presentation numbers are prefixed by the letter B. Sessions and abstracts are listed by days.

The Clinical Trials in Radiology (CTiR) sessions are listed at the end of this section (page 375)

There are 346 Invest in the Youth scientific paper presenters at ECR 2018. You can find their sessions marked with

on the following pages.
SS 201a

Multiparametric liver imaging

Moderators:
A. Filippone; Chieti/IT
S. Ichikawa; Chu-osh, Yamanashi/JP

K-01 10:30
Keynote lecture
D. Regge; Turin/IT

B-0001 10:39
Long-term follow-up magnetic resonance elastography after novel direct antiviral therapy in chronic hepatitis C virus induced liver fibrosis

B-0002 10:47
Repeatability and reproducibility of multiparametric magnetic resonance imaging of the liver
H.R. Wilman, V. Bachitar, J. Jacobs, R. Newbould, M. Gyngell; Oxford/UK, London/UK

B-0003 10:55
Molecular features, histological parameters and enhancement measurements in NASHi patients using gadoxetic acid-enhanced MR imaging
D.S. Feier, N. Bastati-Huber, A. Beer, R.M. Fragner, H. Einspieler, A. Ba-Ssalamah; Chuo-shi, Yamanashi/JP

B-0004 11:03
Application of T1rho in evaluating liver fibrosis and correlation with liver function
Q. Yang, T. Yu, J. Huang, Y. Su, J. Li, B. Liang; Guangzhou/CN

B-0005 11:11
Quantitative evaluation of liver function using coefficient of variation value and contrast enhancement index (CEI) on gadoxetic acid-enhanced MR imaging in preoperative evaluation

B-0006 11:19
Liver volumetry: a useful tool to predict functional improvement after antiviral treatment in cirrhotic chronic hepatitis C patients
T. Di Maira, A. Torregrosa Andreu, V. Navarro Aguilar, D. Sanchez Mateos, V. Fornes, M. Berenguer Haym; Valencia/ES

B-0007 11:27
Gd-EOB-DTPA-enhanced MRI T1 relaxometry as an imaging-based liver function test compared with 13C-methacetin LIMAX test
D. Theilig, P. Roabe, L. Lüdemann, J. Pratschke, B. Hamm, T. Denecke, D. Geisel; Berlin/DE, Essen/DE

B-0008 11:35
Comparison of two liver specific contrast agents in patients with different degrees of liver cirrhosis
C. Khouri Chalouhi, F. Venuccio, B. Tuscano, P. Duca, G. Brancaleoni, A. Vanzulli; Milan/IT, Palermo/IT

B-0009 11:43
Correlation between Gd-EOB-DTPA-enhanced MRI and T1rho in patients with and without liver cirrhosis
J.D. Stief, L. Lüdemann, T. Denecke, B. Hamm, D. Geisel; Berlin/DE, Essen/DE

B-0010 11:51
Perfusion quantification and hepatic function with Gd-EOB-DTPA: hepatic fibrosis and hepatocellular transport
S. Schmidt Kobbe, J.-L. Daire, A. Sciarra, L. Lüdemann, T. Denecke, B. Hamm, D. Geisel; Geneva/CH

B-0011 10:39
Optimisation of MRI screening in hereditary pancreatic adenocarcinoma
B. Boekestijn, M. Wasser; Leiden/NL

B-0012 10:47
CT volumetry of the pancreas: gland size in a normal population and its relation to age, gender and body composition
J. Frekjaer, J. Kipp, E. Mark, A. Drewes, S. Olesen; Aalborg/DK

B-0013 10:55
Quantitative MRI of the pancreas: a feasibility study

B-0014 11:03
Is MRCP necessary to diagnose pancreas divisum?
N. Bogveradze, P. Mayer, M. Klauss, K. Lashkhi; Tbilisi/GE, Verona/IT

B-0015 11:11
Predicting the relapse of acute pancreatitis based on radiomics signature of contrast-enhanced computed tomography
Y. Chen, X. Zhang; Nanchong/CN

B-0016 11:19
Use of CT texture analysis as a predictive biomarker of response to neoadjuvant FOLFIRINOX chemotherapy and chemoRT in pancreatic ductal adenocarcinoma
K.S. Burk, M. Patino, R. Canellas, M.J. Patel, D.V. Sahani; Boston, MA/US

B-0017 11:27
Intravoxel incoherent motion diffusion-weighted MR imaging of solid pancreatic masses: reproducibility and usefulness for characterisation
R. De Robertis, N. Cardobi, P. Martini Tinazzi, R. Grimm, A. Stemmer, M. Zanirato, G. Tortora, M. D’Onofrio; Peschiera del Garda/IT, Erlangen/DE, Milan/IT, Verona/IT

B-0018 11:35
MRI follow-up of IPMN: can we limit the use of gadolinium administration?
L. Bertuzzo, G. Zamboni, R. Pozzi Mucelli; Verona/IT

B-0019 11:43
Multiparametric PET/MR imaging biomarkers are associated with overall survival in patients with pancreatic cancer
B.-B. Chen, T.T. Shih, Y.-W. Tien, M.-C. Chang, M.-F. Cheng; Taipei/TW
B-0020 11:51
Tumour heterogeneity of pancreas head cancer assessed by CT texture analysis: association with survival outcomes after curative resection
G. Yun1, Y. Kim2, Y. Lee3; 1Seongnam-si/KR, 2Gyeonggi-do/KR

10:30 - 12:00 Room X
Vascular

SS 215
The large vessels of the chest
Moderators:
P.M. Kitrou, Patras/GR
M. Prokop, Nijmegen/NL

B-0021 10:30
Contrast volume reduction for aortic CT angiography using a volume calculator and a spiral flow device: a prospective randomised study
D. Raymakers, W. Coudyzer, S.A. Cornelissen, G. Maleux; Leuven/BE

B-0022 10:38
Non-contrast MR angiography for aortic monitoring in Marfan patients after aortic root surgery
S. Veldhoen1, C. Behzadi2, A. Lenz3, F. Henes2, M. Rybczynski2, Y. von Kodolitsch1, T.A. Bley1, G. Adam2, P. Bannas3; 1San Donato Milanese/IT, 2Milan/IT

B-0023 10:46
Two novel methods for an objective quantification of iliac artery tortuosity derived from CT-angiography datasets in patients prior to transcatheter aortic valve implantation (TAVI)
I. Carbone, B. Gossetti, C. Catalano; Rome/IT

B-0024 10:54
Image quality and radiation dose sparing of CT angiography for TAVI planning with low-kV, low contrast medium volume and model-based iterative reconstruction compared to standard CTA
F. Braun1, T. Hadlich, H. Ruhnke, B. Jheh, C. Thilo, C. Scheurig-Muenkler, T.J. Kroenccke, F. Schwarz; Augsburg/DE

B-0025 11:02
Variability of MRI-derived aortic diameters in Marfan patients: comparison of inner vs outer vessel wall measurements

B-0026 11:10
Aortomitral calcification is an independent predictor of mortality in TAVR patients
M.J. Willemsink1, E. Maret, K.J. Moneghetti, J.B. Kim, F. Haddad, Y. Kobayashi, K. Higashigaito, W. Fearon, D. Fleischmann; Stanford, CA/US

B-0027 11:18
Magnetic resonance assessment of thrombus remodeling after endovascular aortic sealing of abdominal aortic aneurysms using the Nellix endosystem
N. Galea1, M. Francone, S. Coco, G. Mancuso, O. Martinelli, C. Belli, I. Carbone, B. Gossetti, C. Catalano; Rome/IT

B-0028 11:26
4D flow analysis of abnormal haemodynamics within saccular aneurysm in contrast to fusiform aneurysm in abdominal aorta
M. Sugiyama1, Y. Takehara1, M. Alley1, N. Unno1, K. Katakhashi1, T. Wakayama1, A. Nozaki1, Y. Saganawa2, H. Sakahara1; Hamamatsu/JP, 1Nagoya/JP, 1Stanford, CA/US, 2Hino/JP

B-0029 11:34
Fully automated segmentation of ascending aorta on phase-contrast cardiac MR images: application in healthy and aneurysmatic patients
M. Codar1, M. Scarabello1, F. Secchi1, C. Sforza2, G. Baselli2, F. Sardanelli2; 1San Donato Milanese/IT, 2Milan/IT

B-0030 11:42
MR angiography in small animals using hyperpolarised water
S. Fischer1, R. Maeder1, V. Denysenko1, M. Terekhov2, S. Zangos3, T. Prisner1, T.J. Vogl1; 1Frankfurt a. Main/DE, 2Würzburg/DE

B-0031 11:50
Low-dose CT angiography for thoracic aorta: optimal combination between 80kV and last generation iterative reconstruction algorithm levels
A.D. Annoni, A. Formenti, D. Andreini, M. Guglielmo, G. Mucogiuiri, G. Pontone, E. Consiglio, E. Conte, M. Pepi; Milan/IT

10:30 - 12:00 Room Z
Interventional Radiology

SS 209
Gastrointestinal interventions
Moderators:
O. Penha; Lisbon/PT
J. Tacke; Passau/DE

B-0032 10:30
Percutaneous treatment of postoperative benign hepaticojejunostomy strictures: temporary placement of covered metallic stents versus balloon dilation
G. Yun1, C. Yoon, N. Seong, J. Byeon, H. Lee, Y. Kim; Seongnam/KR

B-0033 10:38
Preliminary experience of TIPS creation using the new controlled expansion e-PTFE covered stent
R. Miraglia, L. Maruzzelli, I. Petridis, G. Mannone, A. Luca; Palermo/IT

B-0034 10:46
Outcomes of transjugular intrahepatic portosystemic shunt using 12-mm-diameter stent for portal hypertension with refractory ascites
A.M.K. Abdel Aal1,2, K. Mahmoud1, S. Kim1, B. Heek1, S. Moawad2, M. Massoud1, S. Saddekni1, N. A. Aboueldahab1, A. Gunn1; 1Birmingham, AL/US, 2Cairo/EG

B-0035 10:54
Non-invasive pressure monitoring after transjugular intrahepatic portosystemic shunt implantation with integrated sensors
C. Spink1, B. John1, D. Schröder1, W. Krautschneider2, M. Braunschweig2, J.-H. Buhk1, G. Adam1, A. Koops1; 1Hamburg/DE, 2Passau/DE

B-0036 11:02
Risk factors of survival after TIPS using ePTFE covered stentgrafts in refractory ascites
M. Pitton1, M. Mammad1, T. Zimmermann, S. Schotten, P. Galle, C. Düber; Mainz/DE

B-0037 11:10
YesOpen procedure: the new percutaneous image-guided treatment option of HCC-induced portal vein thrombosis
M. Mizandari1, T. Azrumelashvili1, N. Habibi1; 1Tbilisi/GE, 2London/UK

B-0038 11:18
Percutaneous treatment of biliary lithiasis: personal experience
S. Zanardi, A. Cappelli, C. Mosconi, M. Renuzzi, F. Modesto, R. Golfieri; Bologna/IT
B-0040  11:34
Image-guided percutaneous drainage of pancreatic duct: what for and how
M. Mizandari, T. Azrumelashvili, N. Habibi; *Tbilisi/GE, *London/UK

B-0041  11:42
Fluoroscopy-guided percutaneous interventions via pancreatic duct percutaneous drainage track for diagnosis and treatment: feasibility and technique
M. Mizandari, T. Azrumelashvili, N. Habibi; *Tbilisi/GE, *London/UK

B-0042  11:50
Interstitial transpedal MR lymphangiography in pre-interventional work-up for lymphatic interventions in patients with chylous effusions
C.C. Pieper, H. Schild; Bonn/DE

10:30 - 12:00 Room O

Chest

SS 204
COPD and infiltrative lung diseases
Moderators:
P.A. Grenier; Paris/FR
C. Romei; Pisa/IT

B-0043  10:30
Inspiratory/expiratory xenon-enhanced area-detector CT (ADCT): capability for pulmonary functional loss and clinical stage evaluations in smokers
Y. Ohno1, Y. Fujisawa2, Y. Kishida1, S. Seki1, N. Sugihara2, T. Yoshikawa2; 1Kobe/JP, 2Otawara/JP

B-0044  10:38
A meta-analysis of a UIP pattern on CT: is surgical lung biopsy necessary in patients with a possible UIP pattern?
H. Kim, S.H. Yoon, H. Hong, S. Hahn, J.M. Goo; Seoul/KR

B-0045  10:46
Follow-up of idiopathic pulmonary fibrosis: computed tomography vs functional metrics
G. Milanese1, M. Silva1, V. Seletti1, C. Galeone2, B. Bartholmai3, S. Palmucci1, S. Picciucchi5, R. Karwoski3, N. Sverzellati1; 1Parma/IT, 2Milan/IT, 3Aachen/DE

B-0046  10:54
Chest HRCT findings in adult patients with different subtypes of humoral primary immunodeficiencies and correlation with lung function test results
L. Cerese, F. Greco, E. Zanelli, P. D’Angelo, M. De Carli, C. Zuliani, R. Girometti; Udine/IT

B-0047  11:02
Effect of different radiation doses and reconstruction kernels of HRCT on texture analysis-based artificial neural network classification of patients with systemic sclerosis
G. Milanese1, M. Manni1, K. Martin2, B. Maurer3, H. Alkadhi1; 1Zurich/CH

B-0048  11:10
Description of interstitial findings in patients with diverse severity of telomere shortening
H. Jofre, L. Planas, P. Luburich, A. Conejero, M. Molina; Barcelona/ES

SS 207
Urinary tract tumours
Moderators:
M. D’Anastasi; Munich/DE
M. Hanna; Cairo/EG

B-0054  10:30
Contrast-enhanced ultrasound in evaluation of renal masses: a preliminary experience

B-0055  10:38
Value of contrast enhanced ultrasound in evaluation of cystic renal lesions compared to computed tomography and magnetic resonance Imaging
M.H. Lerchbaumer1, J. Rubenthaler2, F.J. Putz1, T. Slowinski1, D.-A. Clevert1, E.-M. Jung1, T. Fischer1; 1Berlin/DE, 2Munich/DE, 3Regensburg/DE

B-0056  10:46
Contrast-enhanced ultrasonography (CEUS) and time/intensity curves for the active surveillance of small renal masses
E. Bertelli, S. Agostini, G. Adddeo, S. Verna, F. Parretti, C. Raspanti, A. Minervini, A. Mari, V. Miele; Florence/IT

B-0057  10:54
Contrast-enhanced ultrasound (CEUS) as a new technique to characterise suspected malignancies in renal transplants in comparison to standard imaging modalities
K. Mueller-Peltzer, J. Rubenthaler, D.-A. Clevert; Munich/DE

B-0058  11:02
Percutaneous cryoablation for renal cell carcinoma using US-guided targeting and CT-guided ice-ball monitoring: procedure time, radiation dose and mid-term outcomes
D. Kim, S. Park; Seoul/KR
B-0059 11:10
Is multiparametric MRI useful for differentiating oncocytomas from chromophobe renal cell carcinomas
C. Galmiche; Bordeaux/FR

B-0060 11:18
CT texture analysis in clear cell renal cell carcinoma: a radiogenomics prospective
S. Badia1, D. Bellini1, C. Marigliano2, M. Rengo1, M. Osimani1, S. Picchia1, V. Petrozza1, A. Laghi1; ‘Latina/IT, ’Milan/IT

B-0061 11:26
Assessing venous thrombus in renal cell carcinoma: preliminary results for non-contrast enhanced magnetic-resonance 3D-SSFP
L. Adams, B. Ralla, G. Engel, G. Diederichs, J. Busch, F. Fuller, B. Hamm, M.R. Makowski; Berlin/DE

B-0062 11:34
Can we diagnose T1 stage UB (urinary bladder) cancer from T2 stage with an inchworm/stalk sign on 3T-MRI?
D. Kim, B. Kang, Y. Ko; Seoul/KR

B-0063 11:42
Investigation of intravoxel incoherent motion diffusion-weighted imaging in the evaluation of parotid gland tumours
F. Wang, G. Wu, W. Chen; Shanghai/CN

B-0064 11:50
Prediction of treatment response after immunotherapy in metastatic or recurrent urothelial carcinoma: potential imaging biomarker using CT texture analysis-a preliminary study
K. Park; Seoul/KR

10:30 - 12:00 Room L 8

Head and Neck

SS 208
Advanced MRI techniques in head and neck imaging
Moderators:
G. C.T.E. Garcia; Villejuif/FR
L. Oleaga Zuñiga; Barcelona/ES

B-0065 10:30
The value of readout-segmented diffusion-weighted imaging in the evaluation of parotid gland tumours
Z. Zhang, J. Cheng; Zhengzhou/CN

B-0066 10:38
Sensorineural hearing loss in vestibular schwannoma relies on the presence of utricular hydrops, as diagnosed with heavily weighted T2 sequences
M. Eliezer1, G. Poillon1, A. Gillibert2, C. Maquet2, J. Horion2, E. Gerardin2, P. Bos1, B. Jaspertse1, A.J.M. Balm1, L.C. ter Beek1, F.W. van Leeuwen1, M.W.M. van den Brekel1, R.G.H. Beets-Tan1, T. Buckle1, Amsterdam/NL, ’Leiden/NL

B-0067 10:46
Imaging of facial neuritis using T2-weighted gradient-echo fast imaging employing steady-state acquisition after gadolinium injection
A. Venkatasamy, A. Balaj1, M. Abu Eid, A. Charpiot, C. Debry, F. Veillon; Strasbourg/FR

B-0068 10:54
D-prep magnetic resonance imaging for the visualisation of the facial nerve
P. Bos1, B. Jaspertse1, A.J.M. Balm1, L.C. ter Beek1, F.W. van Leeuwen1, M.W.M. van den Brekel1, R.G.H. Beets-Tan1, T. Buckle1, Amsterdam/NL, ’Leiden/NL

B-0069 11:02
Is gadolinium really necessary for intralabyrinthine schwannomas MRI examination?
A. Venkatasamy, A. Karol, T. Huynh, A. Charpiot, C. Debry, F. Veillon; Strasbourg/FR

B-0070 11:10
Is post-contrast MRI imaging necessary in the investigation of cholesteatoma recurrence when non-echo planar diffusion-weighted imaging is available? A diagnostic accuracy study

B-0071 11:18
Role of magnetic resonance neurography [MRN] for the diagnosis of peripheral trigeminal nerve injuries in patients with prior molar tooth extraction
R.A.K. Deissouky1,2, Y. Xi1, J.R. Zuniga1,2, A. Chhabra1,2, Zagazig/EG, Dallas, TX/US

B-0072 11:34
Application of dynamic contrast-enhanced MRI and diffusion-weighted imaging in differentiating nasopharyngeal carcinoma and nasopharyngeal lymphoma
C. Song, C. Jingliang; Zhengzhou/CN

B-0073 11:26
DKI can early differentiate radio-insensitive human nasopharyngeal carcinoma xenograft in nude mice
X. Zheng, Y.Y. Chen, Y. Xiao, D. Zheng; Fuzhou/CN

B-0074 11:34
Shape-based and quantitative MRI radiomic features in the assessment of non-metastatic nasopharyngeal carcinoma
R. Du, P.-L. Khong, H. Yuan, D.L. Kwong, V.H. Lee, V. Vardhanabhuti; Hong Kong/HK

10:30 - 12:00 Room E1

Breast

SS 202a
Digital breast tomosynthesis (DBT)
Moderators:
S. Zackrisson; Malmö/SE
N.N.

K-03 10:30
Keynote lecture
G. Forrai; Budapest/HU

B-0075 10:39
Digital breast tomosynthesis vs digital mammography: early performance measures in a population-based screening programme
T. Hovda1, Å.S. Holen2, H. Bjørndal1, S. Sebuødegård2, S. Hofvind2; Drammen/NO, ’Oslo/NO

B-0076 10:39
Digital breast tomosynthesis vs digital mammography: early performance measures in a population-based screening programme
T. Hovda1, Å.S. Holen2, H. Bjørndal1, S. Sebuødegård2, S. Hofvind2; Drammen/NO, ’Oslo/NO

B-0077 10:47
Digital breast tomosynthesis (DBT) as a primary screening test in a population-based screening programme: interim results of the Trento DBT pilot study
D. Bernardi1, M. Gentili1, M. De Nisi1, M. Pellegrini1, C. Fantò1, M. Valentini1, V. Sabatino1, N. Houssami1; Bareno/IT, ’Sydney/AU

B-0078 10:55
A prospective study on sensitivity and reading time of different reading strategies with DBT + synthetic 2D in breast cancer screening
F. Caumo1, G. Romanucci1, M. Zorzi, S. Brunelli; Padua/IT, ’Verona/IT
**B-0079 11:03**
Synthetic 2D mammography can replace digital mammography as an adjunct to digital breast tomosynthesis: experience with a wide angle DBT system


**B-0080 11:11**
Microcalcifications in breast tomosynthesis including synthesised mammography, multiple angulated reconstructions and standard stack reconstructions

C. Neubauer, J. Neubauer, M. Windfuhr-Blum, M. Langer; *Freiburg/DE*

**B-0081 11:19**
Breast screening with synthetic 2D and digital breast tomosynthesis (DBT): is it really more expensive?

F. Caumo, G. Romanucci, M. Zorzi, S. Brunelli; *Verona/IT, 2Padua/IT*

**B-0082 11:27**
Comparing two visualisation protocols for tomosynthesis in screening: specificity and sensitivity of slabs vs planes plus slabs

V. Jotti, P. Giorgi Rossi, S. Ravaiolì, A. Nitrosi, M. Bertolini, E. Bacchini, R. Vaccondio, M. Pescarolo, P. Paccatini; *Reggio Emilia/IT*

**B-0083 11:35**
Overview of early clinical implementation of digital breast tomosynthesis: a single-centre experience

S. Soo, K. Rahmat; *Kuala Lumpur/MY*

**B-0084 11:43**
Breast screening 2D-mammography or breast tomosynthesis: comparison in terms of cancer detection and recalls

F. Fernandez Valverde, S. Romero Martin, J.L. Raya Povedano, J.E. Gordillo Arnaud; *Cordoba/ES*

**B-0085 11:50**
Percentage signal recovery (PSR) calculated from dynamic susceptibility perfusion MRI: accuracy in differentiating various enhancing intracranial mass lesions

M. Talaat, A. Abdel Razek, L. Elserougy, G. Gaballa; *Kafr Elsheikh/EG, 2Mansoura/EG*

**B-0086 10:30**
Noncontrast ASL-perfusion in pre-surgical glioma diagnostics

A. Batalov, N. Zakharova, I. Pronin, E. Pogosbekyan; *Moscow/RU*

**B-0087 10:38**
Building an apparent diffusion coefficient radiomics to yield high diagnostic performance in identifying atypical primary CNS lymphoma mimicking glioblastoma

M. Kim, J. Park, H. Kim; *Seoul/KR*

**B-0088 10:46**
Wavelet-based reconstructions of dynamic susceptibility MR perfusion: a new method to visualize hypervascular brain tumours


**B-0089 10:54**
Differentiation of glioblastoma multiforme and single brain metastasis by the distribution pattern of intratumoral susceptibility sign derived from susceptibility-weighted imaging

H. Kang, S. Jang; *Seoul/KR*

**B-0090 11:02**
In vivo assessment of tumour heterogeneity in WHO 2016 glioma grades using diffusion kurtosis imaging


**B-0091 11:10**
Lipid mapping for grading of gliomas

P. Seow, N. Raml, A.T. Hernowo, V. Narayanan, J.H. Wong; *Kuala Lumpur/MY*

**B-0092 11:18**
Arterial spin labelling and diffusion tensor magnetic resonance imaging-derived metrics for differentiation of post-treatment brain tumour recurrence from tissue necrosis

M. Talaat, A. Abdel Razek, L. Elserougy, G. Gaballa; *Kafr Elsheikh/EG, 2Mansoura/EG*

**B-0093 11:26**
Histogram analysis of diffusion kurtosis imaging estimates for in vivo assessment of 2016 WHO glioma grades


**B-0094 11:34**
Differentiating primary CNS lymphomas from glioblastomas and inflammatory demyelinating pseudotumour using relative minimum apparent diffusion coefficients

J. Wen; *Shanghai/CN*

**B-0095 11:42**
Percentage signal recovery (PSR) calculated from dynamic susceptibility contrast perfusion MRI: accuracy in differentiating various enhancing intracranial mass lesions

J.P. Sharma, T. Singh, K. Singh, I. Mohapatra, M. Singh; *Gurgaon/IN*

**B-0096 11:50**
qMRI using relaxometry detects non-visible peritumoural contrast enhancement in malignant gliomas

I. Blystad, J.B. Warntjes, Ö. Smedby, P. Lundberg, E.-M.B. Larsson; *Linköping/SE, 2Huddinge/SE, 3Uppsala/SE*

**B-0097 10:30**
Vascular calcification on mammography and coronary artery disease identified by computed tomography

S.L. McLenachan, M. Williams, F. Camilleri, D.E. Newby; *Edinburgh/UK*

**B-0098 10:38**
Should breast artery calcifications be graded?

Ç.M. Altay, E. Düşünceli Atman, C. Uzun; *2Mansoura/EG*

**B-0099 10:46**
Breast arterial calcification on screening mammography can predict significant coronary artery disease in women

B.S. Kelly, E. Heffernan, S. McNally; *Dublin/IE*
B-0100 10:54
Comparing computer-aided diagnosis (CAD) system with manual method for detecting breast arterial calcification (BAC)
A.N. Kamble, M. Popli; New Delhi/IN

B-0101 11:02
Do we diagnose it better? - new BI-RADS classification for microcalcifications

B-0102 11:10
Incidental breast lesions on chest computed tomography: prevalence, clinical significance, and differential features for referral
Y. Choi, C.H. Park, G. Hye Mi, T.H. Kim, E. Son; Seoul/KR

B-0103 11:18
Breast MRI: internal thoracic artery lymph node assessment in patients with invasive breast carcinoma
M. Nadijanski, Z. Milosevic; Belgrade/RS

B-0104 11:26
Comparison of invasive lobular and invasive ductal carcinomas of the breast using 3T DCE-MRI
T. Torheim, R. Wolte, A.J. Patterson, R. Bedair, I.A. Mendichovszky, C. Caldas, F. Markowetz, F.J. Gilbert; Cambridge/UK

B-0105 11:34
Role of diffusion-weighted MRI (DWI) and intravoxel incoherent motion (IVIM) in monitoring treatment response to neoadjuvant chemotherapy in locally advanced breast cancer
M.F.A. Kamis1, K. Rahmat1, M.T. Ramli Hamid1; Kuala Lumpur/MY, 2Selangor/MY

B-0106 11:42
The diagnostic performance of automated breast ultrasound (ABUS) compared with handheld ultrasound (HHUS)
M. Yoshida1, K. Enokido2, T. Nishiyama1; 1Tokyo/JP, 2Kanagawa/JP

B-0107 11:50
Primary tumour location predicts the site of local relapse after nipple-areola complex (NAC)-sparing mastectomy
L. Vassallo1, N. Tomasi Cont1, V. Doronzio1, R. Panzone1, D. Regge2; 1Candiolo-Torino/IT, 2Cambridge/UK

B-0108 10:30
The performances of radiographic criteria for bone malignancy when applied to computed tomography and magnetic resonance imaging
T. Omal1, G.O. Afacan2, G. Akansel1, A.S. Arslan1, Y. Anik1, N. Inan1, B. Mueszsinoglu2, F. Corapcioğlu1, 1Istanbul/TR, 2Kocaeli/TR

B-0109 10:38
Can quantitative diffusion weighted imaging segregate malignant from benign bone lesions? A 3-T MRI feasibility study
A.A.A. Doweldar1, M.R. Nouh1, A.M. Khalil1, K. Dashti1; Kuwait/KW, 2Alexandria/EG

B-0110 10:46
mDixon is superior to frequency-selective fat suppression in musculoskeletal tumour imaging
W. Huijgen1, C.S. van Rijsijk1, J.L. Bloem1; Leiden/NL, 2Den Haag/NL

B-0111 10:54
Feasibility study of intra-voxel incoherent motion MR imaging for the differentiation of benign and malignant soft tissue tumours
Y. Li, C. Ren, J. Cheng; Zhengzhou/IN

B-0112 11:02
An artificial intelligence approach to the automatic diagnosis of lipoma and liposarcoma: a pilot radiomics study
L. Malinauskaitė, J. Hofmeister, S. Burgermeister, S. Martin, X. Montet, S. Boudabbous; Geneva/CH

B-0113 11:10
Tumour load in patients with multiple myeloma: β2-microglobulin levels vs low-dose whole-body CT
V. Pfahler, M. D’Anastasi, H. Duerr, J. Ricke, A. Baur-Melnik; Munich/DE

B-0114 11:18
MRFUS treatment for painful bone metastases, analysis of non-responders: are there imaging features associated with poor clinical response?
S. Guerri, D. Mercatelli, S. Gasperini, M. Aparisi Gomez1, E. Rimondi1, U. Alissini1, A. Napoli1, G. Battista1, A. Bazzocchi1; Bologna/IT, 1Valencia/ES, 2Rome/IT

B-0115 11:26
Percutaneous image-guided cryoablation of musculoskeletal metastases to the chest wall: a single-centre experience
C. Loral, L. King; Southampton/UK

B-0116 11:34
Radiological changes of giant cell tumour of bone in treatment with Denosumab
S. Bonilla, J. Llauger Rossello, C. Nuñez Peralta, S. Valverde Lavirgen, J. Palmer Sancho; Barcelona/ES

B-0117 11:42
MRI characteristics of 26 onychomatricomas
L. Lassalle1, S. Eminian2, A. Buisson1, E. Pessis3, R. Campagna1; 1Lyon/FR, 2Lille/FR, 3Grenoble/FR

B-0118 11:50
Follow-up of incidental cartilaginous tumours in the knee of middle-aged women

B-0119 10:30 - 12:00 Room D
Musculoskeletal

Musculoskeletal tumour imaging
Moderators:
A. Arkun; Selangor/MY, 2Izmir/TR
B. Henninger; Munich/DE

B-0120 10:38
Can we diagnose it better? - new BI-RADS classification for microcalcifications

B-0121 10:46
mDixon is superior to frequency-selective fat suppression in musculoskeletal tumour imaging
W. Huijgen1, C.S. van Rijsijk1, J.L. Bloem1; Leiden/NL, 2Den Haag/NL

B-0122 10:54
Feasibility study of intra-voxel incoherent motion MR imaging for the differentiation of benign and malignant soft tissue tumours
Y. Li, C. Ren, J. Cheng; Zhengzhou/IN

B-0123 11:02
An artificial intelligence approach to the automatic diagnosis of lipoma and liposarcoma: a pilot radiomics study
L. Malinauskaitė, J. Hofmeister, S. Burgermeister, S. Martin, X. Montet, S. Boudabbous; Geneva/CH

B-0124 11:10
Tumour load in patients with multiple myeloma: β2-microglobulin levels vs low-dose whole-body CT
V. Pfahler, M. D’Anastasi, H. Duerr, J. Ricke, A. Baur-Melnik; Munich/DE

B-0125 11:18
MRFUS treatment for painful bone metastases, analysis of non-responders: are there imaging features associated with poor clinical response?
S. Guerri, D. Mercatelli, S. Gasperini, M. Aparisi Gomez1, E. Rimondi1, U. Alissini1, A. Napoli1, G. Battista1, A. Bazzocchi1; Bologna/IT, 1Valencia/ES, 2Rome/IT

B-0126 11:26
Percutaneous image-guided cryoablation of musculoskeletal metastases to the chest wall: a single-centre experience
C. Loral, L. King; Southampton/UK

B-0127 11:34
Radiological changes of giant cell tumour of bone in treatment with Denosumab
S. Bonilla, J. Llauger Rossello, C. Nuñez Peralta, S. Valverde Lavirgen, J. Palmer Sancho; Barcelona/ES

B-0128 11:42
MRI characteristics of 26 onychomatricomas
L. Lassalle1, S. Eminian2, A. Buisson1, E. Pessis3, R. Campagna1; 1Lyon/FR, 2Lille/FR, 3Grenoble/FR

B-0129 11:50
Follow-up of incidental cartilaginous tumours in the knee of middle-aged women
Scientific Sessions / My Thesis in 3 Minutes

**B-0120 10:38**
National audit on the appropriateness of CT and MRI examinations in Luxembourg

**B-0121 10:46**
Combination of environment recognition sensors and conventional x-ray settings
A. Corbi Bellot, F. Albiol, A. Albiol; Paterna/ES, Valencia/ES

**B-0122 10:54**
Radiation dose optimisation in intraoperative computed tomography of the brain
R. Forbrig, M. Patzig, C.G. Trumm, R. Stahl, F. Dorn; Munich/DE

**B-0123 11:02**
Impact of patient size and radiation dose on spectral accuracy in spectral detector CT: a phantom study
S. van Hedent, C. Tatsuoka, S. Carr, B. Eck, R. Kessner, N. Grosse Hokamp, P. Ros, D.W. Jordan; Cleveland, OH/US

**B-0124 11:10**
Evaluating the effect of image truncation in the calculation of water equivalent diameter
A. Deduelle, P. Moussalî, J. Jacobs, N. Fytoussi; Leuven/BE, Lodz/PL

**B-0125 11:18**
Overranging dose reduction by dynamic collimators: evidence from clinical practice
N. Saltybaeva, H. Alkadhi; Zurich/CH

**B-0126 11:26**
Validation of a task based automatic dose rate control (ADRC) method for interventional cardiology and radiology x-ray systems
M. Dehairs, N. Marshall; Leuven/BE

**B-0127 11:34**
Model observer techniques and an innovative statistical method for detectability evaluation in digital angiography: comparison with a 2AFC experiment
R. Villà, N. Paruccini, C. Spadavecchia, A. Bagli, R. Corso, A. Crespi; Monza/IT

**B-0128 11:42**
Low-dose protocol in prostatic artery embolisation (PAE): dose assessment
F. Rottoli, C. De Mattia, M. Sutto, P.E. Colombo, A. Rampoldi, A. Torresin; Milan/IT

**B-0129 11:50**
Standardisation and optimisation of MRI examination protocols
E. Karavassili, A. Karatop; Szatmár, R. Illing, N. Papanikolaou; Nicosia/CY, Budapest/HU

**10:30 - 12:00**
**Room K**

**SS 214 Optimising mammography**

**Moderators:**
M. Marolt Music; Ljubljana/SI
D. O’Leary; Newcastle/UK

**B-0130 10:30**
Mammography performance and quality assurance practice among five European countries
A. Henner, N. Richli Meystre, C. Sá dos Reis, B. Stram, J. Pires Jorge, T. Kukker, E. Metsälä; Oulu/Fin, Lausanne/CH, Perth/AU, Bergen/NO, Tartu/EE, Helsinki/FI

**B-0131 10:38**
Validation of applied pressures after clinical introduction of pressure-standardised compression mammography

**B-0132 10:46**
Breast compression between women imaged using digital mammography and breast tomosynthesis in a population-based breast cancer screening programme
G.G. Waade, A.S. Helen, B. Hanestad, S. Sebuødegård, N. Moshina; K. Pedersen, S. Hofvind; Oslo/NO, Bergen/NO

**B-0133 10:54**
Breast compression and experience of pain: comparing two compression paddles
S. Hofvind, N. Moshina, G.G. Waade, S. Sebuødegård; Oslo/NO

**B-0134 11:02**
The influence of breast compression on re-attendance in a population-based screening programme
S. Sebuødegård, N. Moshina, G.G. Waade, S. Hofvind; Oslo/NO

**B-0135 11:10**
Impact of contralateral breast shielding on the risk of developing radiation-induced cancer from full field digital mammography (FFDM) screening

**B-0136 11:18**
Outpointing breasts and hallux valgus: correlation and implications in mammography quality
S. Paciﬁci, D. Giudice; Rome/IT

**B-0137 11:26**
Learner’s perception, knowledge and behavior assessment within a breast imaging eLearning course for radiographers
I.C. Moreira, S.R. Ventura, I. Ramos, P.P. Rodrigues; Porto/PT

**B-0138 11:34**
The customised training for radiographers and its importance for image quality improvement and an accurate diagnosis of breast cancer
T.B. Silva, E.C. Maud, S. Sabino; Barretos/BR

**B-0139 11:42**
Dose analytics over large DICOM datasets: a case study in mammography and a quest for meta data quality
M. Rodrigues dos Santos, N. Rocha, A. Silva; Aveiro/PT
**B-0140** 11:50
**Tomosynthesis-guided vacuum-assisted breast biopsy: a survey of the patient’s experience**

**B-0141** 10:39
**Paradoxical low-flow, low-gradient severe aortic stenosis: cardiac magnetic resonance (CMR) evaluation**
S. Pradella, C. Vignoli, M. Acquafresca, F. Grossi, I. Fusi, V. Miele; Florence/IT

**B-0142** 10:47
**The role of topography of valve calcification in degenerative aortic stenosis: a new marker in CT evaluation**
J.A.B. Araújo-Filho¹, A. de Santis¹, C.H. Nomura¹, F. Tarasoutchi¹, M.C. Vieira¹, M. Katz¹, J. Brown¹, E.R. Edelman¹, P.A. Lemos¹; São Paulo/BR, ²Cambridge, MA/US, ³Boston, MA/US

**B-0143** 10:55
**Dynamic morphological changes of the aortic annulus in patients with bicuspid aortic valves**
S. Beccegain, L.R. Bons, A.T. van den Hoven, G.P. Krestin, A.E. van den Bosch, J. Roos-Hesselink, R.P. Budde; Rotterdam/NL

**B-0144** 11:03
**Does the heart cycle fase of cardiac-MSC evaluation influence the measurement of the aortic root in patients undergoing TAVI placement?**
A. Drago, V. Alberotanza, C. Massarelli, L. Mappa, M. Carbone, M. de Ceglie, E. Ventrella, A.A. Stabile Ianora, A. Scardapane; Bari/IT

**B-0145** 11:11
**Angio-CT: key for landing zone reconstruction in TAVI**
D. Araujo Martins, R. Ruiz Salmerón, A. Rivera, C. Caparros Escudero, L. Cueto Álvarez, F. Mateo Carballo; Sevilla/ES

**B-0146** 11:19
**One-stop high definition 64-row CT coronary angiography in patients with severe aortic stenosis candidate to transcatheter aortic valve implantation (TAVI): a pilot feasibility study**
L. Faggioni, M. Gabelloni, M. Bianchi, G. Costa, M. De Carlo, A.S. Petronio, D. Caramella; Pisa/IT

**B-0147** 11:27
**Comparison of aortic annulus dimensions by multimodal measurement before transcatheter aortic valve replacement**
R. Qi; Hangzhou/CN

**B-0148** 11:35
**Comparison of cardiovascular magnetic resonance imaging and computed tomography to guide transcatheter aortic valve replacement: a pilot study**
A. Mayr, C. Kranewitter, G. Klug, C. Kremser, G. Feuchtner, W. Jaschke, B. Metzler; Innsbruck/AT

**B-0149** 11:43
**Value of left ventricular fibrosis volume as a parameter for long-term survival after TAVI**

**B-0150** 11:51
**Left ventricular reverse remodeling after transcatheter aortic valve implantation as assessed by CT angiography**
B. Szilveszter, D. Oren, M. Kolossvary, M. Veczey-Nagy, J. Karady, F. Suhai, A. Apor, B. Merkely, P. Maurovich-Horvat; Budapest/HU

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**Wednesday**

**SS 203**
**All about TAVI: pre- and post-procedural assessment**
Moderators: C. Herzog; Munich/DE

**K-04**
**Keynote lecture**
M. Gardarsdottir; Reykjavik/IS

**B-0151** 10:30
**Apparent diffusion coefficient (ADC) and its correlation with gestational age (GA) in normal developing foetal brain: preliminary results of a prenatal MRI study**
A. Antonelli, S. Capuani, M. Guerrieri, S. Bernardo, R. Petrillo, V. Vinci, L. Manganaro, C. Catalano; Rome/IT

**B-0152** 10:38
**A pain in the neck: imaging of the paediatric cervical spine (c-spine) in isolated neck trauma**
M. Mcgill, A. Paterson; Belfast/UK

**B-0153** 10:46
**Diffusion kurtosis imaging (DKI) can efficiently differentiate low- and high-grade gliomas in paediatric patients**
I.P. Voicu, A. Napolitano, L. Lattavo, C. Carducci, M.C. Rossi Espagnet, A. Mastronuzzi, P. Toma, G.S. Colafati; Rome/IT

**B-0154** 10:54
**Grading of hemispheric gliomas in pediatric patients by using Diffusion Kurtosis MR imaging**
I.P. Voicu, A. Napolitano, L. Lattavo, C. Carducci, M.C. Rossi Espagnet, A. Mastronuzzi, P. Toma, G. Colafati; Rome/IT

**B-0155** 11:02
**Diffusion kurtosis imaging (DKI) can help differentiate low- and high-grade brainstem gliomas in pediatric patients: a pilot study**
I. Voicu, A. Napolitano, L. Lattavo, M. Rossi Espagnet, C. Carducci, A. Mastronuzzi, P. Toma, G. Colafati; Rome/IT

**B-0156** 11:10
**High predictive value of MRI imaging in mitochondrial disease**
T. De Beaurepaire, D. Grevent, R. Levy, V. Dangouloff-Ros, A. Munich, A. Röttig, N. Boddaert; Paris/FR

**B-0157** 11:18
**SMI ultrasound of the neonatal brain: comparison with MRI (1.5 T) in a clinical case series**

**B-0158** 11:26
**Simultaneous decrease of aspartate and NAA levels in the brain after severe TBI: ¹H MRS study**
P.E. Menschikou, M. Ublinskiy, A. Manzhurtsev, T. Akhadov, N. Semenova; Moscow/RU
**B-0158 11:34**
Assessment of a 33-point software programme for the identification of vertebral fractures in children
F. Algahtani, F. Messina, A.C. Offiah; Sheffield/UK

**B-0160 11:42**
Systematic approach to the congenital abnormalities of the posterior fossa: a tertiary paediatric referral hospital experience in last five years (2012-2016)
J. Śmiechowicz1, M. Rebollo Polo2, M. Gómez Chiari3, J. Muchart Lopez1, C. Fons Estupiña1, Girona/ES; 2Esplugues de Llobregat/ES

**B-0161 11:50**
Dentate and basal ganglia T1-hyperintensity in pediatric patients who had received both linear and macrocyclic Gadolinium-based MRI contrast agents; evidence of a „carry-over“ effect
P. Pulino1, A. Bianchi1, A. Sciotti1, S. dicioti1, E. Bartolini1, P. Papadopoulos1, C. Delfilippi1, M. Mascalph1; Florence/IT; 2Pisa/IT

**B-0163 11:38**
Radiomic features from pretreatment MRI are associated with prognosis in rectal cancer patients: preliminary findings
M. Zerunian, D.M. Bellini, D. Caruso, D. De Santis, T. Blasenbrey1; 1Verona/IT

**B-0164 11:46**
Performance of texture analysis in predicting tumoural response to neoadjuvant chemoradiotherapy in rectal cancer patients studied with 3T MR
M. Zerunian, D.M. Bellini, D. Caruso, D. De Santis, T. Blasenbrey1; 1Verona/IT

**B-0165 11:54**
Evaluation of diagnostic accuracy of diffusion weighted (DW) MRI in mesorectal lymph node staging of rectal carcinoma (ReNoRis)
C.O. Monaco1, G. Parker1, R. Little1, Y. Watson1, S. Cheung1, J. O’Connor1, A.V. Marchiano1, D. Scaramuzza1; 1Milan/IT; 2Manchester/UK

**B-0166 11:02**
Prognostic value of bodycomposition parameters assessed at the preoperative CT in patients withcolorectal carcinoma
M. Martinelli, M. Chincarini, G. Zamboni, C. Fabris, C. Conti, C. Pedrazzani, R. Pozzi Mucelli1; Verona/IT

**B-0167 11:10**
Pelvic MRI after induction chemotherapy and before long-course chemoradiation therapy: what are the imaging findings?

**B-0168 11:19**
Tumour volume vs RECIST criteria in re-staging rectal cancer
E. Guid1, C. Giaconi, C. Arena, E. Neri; Pisa/IT

**B-0169 11:26**
MRI of rectal cancer response to therapy: comparison of T2, DWI and ADC between 3T and 1.5T
M. Zerunian1, D. Caruso, D.M. Bellini, D. De Santis, F. Rivosecchi1, A. Laghi; Latina/IT

**B-0170 11:34**
Correlations between the iodine concentrations from dual-energy computed tomography and molecular markers Ki-67 and HIF-1a in rectal cancer: a preliminary study
S. Fan1, X. Li, Z. Ye; Tianjin/CN

**B-0171 11:42**
Utility of CT histogram parameters in discriminating between metastasis and non metastases among colorectal cancer patients with pulmonary lesions
S. Wang1, T. Tong, T. Hu, W. Peng, J. Wang, L. Huang; Shanghai/CN

**B-0172 11:50**
Staging of colon cancer, best technique/modality, a PhD thesis
E. Nerad1, M.J. Lahaye1, R.G.H. Beets-Tan1; 1Worcester/UK; 2Amsterdam/NL

**SS 216**
Colorectal cancer revisited
**Moderators:**
L.K. Blomqvist; Stockholm/SE
A. Lebovici; Cluj-Napoca/RO

**B-0162 10:30**
MRI texture analysis of rectal cancer with mono- and multivariate analysis using machine learning artificial intelligence
R. Ferrari1, C. Voen1, C. Mancini1, M. Zerunian1, F. Rivosecchi2, V. Marè1, R. Paramatti1, R. Faccini1, A. Laghi1; 1Rome/IT; 2Latina/IT

**B-0163 10:38**
Radiomic features from pretreatment MRI are associated with prognosis in rectal cancer patients: preliminary findings
S. Yiqun, T.T. Tong, Y.J. Gu; Shanghai/CN

**B-0164 10:46**
Performance of texture analysis in predicting tumoural response to neoadjuvant chemoradiotherapy inrectal cancer patients studied with 3T MR
M. Zerunian, D.M. Bellini, D. Caruso, D. De Santis, T. Blondi, A. Laghi; Latina/IT

**B-0165 10:54**
Evaluation of diagnostic accuracy of diffusion weighted (DW) MRI in mesorectal lymph node staging of rectal carcinoma (ReNoRis)
C.O. Monaco1, G. Parker1, R. Little1, Y. Watson1, S. Cheung1, J. O’Connor1, A.V. Marchiano1, D. Scaramuzza1; 1Milan/IT; 2Manchester/UK

**B-0166 11:02**
Prognostic value of bodycomposition parameters assessed at the preoperative CT in patients withcolorectal carcinoma
M. Martinelli, M. Chincarini, G. Zamboni, C. Fabris, C. Conti, C. Pedrazzani, R. Pozzi Mucelli1; Verona/IT

**B-0167 11:10**
Pelvic MRI after induction chemotherapy and before long-course chemoradiation therapy: what are the imaging findings?

**B-0168 11:19**
Tumour volume vs RECIST criteria in re-staging rectal cancer
E. Guid1, C. Giaconi, C. Arena, E. Neri; Pisa/IT

**SS 205**
Process improvement and patient communication
**Moderators:**
M. Fatehi; Tehran/IR
A. Trianni; Udine/IT

**B-0173 10:30**
Early treatment for PE diagnosed on CTPA: does electronic critical report labelling make a difference?
S.L. Dluzewski, N. Patel, S.R. Tincey1; 1S. Hare; London/UK

**B-0174 10:38**
Appropriateness and pattern of imaging modality choice amongst radiologists from different countries
V. Pozdniakova1, J. Froehlich2, A. Gutzeit3; 1Stavanger/NO; 2Zurich/CH; 3Lucerne/CH

**B-0175 10:46**
Preliminary analysis of a computer tool to avoid repetition of radiological tests
P. Fraga Rivas1, L. Garcia del Salto1, J. de Miguel Criado1, F. Aguilera del Hoyo1, C. Benito Vicente1, A. Marco Sanz1; 1Madrid/ES; 2Coslada/ES

**B-0176 10:54**
Making the best of clinical radiology: a single-institution review of imaging referral appropriateness including cumulative monetary and dose estimates for inappropriate scans

**B-0177 11:02**
Metformin and intravenous contrast medium: a systematic review of international radiological societal guidelines
A. Weir1, B.S. Kelly1, A. Liew2, P. McCarthy2; 1Auckland/NZ; 2Monash/AUS

**B-0178 11:10**
Study of the current situation of patient information in the example of a CT scan: what are improvement options?
D. Kildal1, S. Schmidt1, M. Beer1, O. Schöffski1, T. Blasenbrey1; 1Ulm/DE; 2Professorship, University of Erlangen-Nuremberg/DE
B-0179 11:18
Patient-adapted communication between radiologist and patient: should radiologists rethink their patient care?
A. Gutzeit; Lucerne/CH

B-0180 11:26
Significant quality improvement of results and patient satisfaction in medical information for radiological examinations applying video information techniques
D. Kildaf, S. Schmidt; 1 M. Beer, O. Schöffski; T. Blasenbrey; 1Ulm/DE, 2Nürnberg/DE

B-0181 11:34
Radiologists as co-author in case reports containing radiological images: do their presence influence quality?
E. Luyckx; 1 J.M. Bosmans; 2 B. Broeckx; 3 S. Ceyssens; 1 P.M. Parizel; 1 Brussels/BE, 2 Gent/BE, 3 Merelbeke/BE

B-0182 11:42
Remote radiological audit: a regional quality assurance system
E. Guseva; S. Morozov; D.V. Burenchev; I. Trofimenko; N. Ledikhova; Budapest/HU, 2 Nicosia/CY

B-0183 11:50
Affidea imaging metrics platform: a comprehensive dashboard providing key performance indicators for optimisation of image quality and throughput
N. Papanikolaou; G. Papaioannou; A. Iliopoulos; P. Szatmari; R. Illing; 1 Athens/GR

B-0184 11:59
Can gadoxetic acid-enhanced MRI predict that a solitary HCC (cT1) is pT1 or pT2?
I.C. Chou; Y.-T. Kuo; I.H.W. Lao; P.-L. Hsieh; Y.-Y. Su; C.-W. Mak; D.-P. Sun; M.-J. Sheu; H.-T. Kuo; Taïnan/TW

B-0185 12:05
Liver imaging reporting and data system (LI-RADS) version 2017 with gadoxetic acid-enhanced MRI: utility of ancillary features in diagnosis of hepatocellular carcinoma
H. Chang; H. Park; Y. Kim; M. Yu; S. Jung; H. Jeon; Seoul/KR

B-0186 12:13
Liver vein infiltration in patients with hepatocellular carcinoma: impact on survival
S. Schotten; F.-I. Meyer; A. Mähringer-Kunz; A. Weinmann; C. Düber; R. Kloeckner; Mainz/DE

B-0187 12:21
Diagnostic efficacy of conventional gadolinium-enhanced MRI in the detection of recurrent hepatocellular carcinoma: intra-individual comparison with gadoxetic acid-enhanced MRI
J.-H. Yim; Y. Kim; Seoul/KR

B-0188 12:29
Differentiation between hepatocellular carcinoma showing uptake of gadoxetic acid and focal nodular hyperplasia
A. Kitag; O. Matsui; N. Yoneda; R. Kita; K. Kozaka; S. Kobayashi; T. Minami; W. Koda; T. Gabata; Kanazawa/JP, 2 Osaka/JP

B-0189 12:37
T2 mapping and diffusion-weighted imaging of hepatocellular carcinoma: prediction of tumour histological grades
L. Cao; B. Song; Chengdu/CN

B-0190 14:00
Differences in liver imaging reporting and data system categorisation between MRI with hepatobiliary-specific vs primary-extraacellular agents
V. Bura; H. Nguyen; S. Lee; T. Tirkes; C. Lalli; 1 Antwerp/BE, 2 Ghent/BE, 3 Merelbeke/BE

B-0191 14:08
Prospective evaluation of dynamic MR with gadoxetic acid for the non-invasive diagnosis of HCC in newly detected nodules smaller than two centimetres on US in cirrhotic patients
C. Ayuso; A. Darnell; J. Rimola; A. García-Criado; Á. García-Criado; R. Vilana Puig; 1 Barcelona/ES

B-0192 14:16
Diagnostic accuracy of LR-M criteria for differentiating combined hepatocellular cholangiocarcinoma on gadoxetate-enhanced MRI
H. Lee; C. An; M.-J. Kim; Seoul/KR

B-0193 14:24
An imaging and clinical scoring system to predict early mortality in spontaneous ruptured hepatocellular carcinoma treated with transarterial embolisation
K.H. Lee; M.L.D. Tse; A.K.C. Cheng; H.Y.F. Wong; M.L. Yu; Y.L. Li; P.Y.C. Chien; Y.C. Ho; F. Chu; Hong Kong/HK

B-0194 14:32
Can gadoxetic acid-enhanced MRI predict that a solitary HCC (cT1) is pT1 or pT2?
I.C. Chou; Y.-T. Kuo; I.H.W. Lao; P.-L. Hsieh; Y.-Y. Su; C.-W. Mak; D.-P. Sun; M.-J. Sheu; H.-T. Kuo; Taïnan/TW

B-0195 14:40
Liver imaging reporting and data system (LI-RADS) version 2017 with gadoxetic acid-enhanced MRI: utility of ancillary features in diagnosis of hepatocellular carcinoma
H. Chang; H. Park; Y. Kim; M. Yu; S. Jung; H. Jeon; Seoul/KR

B-0196 14:48
Liver vein infiltration in patients with hepatocellular carcinoma: impact on survival
S. Schotten; F.-I. Meyer; A. Mähringer-Kunz; A. Weinmann; C. Düber; R. Kloeckner; Mainz/DE

B-0197 14:56
Diagnostic efficacy of conventional gadolinium-enhanced MRI in the detection of recurrent hepatocellular carcinoma: intra-individual comparison with gadoxetic acid-enhanced MRI
J.-H. Yim; Y. Kim; Seoul/KR

B-0198 15:04
Determination between hepatocellular carcinoma showing uptake of gadoxetic acid and nodular hyperplasia
A. Kitag; O. Matsui; N. Yoneda; R. Kita; K. Kozaka; S. Kobayashi; T. Minami; W. Koda; T. Gabata; Kanazawa/JP, 2 Osaka/JP

B-0199 15:12
T2 mapping and diffusion-weighted imaging of hepatocellular carcinoma: prediction of tumour histological grades
L. Cao; B. Song; Chengdu/CN

B-0200 15:20
Prediction of pathological differentiation for hepatocellular carcinoma: preoperative Gd-EOB-DTPA-enhanced MRI and histopathological correlation
K. Huang; Guiyang/CN

SS 301a
Detection and staging of HCC
Moderators:
T. Denecke; Berlin/DE
G. D’Ippolito; 1 Budapest/HU, 2 Nicosia/CY

SS 301b
Modern imaging techniques of the liver
Moderators:
A. Agostini; Ancona/IT
G.H. Mostbeck; Vienna/AT

B-0201 14:00
Evaluation of hepatic warm ischaemia-reperfusion injury and intervention effect of Lipo-PGE1 in rabbit models: 3T7 BOLD MRI study
Q. Ji; Z.-Q. Chu; J.Y. Li; Nanjing/CN, 2 Tianjin/CN

B-0202 14:08
Ultrasonic adaptive sound speed estimation for the diagnosis and quantification of hepatic steatosis
M. Dioguardi Burgio; M. Imbault; 2 M. Ronot; A. Faccinetto; B. Van Beers; P.E. Rautou; L. Castera; M. Tanter; V. Vilgrain; 1 Clercy/FR, 2 Paris/FR

B-0203 14:16
Performance of a 2D-SWE method for predicting different stages of liver fibrosis, using transient elastography as the reference method
I. Sporea; F.B. Bende; A.S. Popescu; R. Sirli; M. Danila; S. Nistorescu; R. Fofiu; V. Baldea; 1 Cluj-Napoca/RO

B-0204 14:24
Associations between liver fat, visceral fat and microalbuminuria in the general population
I. Dekkers; A. de Vries; A. de Roos; T. Rabelink; F.D. Rosendaal; H.J. Lamb; R. de Mutsert; Leiden/NL
B-0205 14:32
Use of 2D shear-wave elastography in predicting different stages of liver fibrosis according to METAVIR scoring system: a histopathological correlation study
M. Akşakal, S. Özcan, G. Esenbasi, S. Özenirler, M. Cindoruk, T. Kızıl, F.N. Baran Akşakal, C. Yucel; Ankara/TR

B-0206 14:40
Preliminary exploration of the application of super microvascular imaging in focal liver lesions
H. Meng-Na, T.A. Jiang, Hangzhou/CN

B-0207 14:48
Intraoperative shear wave elastography for assessment and staging of liver fibrosis and cirrhosis during open liver tumour surgery in correlation with histopathology: first results

B-0208 14:56
Intraoperative CEUS for localisation and characterisation of liver lesions during open liver tumour surgery: a single centre’s 7 years experience

B-0209 15:04
How safe are percutaneous liver biopsy procedures? Complication rate and seeding risk in an oncological setting

B-0210 15:12
Role of interventional radiology in the scope of liver transplantation
M. Pitton, F. Becker, S. Schotten, R. Kloeckner, T. Zimmermann, J. Mittler, P.R. Galle, G. Otto, C. Düber; Mainz/DE

B-0211 15:20
Transient elastography (TE), shear wave elastography (SWE) and magnetic resonance elastography (MRE) for fibrosis assessment in chronic viral hepatitis: preliminary data
L. Cepasco, S. Perugini Bernardi, L. Bacigalupo, F. Paparo, M. De Cesari, G. Sirti, G. Cenderello, V.M. Pinto, G.A. Rollandi; Genoa/IT

14:00 - 15:30 Room X

Vascular

SS 315
Carotid and plaque imaging
Moderators:
D. Bos; Rotterdam/NL
R.W. Günther; Berlin/DE

B-0212 14:00
Association of non-alcoholic fatty liver disease with increased carotid intima-media thickness considering other cardiovascular risk factors
A. Mohammadzadeh, M. Mohammadzadeh, V. Shahkarami, M. Shakiba, P. Sabatresaray; Tehran/IR

B-0213 14:08
Carotid intima-media thickness (CIMT) as a window to atherosclerosis
D.J. Petrovic; Belgrade/RS

B-0214 14:16
Development and validation of a pathlength calculation for carotid-femoral pulse wave velocity
M. Bonnici-Mallia, J. Weir-McCall, L. Brown, J. Summersgill, P. Talarczyk, S. Chin, F. khan, A.D. Struthers, G. Houston; Dundee/UK

B-0215 14:24
Lumen dynamics of spontaneous arteries dissection
M. Drevael, L. Kalashnikova, M. Kretenkova, L. Dobrynina; Moscow/RU

B-0216 14:32
Relationship between ICA geometry and plaque composition
G. Corrias, M. Porcu, M. Laino, L. Saba, A. Moreu; ‘Monseratto’/IT, ‘Cagliari’/IT, ‘Rome’/IT

B-0217 14:40
Are there any differences in radiation-induced and non-radiation-induced carotid atherosclerosis?

B-0218 14:48
Carotid IMT and haemodynamic indices in evaluation of atherosclerosis in hypertensives
S.F. Kenig; Zaria/NG

Magnetic resonance imaging-based assessment of carotid atheroma: a comparative study of patients with and without coronary artery disease
A. Usman, U. Sadat, Z. Teng, M. Graves, J. Boyle, J. Gillard; Cambridge/UK

B-0220 15:04
DCE-MRI demonstrates less microvasculature in symptomatic carotid atherosclerosis

B-0221 15:12
New 3D-arterial analysis software to evaluate carotid atherosclerotic plaque in comparison with CEUS, CTA and histological examination
V. De Socio, V. Cantisani, M. Di Segni, N. Di Leo, A. Rubini, V. Forte, D. Fresi, F. D’Ambrosio, C. Catalano; ‘Rome’/IT, ‘Civitavecchia’/IT

B-0222 15:20
MR imaging shows an inverse association between the microvasculature and intraplaque haemorrhage in atherosclerotic carotid lesions

14:00 - 15:30 Room Z

Interventional Radiology

SS 309
Aortic and arterial interventions
Moderators:
A. Massmann; Homburg a.d. Saar/DE
N.N.

K-05
Keynote lecture
N.N.

B-0223 14:09
Hybrid repair of aortic pathology involving aortic arch
Y. Xue, L. Huang; Beijing/CN
B-0224 14:17
Overall survival and factors predicting long-term outcome after thoracic aortic endovascular repair
B. De Coster, S. Houthoff, A. Laenen, I. Fourneau, G. Maleux; Leuven/BE

B-0225 14:25
Analysis of remodeling in abdominal aortic branch perfusion patterns complicated by type B aortic dissection after thoracic endovascular aortic repair
T. Li, X. Han; Beijing/CN

B-0226 14:33
Evaluating aortic endograft (EVAR) fate according to anatomical instruction (IFU) compliance: which anatomical feature has the most impact on graft fate?
N. Güneş, A. Gulcu; türk/IT

B-0227 14:41
Role of intra-vascular ultrasound (IVUS) in EVAR planning
G. Falcone, C. Raspani, G. Gabbanì, E. Casassamìsa, F. Mondaini, M. Citone, F. Fanelli; Florence/IT

B-0228 14:49
Interventional treatment of visceral artery aneurysms: single centre experience over 16 years
P. Reider, M. Lerchenberger, M. Rentsch, C.G. Trumm; Munich/DE

B-0229 14:57
Endovascular treatment of giant aneurysms: experience in 176 cases
F.E. Falcon Leon; Y. Tairouz; Valencia/VE

B-0230 15:05
Endovascular repair of 40 Visceral Artery Aneurysms (VAAs) and Pseudoaneurysms (VAPAs) with the Viabahn Stent-Graft: technical aspects, clinical outcome and mid-term patency
P. Marra, M. Venturini, M. Colombo, G. Brembilla, M.M. Panzeri, M. Salviòni, S. Gusmini, F. De Cobelli, A. Del Maschio; Milan/IT

B-0231 15:13
Endovascular treatment of visceral artery aneurysms and pseudoaneurysms: extravascular stent graft migration as a possible long-term complication
L. Mascari, M. Tipaldi, M. Pignatelli, M. Cappucci, M. Krokidis, G. Orgera; Rome/IT, Cambridge/UK

B-0232 15:21
Multicentre experience in endovascular treatment of aorto-iliac-femoral anastomotic pseudoaneurysms: evaluation of long-term follow-up
G. Guzzardi, B. Del Sette, P. Cerini, G. Carrafiello, F. Fusaro, D. Laganà, C. Stanca, A. Carriero; Novara/IT, Milan/IT, Catanzaro/IT

14:00 - 15:30 Room O

Chest

SS 304
Quantitative CT: a new diagnostic and functional tool
Moderators: B. Ghaye; Brussels/BE
M. Occhipinti; Florence/IT

B-0233 14:00
Correlation analysis of quantitative CT parameters and pulmonary function in COPD patients
Q. Yu, X. Quan, X. Lu; Guangzhou/CN, Shenyang/CN

B-0234 14:08
Using a neural network-based software to predict lung function values from qCT parameters in patients with COPD
J.F.M. Gawlitza, T. Sturm, K. Spohrer, T. Henschler; Mannheim/DE

B-0235 14:16
Quantitative assessment of lung volume and lung density distribution in lung transplant patients: progression pattern in chronic lung allograft dysfunction
S. Dettmer, H. Suhring, T. Kaireit, J.-M. Kuhnigk, C. Gottlieb, J. Vogel-Claussen, F. Wacker; Hannover/DE, Bremen/DE

B-0236 14:24
Quantitative CT and machine learning methods can predict eventual development of bronchiolitis obliterans syndrome after lung transplantation

B-0237 14:32
Temporal subtraction of serial-computed tomography images for visualisation and quantification of disease progression in idiopathic pulmonary fibrosis

B-0238 14:40
Subtraction CT of the lungs: accuracy of motion correction software

B-0239 14:48
Quantitative CT assessment in patients with desquamative interstitial pneumonia: correlations with pulmonary function parameters
S. Hong, S. Lee, N. Kim, S. Lee, J. Seo; Seoul/KR

B-0240 14:56
Use of quantitative computed tomography to assess post-interventional long-term changes after bronchial thermoplasty in patients with severe asthma

B-0241 15:04
Accuracy of emphysema volume and airway measurements according to FBP, HIR, MIR, and virtual monoenergetic reconstruction images at both low- and standard-dose settings

B-0242 15:12
Qualitative and quantitative comparison of lung nodules in an ex-vivo system on a high-pitch dual source CT and a standard CT in free breathing
C.A. Burgard; Munich/DE

B-0243 15:20
Quantitative CT as a one-stop shop to describe status and outcome of patients with acute respiratory distress syndrome (ARDS)
**SS 307**
Prostate cancer diagnosis

**Moderators:**
A. Guerra; Lisbon/PT
N.N.

**B-0244** 14:00
Analysis of clinical and economic management optimisation of multiparametric-MRI as the first line tool in men with high clinical suspicion of prostate cancer
M. Pecoraro1; A. Padhani1; R. Campal; M.C. Valerio1; C. Catalano1; V. Panbianco1; Rome/IT, *Middlesex*/UK

**B-0245** 14:08
Impact of upfront risk stratification on the negative predictive value of multiparametric MRI in patients with no history of prostate cancer
M. Abihanna1; C. Melodelima2; P.-C. Moldovan1; R. Souchon1; A. Ruffion3; M. Bonatti1; Samsun/TR, *Verona*/IT

**B-0246** 14:16
Diagnostic performance of biparametric MR imaging for detection of prostate cancer: a systematic review and meta-analysis
X. Niu; Chengdu/CN

**B-0247** 14:24
Diffusion-weighted MRI in prostatic lesions: diagnostic performance of normalised ADC using normal peripheral prostatic zone as a reference
T.F.T. Ali; Cork/IE

**B-0248** 14:32
Dynamic contrast-enhanced MRI (DCE) for prostate cancer detection: are qualitative and quantitative analyses the key to success?
P. Flavere; T. Ullrich, R. Rabenalt, P. Albers, G. Antoch, L. Schimmöller; Düsseldorf/DE

**B-0249** 14:40
Prostate tumour volume analysis on MRI as a predictor for aggressive disease
N.M. Hughes, C. O'Neill, F.M. O'Brein, N. Mayer, P. Kelly, J.G. Buckley, K. O'Regan; Cork/IE

**B-0250** 14:48
Prostate volume estimation at MRI: reproducibility and limits
M. Bonatti1; F. Lombardo1; M. Simioni2; G. Avesani1; G. Bonatti1; Bolzano/IT, *Verona*/IT

**B-0251** 14:56
Prevalence and significance of incidental extraprostatic findings in patients undergoing magnetic resonance imaging of the prostate for detection of prostate cancer
F.M. Schäfer, P. Asbach, M. Haas, B. Hamm, A. Baur; Berlin/DE

**B-0252** 15:04
Mpm-MRI of the prostate: anti-peristaltic hyoscyne butylbromide significantly decreases motion artefacts and allows better delineation of anatomic structures

**B-0253** 15:12
Texture analysis of prostate MRI: utility for differentiating patients combined intraductal carcinoma of the prostate from prostate adenocarcinoma
L. Chu, R. Liu; Chengdu/CN

**B-0254** 15:20
Cell cycle progression genomics and MRI features of prostate cancer: radiogenomic correlation and prognostic synergism
A.G. Wibmer1; N.L. Robertson1; B. Ehdai6; S. Stone1; M. Brawer1; H. Hricak1; H. Vargas1; 'New York, NY/US, 'Salt Lake City, UT/US, 'Irvine, CA/US

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**SS 308**
Temporal bone, temporomandibular joint and maxillofacial imaging

**Moderators:**
U. Lamot; Ljubljana/SI
B. Ozgen Mocan; Ankara/TR

**B-0255** 14:00
The diagnostic value of ultrasonography in assessing temporomandibular joint disc position
D. Talmaceanu1; L.M. Lenghel1; G. Baciut1; M. Baciut1; H. Rotar1; N. Bolog2; B. Stöver, B. Kaltenbach, T.J. Vogl; Frankfurt a. Main/DE

**B-0256** 14:08
Is condyle morphology a factor for anterior temporomandibular disc displacement?
I. Camlidag, A.T. Sayıt, M. Elmali; Samsun/TR

**B-0257** 14:16
Fast and accurate diagnosis of oval or round window perilymphatic fistula on CT and MRI without contrast injection on 101 patients with surgical confirmation
A. Venkatasamy, Z. Al Ohraini, A. Charpiot, C. Debry, F. Veillon; Strasbourg/FR

**B-0258** 14:24
Effect of varying tube potentials for the assessment of cochlear implants using advanced cone-beam CT

**B-0259** 14:32
Radiation exposure imparted during multidetector and cone-beam CT scans for the perioperative cochlear implant evaluation
N. Guébert, U. Dietrich, D. Arweiler-Harbeck, M. Forsting, A. Ringelstein; Essen/DE

**B-0260** 14:40
Diagnostic performance of digital tomosynthesis as compared to conventional radiography in evaluation of craniovertebral junction
P. Kala, R. Avantsa, G. Gowda; Bangalore/IN

**B-0261** 14:48
Thesphenoid ostium and its relationship to other endoscopic landmarks inacromegaly: a CT-based morphological study
V. Hegde1; N. Rajgopalan1; S. Thakar2; 'Chennai/IN, 'Bangalore/IN

**B-0262** 14:56
Comparing subjective and objective image quality at two different radiation exposure ranges of the paranasal sinus CT examinations using a volumetric 320-row detector CT system
M. Kantarci, A. Levent, S. Eren, B. Pirimoğlu; Erzurum/TR

**B-0263** 15:04
“How much radiation do my baby get sick?” Answering to worried moms about dental radiology in childhood
F. Testa, N. Angaramo, M. Marchisio, R. Olivero, D. Fraire, V. Verna; Bra/IT
B-0264 15:12
High-resolution dental MRI for planning palatal graft surgery: a clinical pilot study

B-0265 15:20
MRI profile of sinonasal mucosal melanoma: analysis of 46 cases
E. Toninocelli, L. Calabretta, M. Ravanelli, D. Lombardi, D. Farina, R. Maroldi; Brescia/IT

14:00 - 15:30 Room E1
Breast

SS 302
Breast ultrasound
Moderators:
G. Eisen; Istanbul/TR
M.A. Marino; Messina/IT

B-0266 14:00
Breast lesions characterization: prospective comparison of strain and shear wave elastography as additional tool to BI-RADS classification
V. De Socco, V. Cantisani, G. Alagna, M. Di Segni, V. Forte, N. Di Leo, S. La Morte, F. D’Ambrosio; Rome/IT

B-0267 14:08
Meta-analysis of 3 methods to analyse breast strain elastography
R.G. Bear1, A. DeSilvestri2, V. Scotti2, F. Manzoni2, C. Tinelli2; 1Rootstown, OH/US, 2Pavia/IT

B-0268 14:16
Anatomic factors affecting shear wave elastography of malignant and benign breast lesions
L. Pionski, E. Carmon, E. Chernovsky, G. Zeltzer, T. Selia; Jerusalem/IL

B-0269 14:24
Breast sonoelastography: comparison of the accuracy of the computer assisted diagnosis (CAD) classifier system using two values of different cut-off values with the visual classifier
E.F. Fleury1, A.C. Gianini1, V.J. Ayres1, L. Ramalho1, J. Sousa Neto1, K.D. Marcomini1; 1São Paulo/BR, 2Santo André/BR, 3São Carlos/BR

B-0270 14:32
Role of elastography in the characterisation of subcentimeter breast lesions
S. Sampangi, S. Shivalingappa, M. Ashok Kumar, I. Desai, A. Kesari, D. Basavalingu, A. Verma, K. Kallur, P. Asokan; Bangalore/IN

B-0271 14:40
Chemosresponse assessment in locally advanced breast cancer patients: comparison of grey scale ultrasound and elastography
A. Katyan, M.K. Mittal, C. Mani, A.K. Mandal, S.B. Grover; New Delhi/IN

B-0272 14:48
Can a hyperechogenic breast lesion be malignant?

B-0273 14:56
Texture feature analysis can support breast lesions identification and characterisation in images acquired by automated breast ultrasound systems
M. Marcon, A. Becker, N. Berger, M. Wurnig, M. Wagner, T. Frauenfelder, A. Boss; Zurich/CH

14:00 - 15:30 Room E2
Neuro

SS 311
Neuroinflammation and neuroinfection
Moderators:
A. Rovira-Cañellas; Barcelona/ES
R. Wodetek; Vienna/AT

B-0274 15:04
Does breast cancer subtype affect the diagnostic performance of axillary ultrasound for nodal staging in breast cancer patients
M.L.G. Vane1, T. van Nijatten1, P.J. Nielenman1, M.B. Lobbes1, L. van Roosendaal1, L. Krooerman1, K. Keymeulen1, M. Smidt1, R. Schipper1; 1Maastricht/NL, 2Heerlen/NL

B-0275 15:12
Can documenting the number of abnormal nodes at axillary ultrasound accurately predict axillary nodal burden
N. Sharma1, M. Wallis1, R.G. Newcombe1, S. Puri1, M. Al-Attar2, S. Pascale1, M. Hajai3, B. Elsberger1, A. Goyal4; 1Leeds/UK, 2Cambridge/UK, 3Cardiff/UK, 4Derby/UK, 5Leicester/UK, 6Kettering/UK, 7Dundee/UK

B-0276 15:20
Specification of breast masses according to BI-RADS classification enforced with contrast-enhanced ultrasound
E. Peniaeva1, A. Sencha1, Y. Patrunov1, E. Sencha1; Yaroslavl/RU, 2Moscow/RU

B-0277 14:00
Histogram analysis of ADC maps and FLAIR MR imaging can predict active demyelination in multiple sclerosis
K.Y. Wang, J. Carlton, D. Guffey, P.E. Meron; Houston, TX/US

B-0278 14:08
Proton magnetic resonance spectroscopy (1H-MRS) of the brain in patients with tick-borne encephalitis
B. Kawadzki1, B. Kubas1, M. Hladunski1, J. Zajkowski1, O. Zajkowska2, D. Juriglewicz1, A. Garkowsk1, S. Panczewicz1, U. Lebkowska1; Warsaw/PL

B-0279 14:16
Altered hippocampal GABA and glutamate levels and functional connectivity in multiple sclerosis
X. Yin1, F. Gao1, G. Wang2; 1Chongqing/CN, 2Jinan/CN

B-0280 14:24
Advanced MRI assessment during dendritic cell immunotherapy
A. Skipp1, M. Eoli, D. Aquino, G. Finocchiaro, M.G. Bruzzone, V. Cuccarini; Milan/IT

B-0281 14:32
Cortical vs juxtacortical lesions in multiple sclerosis: an analysis of PSIR performance in comparison to FLAIR
M.R. Lima1, G. Furlin1, A. Kupske1, J.S. Muller1, M.C.A. de Vecino1, 2Porto Alegre/BR, 2Boston, MA/US

B-0282 14:40
Neuroimaging manifestations of HIV-AIDS at a reference center in south of Brazil
G.P.D. Castro1, P. Yokoh, J. Geske, G. Michelis, A. Cremonese, B.C. Tenxera; Curitiba/BR

B-0283 14:48
Acute optic neuritis (ON): can magnetic resonance (MRI) in the acute setting help in determining the aetiology?
C. Rost1, M. Cellina, V. Fetoni, M. Pirovano, M. Ciocca, G. Oliva; Milan/IT
Emergency Imaging

**SS 317**
CT imaging in trauma

**Moderators:**
A. Agrawal; Delhi/IN
F.G. Mück; Munich/DE

**B-0288**
14:00
Improved image quality and reduced radiation dose in trauma CT using a custom arm rest pillow
V. Larsen, C.T. Trapy, B.R. Mussmann; Odense/DK

**B-0289**
14:08
Evaluation of the diagnostic potential of the GCS for the indication of whole-body CT in paediatric polytrauma
C. Frellesen, J. Wichmann, P. Tischendorf, T.J. Vogl, K. Eichler; Frankfurt a. Main/DE

**B-0290**
14:16
Who needs a CT scan? Incorporating S100B into existing guidelines in the management of mild traumatic brain injury
L. van den Hauwe, M. Landen, F. Vandereyken, R. Vael, P. Bracke; Brasschaat/BE

**B-0291**
14:24
Can computed tomography (CT) help in predicting diplopia in orbital blowout fractures (BOFs)?
M. Cellina, M. Orsi, C. Floridi; "Milan/IT, "Perugia/IT

**B-0292**
14:32
Multi-energy CT in patients with thoraco-abdominal bleeding: new techniques to facilitate image reading and to help save dose

**B-0293**
14:40
Evaluation of CT and clinical features of bowel and/or mesenteric injury in blunt abdominal trauma: a case-control study

**B-0294**
14:48
Prognostic and diagnostic value of hyperattenuating adrenal glands on contrast-enhanced computed tomography scans of polytraumatised patients
D. Kildal, T. Erben, M. Beer; Ulm/DE

**B-0295**
14:56
Dual-phase CT protocol in the assessment of traumatic liver injuries
F. Jacobelli, I. Ladevö, A. Sorbo, M.G. Scuderi, S. Daniele, A. Spanaro, G. Russo, L. Romano, M. Scaglione; "Naples/IT, "Castel Volturno/IT

**B-0296**
15:04
Correlation between CT-based liver injury scoring and subsequent management
M. Reim, A. Lomb, V. Minnovits, P. Ives, S. Saar, U. Lepner, P. Talving; "Tartu/EE, "Tallinn/EE

**B-0297**
15:12
Comparison of the inter-observer reliability of injury severity recording between unstructured and structured CT reports of blunt abdominal trauma
Y.-C. Wong, L.-J. Wang, C.-H. Wu; Taoyuan/TW

**B-0298**
15:20
Whole-body multidetector CT in polytrauma patients: incidence and clinical significance of missed diagnoses
F. Ruschi; Bolzano/IT

Muscloskeletal

**SS 310**
Joint imaging

**Moderators:**
M. Tzalonikou; Athens/GR
B. Vande Berg; Brussels/BE

**B-0299**
14:00
Dose optimisation in digital radiography of the hands: evaluation of the GC65A low-dose technology
S. Siepmann, K. Ziegeler, A. Beck, T. Diekhoff, A. Bach, B. Hamm, K.-G. Hermann; Berlin/DE

**B-0300**
14:08
Heels: the higher, the better? Weight-bearing MRI evaluation of the forefoot in women during heeled-shoes wearing
C. Giaanneros, F. Bruno, S. Quarchioni, E. Cannizzaro, P. Palumbo, S. Mariani, F. Arrigoni, A. Barile, C. Masciocchi; L`Aquila/IT

**B-0301**
14:16
MDCT arthrography assessment of the severity of cartilage damage and scapholunate dissociation in regard to specific component tears of the scapholunate ligament
J.-B. Queure, C. Phan, A. Miquel, L. Arrive, Y. Menu, M. Crema; Paris/FR

**B-0302**
14:24
MRI patterns of locked metacarpophalangeal joints of the long fingers

**B-0303**
14:32
Cartilage damage assessed with dGEMRIC occurs at the zone of 3D CT-based impingement simulation: a pilot study
F. Schmaranzer, T. Lerch, I. Todorski, P. Haefeli, M. Hanke, S. Werlen, K. Siebenrock, M. Tannast; Bern/CH

**B-0304**
14:40
Diagnostic efficacy of a 3D sequence in the standard MR protocol among high risk patients for knee cartilage lesions
M. Vlahou, I. Kyriakis, K. Vassilou, I. Tsougos, S. Michalitsis, M. Hantes; "Larissa/GR, "Milton Keynes/UK
B-0305 14:48
Comparison of T2*-weighted gradient-echo sequence with magnetisation transfer contrast, to other MRI sequences in the diagnosis of gonarthrosis

B-0306 14:56
Knee derangement in the era of total knee replacement epidemic
M. Abd El Bagi1, C. Alishahi2, H. Alfaleh3, S. Ahmed3, F. Alorfi3, N. Ashraf4, A. Thomas1, M. Reutener1, Riyadh/SA

B-0307 15:04
Diagnostic imaging of haemophilic arthropathy in children: 3T MRI HAMRIS staging scale
K. Bokwa-Dabrowska1, P. Laguna2, M. Brzewski3; Warsaw/PL

B-0308 15:12
Fat saturated 3D-flash sequence improves erosion detection on the sacroiliac joints: results from the SIMACT study
T. Diekhoff1, J. Greese2, J. Sieper2, D. Podubnyy2, B. Hamm2, K.-G. Hermann1; Berlin/DE

B-0309 15:20
Prevalence of fat metaplasia and other structural changes of sacroiliac joints in patients without axial spondyloarthritis: a cross-sectional MRI study
K. Ziegeler1, H. Eshkal1, C. Schorr1, J. Sieper1, T. Diekhoff1, M.R. Makowski1, B. Hamm2, K.-G. Hermann1; Berlin/DE

14:00 - 15:30 Room G

Physics in Medical Imaging

SS 313
Dose management and diagnostic reference levels
Moderators:
H. Bosmans1; Leuven/BE
R. Villa2; Monza/IT

K-06 14:00
Keynote lecture
V. Tsapaki1; Athens/GR

B-0310 14:09
Online platform for fast and accurate calculation of fetus dose in CT
N. Saltybaeva1, H. Alkadhi1; Zurich/CH

B-0311 14:17
Radiation dose for digital breast tomosynthesis: influence of breast composition and breast thickness
N. van der Werf1, E.-J. van Dijk1, D.icketscheid1, M.C. Kock1, *Dordrecht/ NL, *The Hague/NL

B-0312 14:25
A national web-based tool for optimisation of radiological protocols
S.J. Thunberg1, H. Bävenäs1, T. Cederlund2; Stockholm/SE

B-0313 14:33
Validation of the DACS-integrated radiation dose monitor skin dose mapping software using XR-RV3 Gafchromic films for fluoroscopically guided procedures

B-0314 14:41
Radiation dose impact of indication- and BMI-based CT protocols vs anatomy-based protocols: prospective multicentre study

B-0315 14:49
CT scan radiation dose evaluation by clinical indication: a multi-centric French study

B-0316 14:57
Multicentre CT scanner dose excellence programme: strategies and results

B-0317 15:05
Evaluation of diagnostic reference levels for conventional radiography in Austria
D. Wachabauer1, F. Röthlin1, P. Homolka1, H.M. Moshammer1, H. Ostermann1; Vienna/AT

Diagnostic reference levels for interventional radiology: quantifying diagnostic cerebral angiography complexity
T. De Bondt1, F. Zanca1, X. Lopez Rendon2, L. Brouhon1, T. Van der Zijden1, M. Voormolen1, O. D’Archambeau1, P.M. Parizel1; *Antwerp/BE, *Buc/FR

B-0319 15:21
Implementation of updated ACR size-specific CT diagnostic reference levels based on water-equivalent diameter and SSDE using automated dose monitoring software
P. Kröpil1, C. Thomas1, O.T. Bethge1, Y. Klosterkemper1, J. Aissa1, E. Appel1, C. Schleich1, A. Antoch1, J. Boos1; Düsseldorf/DE

14:00 - 15:30 Room K

Radiographers

SS 314
Balancing dose and image quality in CT
Moderators:
S.D. Moerup1; Odense/DK N.N.

K-07 14:00
Keynote lecture
J. Santos1; Coimbra/PT

B-0320 14:09
Image comparison of virtual non-contrast images and true non-contrast images obtained from dual-energy CT in latest generation dual-source and dual-layer CT for liver
B. Na1, S.-J. Lee1, H.-J. Jeong1, D.-S. Kim1; Seoul/KR

B-0321 14:17
Acceptable noise levels in abdominal CT examinations of obese paediatric patients
M. O’Connor1, J.G. Stowe1, S. Foley1; Dublin/IE

B-0322 14:25
Does body mass index affects radiation dose reduction in prospective electrocardiographic gating cardiac computed tomography?
B. Kara1, M. Onur1, A. Tokter2, S. Horoz1, D. Akata3, Ankara/TR

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B-0323 14:33
Metal artefact reduction in the musculoskeletal system with dual-energy CT and spectral imaging
C. Fraia Piñeiro1, M. González Vázquez1, M. Monteiro2; Vigo/ES, "Coimbra/PT

B-0324 14:41
Effective dose calculations of trunk CT scans in single-energy CT (SECT) and fast kVp switching dual-energy CT (FKS-CT)
K. Yagami1, T. Miyoshi1, S. Shigeyama1, H. Okada1, S. Suzuki1, S. Foley2, "Gifty/JP, "Toyoyake/JP, "Dublin/IE

B-0325 14:49
Impact of scanner type and acquisition parameters on the accuracy of displayed computed tomography dose index
C. Dionisi, B. Cannillo, R. Matheoud, L. Vigna, G. Fusco, M. Brambilla; Novara/IT

B-0326 14:57
Dose values in interventional computed tomography procedures: a multicentre study
A.R. Costa1, I. Gomes1, A.S. Pimenta2, C. Oliveira1, C.M. Almeida1, G.N. Paulo1, J. Santos1; "Coimbra/PT, "Porto/PT, "Lisbon/PT

B-0327 15:05
One-stop imaging for triple-rule-out CT angiography using 16-cm wide-detector CT: a preliminary study
K. Liu, Z. Li; "Chengdu, Sichuan/CN

B-0328 15:12
Optimisation of computed tomography practice: phantom and patient approach
F. Pires, T. Patrão, F. Alves, J. Santos; "Coimbra/PT

B-0329 15:21
Assessment of image quality criteria from chest CT examinations
R. Carrasquinho1, A.M. Ribeiro1, L.P. Ribeiro1, O. Lesyk1, R.P. Almeida1, A.F.Abrantes1; "Faro/PT, "São Brás de Alportel/PT

14:00 - 15:30  Room M 1

Cardiac

SS 303
Cardiac imaging in metabolic disease
Moderators:
A. de Roos; Leiden/NL
E. Perschina; Moscow/ RU

B-0330 14:00
Obesity and type 2 diabetes: cardiovascular and cerebral aspects
R.L. Widya; Leiden/NL

B-0331 14:08
CT dose reduction for epicardial fat measurement in obese patients: effects of low-dose cardiac CT and adaptive statistical iterative reconstruction
S. Mirafzal, C. Lahaye, A. Mulliez, P. Morin, M.A. Vaz Touret, Y. Boirie, L. Boyer, L. Cassagnes; "Clermont-Ferrand/FR

B-0332 14:16
Computer-aided semi-automatic quantification of epicardial fat volume on angio-CT images
M. Codari1, C. De Angeli1, M. Scarabell02, F. Secchi1, F. Sardanelli1; "San Donato Milanese/IT, "Milan/IT

B-0333 14:24
Epicardial fat volume as a potential imaging biomarker for coronary artery disease in symptomatic patients
G. Milanesi1, M. Silva1, L. Bruno1, M. Goldoni1, E. Maffei1, F. Cademartiri1, N. Sverzellati1; "Parma/IT, "Palermo/IT, "Urbino/IT, "Rotterdam/NL

B-0334 14:32
Intra- and interobserver variability of MR-based assessment of myosteatosis as a biomarker for metabolic diseases in subjects from the general population

B-0335 14:40
Cardiovascular function in relation to abdominal adipose tissue distribution

B-0336 14:48
MRI-based epi- and para-cardial fat depots in a cohort of prediabetics, diabetics and healthy controls from a general population without cardiovascular disease
S.D.Heber1, R. Lordeber2, S. Gatidis1, J. Machann1, S. Auweter1, S. Sellner2, A. Peters3, F. Bamberg1, C.L. Schlett2; "Tübingen/DE, "Munich/DE, "Heidelberg/DE

B-0337 14:56
Coronary CT angiography-based fractional flow reserve in diabetic patients: results from the MACHINE consortium

B-0338 15:04
The right ventricular strain assessment in type 2 diabetes mellitus patients: insights from cardiac magnetic resonance feature tracking

B-0339 15:12
Assessment of the left ventricular myocardial strain in type 2 diabetes mellitus patients with hypertension using MR tissue tracking
L. Xia, Y. Guo, Z. Yang; Chengdu/CN

B-0340 15:20
Phenotypic multi-component involvement of subclinical disease as quantified by MRI in subjects with prediabetes, diabetes and normal glucose tolerance

14:00 - 15:30  Room M 2

Paediatric

SS 332
Muskuloskeletal and child abuse
Moderators:
A. Bartoloni; Rome/IT
R.R. Van Rijn; Amsterdam/NL

B-0341 14:00
Detection of bridging vein thrombosis at computed tomography: a specific sign of shaken baby syndrome
S. Nathman, D. Grevent, K. Beccaria, N. Boddaert; Paris/FR
### Oncologic Imaging

#### SS 316<br>Cancer radiomics: adding value in cancer

**Moderators:**<br>A. Farchione; Rome/IT  
S.M. Niehuu; Berlin/DE

**K-08**<br>14:00<br>**Keynote lecture**<br>X. Montet; Geneva/CH

**B-0352**<br>14:09<br>Radiomics as a novel tool for primary nodal staging in rectal cancer<br>J.J.M. van Griethuysen; D.M. Lambregts, S. Trebesch, M. Maas, M.J. Lahaye, G.L. Beets, F.C. Bakers, R.G.H. Beets-Tan, H.J. Aerts; Amsterdam/NL, Maastricht/NL, Boston, MA/US

**B-0353**<br>14:17<br>CT radiomics signature for preoperative esophageal cancer patients lymph node metastasis prediction<br>J. Qu, C. Shen; Zhengzhou/China, Xi’an/China

**B-0354**<br>14:25<br>CT texture features of adrenal tumours: the answer to indeterminate adrenal lesions?<br>J. Garlani, M.M. Siddique, G. Cook, V. Goh; London/UK

**B-0355**<br>14:33<br>Machine learning and radiomics analysis of multi-parametric PET/MRI: characterisation of primary cervical cancers<br>J. Gruenesen, F. Nensa, A. Demircioglu, M. Forsting, K. Herrmann, L. Umutlu; Essen/DE


**B-0357**<br>14:49<br>CT-derived texture analysis in predicting tumoral response to immunotherapy in patients with lung cancer and correlation with iRECIST<br>F. Rivosecchi, D. Caruso, D. De Santis, D.M. Bellini, N. Panvini, M. Rengo, A. Laghi; Latina/IT

**B-0358**<br>14:57<br>Evaluating response to chemotherapy in colorectal liver metastases: correlation between CT texture analysis and RECIST criteria<br>N. Panvini, D. Caruso, D. De Santis, D.M. Bellini, F. Rivosecchi, M. Rengo, A. Laghi; Latina/IT

**B-0359**<br>15:05<br>Histogram analysis of T1-weighted, T2-weighted, and postcontrast T1-weighted images in primary CNS lymphomas: correlations with histopathological findings<br>H.-J. Meyer, S. Schob, B. Münch, C. Frydrychowicz, U. Quäschling, K.-T. Hoffmann, A. Surov; Leipzig/DE

**B-0360**<br>15:13<br>Added value of radiomics signature to predict pulmonary metastasis in colorectal cancer patients with lung nodules<br>T. Hu, T. Tong, S. Wang; Shanghai/China
### Oncologic Imaging

#### B-0361 15:21
Personalised radigenomic medicine: prostate cancer gene 3 and PI-RADSv2 team up to predict clinically significant prostate cancer

M. Nguyentan1, V. Bura1, A. Ushinsky1, S. Fardin1, C. Green1, E. Uchio1, T.K. Lee1, C. Lail1, R. Houshyar1; 1Orange, CA/US, 2Cluj-Napoca/RO

#### B-0370 14:32
Prognostic significance of different MRI modalities for evaluation of neoadjuvant chemoradiation treatment of locally advanced rectal cancer

O. Ganych; Kyiv/UA

#### B-0371 14:36
Prediction of response to transarterial radioembolisation by means of MRI-based texture analysis as a potential radiomics tool

R. Reimer1, P. Reimer1, A. Mahnken1; Marburg/DE, Karlsruhe/DE

### Oncologic Imaging

#### MY 3

#### Oncologic Imaging

Moderators:
G. Brancatelli; Palermo/IT
S. Gourtsoyianni; Athens/GR

#### B-0362 14:00
Whole-body diffusion-weighted MRI in Hodgkin Lymphoma: 3D texture analysis for early treatment response assessment

K.N. de Paepe1, I.F. Vieira1, F. De Keyzer1, P. Wolter1, O. Bechter1, D. Dierickx2, R. Oyen2, G. Vandeveeye2; 1London/UK, 2Verviers/BE

#### B-0363 14:04
Dynamic glucose-enhanced MRI: clinical perspectives and challenges

D. Paepe1, P. Schuенken1, C. Köhler1, B. Bachert1, M. Ladd1, M. Bendzusi1, H.-P. Schlemmer1, M. Zaiss1, A. Radbruch1; Heidelberg/DE, Tübingen/DE

#### B-0364 14:08
Compressed sensing accelerated 3D magnetic resonance cholangiopancreatography: application in pancreatic diseases


#### B-0365 14:12
Multiparametric MRI to predict response to external beam radiotherapy in locally advanced cervical cancer: comparison of MRI volumetry, diffusion-weighted MRI and MR texture analysis

L.A. Min1, L.L.G.C. Ackermans1, M.E. Nowee1, J.J. van Griethuysen1, S. Trebesch1, W. Vogel1, M. Maas1, R.G.H. Beets-Tan1, D.M. Lambregts1; Amsterdam/NL, Maastricht/NL

#### B-0366 14:16
Is there rationale for the routine inclusion of chest CT in gastric cancer staging? Evidence from a single-institution cancer registry

A.-H. Chen1, C.-M. Chen2; Taoyuan/TW, Taipei/TW

#### B-0367 14:20
MR texture analysis: potential imaging biomarker for prediction of chemotherapy response in patients with colorectal liver metastases

H. Zhang1, T.T. Tong1; Shanghai/China

#### B-0368 14:24
Patterns of responses in metastatic NSCLC during immunotherapy: comparison of RECIST 1.1, iRECIST and iRECIST criteria

M. Tazdait1, P. Bidault1, S. Ammari1, C.S. Balleyguier1, D. Planchard1, J.-C. Soria1, A. Marabelle1, B. Besse1, C. Caramella1, Villejuif/FR

#### B-0369 14:28
Diagnostic value of automated breast volume sonography (ABVS) in breast cancer detection in women with different ACR types

M. Efremova1, V.E. Gazhonova1; Moscow/Russia
**16:00 - 17:30**  
**Sky High Stage**  

**MY 4**  
**Genitourinary**

**Moderators:**  
A.K. Dixon; Cambridge/UK  
S. Nougaret; Montpellier

**B-0382 16:00**  
Radiomics of high-grade serous ovarian cancer: association between quantitative CT features and prognosis  

**B-0383 16:04**  
Prostate cancer detection rate in patients with negative multi-parametric (mp) MRI or negative biopsy after 2 years of follow up  
E. Appendino1, S. Pedalino1, E. Tabone1, V. Romano1, S. Mazzetti1, A. Giacobbe2, G. Muto1, F. Russo1, D. Regge1; 1Candiolo-Turin/IT, 2Milan/IT

**B-0384 16:08**  
Which cancer-related factors are associated with prostate cancer missing when evaluating mpMRI with PI-RADS v2?  
R. Girometti1, F. Greco1, L. Cereser1, G. Como1, V. Ficarra2, G. Giannarini1, A. Crestani1, C. Zuliani1; Udine/IT, 2Messina/IT

**B-0385 16:12**  
Role of ureteric jet angle as measured by colour Doppler ultrasound in evaluating severity (grading) of VUR in patients presenting with urinary complaints  
P. Maravi; Bhopal/IN

**B-0386 16:16**  
Accuracy of multiparametric MRI of prostate cancer recurrence after high-intensity focused ultrasound (HiFU); is dynamic contrast enhancement still needed?  

**B-0387 16:20**  
Development of preoperative prediction of high Fuhrman grade in the patient with clear cell renal cell carcinoma  
J. Ding, J. Chen, J. Sun, W. Xing; Changzhou/CN

**B-0388 16:24**  
Prognostic value of diffusion-weighted imaging for clinical outcome prediction in uterine cervical cancer treated with radiotherapy  
K. Gu, C.K. Kim, J. Lee; Seoul/KR

**B-0389 16:28**  
Intravoxel incoherent motion and blood oxygen level-dependent of early iodinated contrast-induced acute kidney injury induced in a rabbit model  
Y. Wang1, K. Ren1, L. Xie1, X. Zhang1; 1Shenyang/CN, 2Beijing/CN

**B-0390 16:32**  
Comparison of MRI and transvaginal ultrasonography in the diagnosis of retrocervical septum endometriosis  
M. Wang, J. Lu, Y. Dai, Y. Xia; Beijing/CN

**B-0391 16:36**  
Clinical complications in percutaneous renal biopsy guided by ultrasound; 16 vs 18-gauge needles  
P. Ramos Botelho Antunes1, M.C. Barbosa Álvares2, F. Franco Monteiro Prado1, F. Tínoco Alvim de Souza1, M. Álvares de Campos1, E. Carvalho de Siqueira1, R. Berindoague Neto1, B. Carvalho Silva Rabelo1; 1Belo Horizonte/BR, 2Itauna/BR

**B-0392 16:40**  
Developing a new PI-RADS v2-based nomogram for forecasting high-grade prostate cancer  
X. Niu; Chengdu/CN

**B-0393 16:44**  
Diffusion-weighted MRI as a prognostic and response biomarker in patients with castration-resistant prostate cancer and bone metastases  
R. Perez Lopez1, N. Tunariu1, D.-M. Koh1, J.S. de Bono1; 1London/UK, 2Barcelona/ES

**B-0394 16:48**  
Tumour size at MRI association with lymph node metastasis and lymphovascular space invasion in resectable cervical cancer: a multicentre evaluation of surgical specimens  
X.-i. Chen, P. Zhou, H. Li; Chengdu/CN

**B-0395 16:52**  
NSsaFe: observational study on the incidence of nephrogenic systemic fibrosis in patients with renal impairment following gadoteric acid administration  
A. Gottschall, B. Kress; Frankfurt a. Main/DE

**B-0396 16:56**  
Staging of endometrial carcinoma with MRI: does the fusion T2-weighted and high b-value diffusion-weighted images improve diagnosis? An agreement study with histopathology  
M. Correia1, M.A. Serrado2, M. Hortal, T.M. Cunha1, D. Virella1; 1Lisbon/PT, 2Funchal/PT

**B-0397 17:00**  
Testicular microlithiasis: clinic-radiologic-pathologic correlation in 289 patients with germ cell tumour  
M. De la Mora Malváez1, A. Garza Gangemi1, D.A. Sánchez Nava1, M. Licanó1, O.C. Rico Rodríguez1, C. Kauffman Ortega1, R. Castillejos Molina1; Mexico City/MX, 2Tlalpan/MX

**B-0398 17:04**  
Differentiation and diagnosis of benign and malignant testicular lesions using 18F-FDG PET/CT  
D. Shao; Guangzhou/CN

**B-0399 17:08**  
Ectopic pregnancies in caesarean section scars: five-years' experience  
H.S. Darwish1, Y. Habash1, M. Habsah2; 1Ismailia/EG, 2Cairo/EG

**B-0400 17:12**  
Role of ultrasound and MR imaging in evaluation of patients at high risk of morbidity adherent placenta  
G. Khatri, N. Antil, R. Misra, S.K. Bajaj; New Delhi/IN

**B-0401 17:16**  
Comparing of MRI and ultrasonography in the diagnosis of retrocervical septum endometriosis  
M. Wang, J. Lu, Y. Dai, Y. Xia; Beijing/CN
B-0412 09:10
Advantages of spectral CT in staging of patients with non-small cell lung cancer (NSCLC)
U. Fehrenbach1, K. Merz1, G. Bönning1, J. Kuhn1, F. Feldhaus1, M.H. Maurer1, D. Renz1, B. Hammi1, F. Streitparth1; Berlin/DE, Berne/CH, Jena/DE

B-0413 09:14
Longitudinal airway remodeling in active and past smokers in a lung cancer screening population

B-0414 09:18
Bronchial wall changes after thermoplasty in the treatment of severe asthma: CT scan assessment at 3 months
Y.W. Kim1, M.P. Debray2, C. Fettita1, O. Fouque1, M. Aubier2, P.-Y. Brillet1; Bobigny/FR, Paris/FR, Evry/FR

B-0415 09:22
Optimisation of a chest CT protocol for the detection of ground glass opacity nodules: feasibility study with a computer-assisted detection system and a lung cancer screening phantom

B-0416 09:26
Diagnostic ability of the primary lung cancer by radiologists with chest x-ray
R. Nishino1, H. Numasaki2, N. Minamoto1, S. Nakai1, T. Uchigashima1, A. Takahashi1, S. Ehara1, M. Sakai1, T. Takashima1, Suita/JP, Osaka/JP

B-0417 09:30
Salivary gland tumours in the central airway: the comparison of CT features between adenoidal cystic carcinoma and mucoepidermoid carcinoma
Y. Deng, Q. Zeng, X. Wu, X. Li, W. Luo; Guangzhou/CN

B-0418 09:34
Early residual tumour differentiation from benign peribulbar thermal injury after radiofrequency ablation by spectral analysis with dual-energy computed tomography
L. Yuekao; Shi Jiazhuang/CN

B-0420 09:38
Assessment of survival in patients with idiopathic pulmonary fibrosis using Kortus and mean lung density HRCT indexes

B-0421 09:42
Volumetric analysis of intravoxel incoherent motion diffusion-weighted MRI in predicting the invasiveness of non-small cell lung cancer
J. Jiang, L. Cu1, Y. Fu1, G. Xu; Yancheng/CN, Nantong/CN
B-0423 10:38
Gd-BOPTA excretion MRI analysis in patients with compromised and non-compromised bile ducts
M. Shorikov, M. Lapteva, P. Polyakov, D. Frantsev, O.N. Sergeeva, B. Dolgushin; Moscow/RU

B-0424 10:46
Spectral CT and cholesterol content in gallbladder stone

B-0425 10:54
Is cross-sectional imaging predictive of difficult hepatectomy in patients undergoing liver transplantation?
R. Girometti, D. Lorenzin, L. Montaldo, G. Como, A. Risaliti, C. Zuliani; Udine/IT

B-0426 11:02
Improved visualisation of hepatic metastases in gadoxetate disodium-enhanced MRI: potential of contrast-optimised (phase-sensitive) inversion recovery imaging

B-0427 11:10
CT-based liver surface nodularity quantification for the detection of clinically significant portal hypertension in cirrhotic patients
R. Sartoris, V. Vilgrain, P.-E. Rautou, M. Ronot; 1

B-0428 11:18
Improvement of diagnostic image quality of abdominal CT using a deep learning-based reconstruction: initial clinical trial targeting hepatic metastases

B-0429 11:26
Up to seven criteria for liver transplantation: a single-centre experience
K. Koryukova, M. Bezzi, M. Di Martin, S.G. Ginanni Corradini, M. Rossi, C. Catalano; Rome/IT

B-0430 11:34
A deep-learning approach to the significant liver fibrosis binary classification problem using gender, morphologic and haemodynamic measurements derived from B-mode ultrasound images
A. Angelakis, I. Theotokas, I. Vafiadis, E. Manesis, P. Zoumpoulis; Athens/GR

B-0431 11:42
Three-dimensional texture analysis technology in computed tomography: a new radiological marker in the pathology of liver cancer
H. Xu, Y. Gao; Chengdu/CN

B-0432 11:50
Analysis of the relationship between imaging patterns of calcification and response to chemotherapy in patients with colorectal metastases
J. Zhang, B. Wu, Y. Zhou; Chengdu/CN

B-0433 10:39
Role of iliac crest tangent sign in correct numbering of lumbosacral transitional vertebrae
N. Gunduz, G. Durukan, M.B. Eser, A. Aslan, A. Kabaalioglu; Istanbul/TR

B-0434 10:47
The termination level of dural sac relevant to caudal epidural block in lumbosacral transitional vertebrae: comparison between sacralisation and lumbarisation groups
J.Y. Jeon; Incheon/KR

B-0435 10:55
Modic changes: the association with low back pain and activity limitation - a systematic literature review and meta-analysis
C. Herlin, P. Kjaer, A. Espeland, J. Skouen, C. Leboeuf-Yde, J. Karppinen, J. Niinimaki, J.S. Sørensen, T.S. Jensen; Odense/DK, 1Bergen/N0, 2Oulu/FI, 3Svedborg/DK, 4Silkeborg/DK

B-0436 11:03
Weight-bearing MRI evaluation of Modic changes: uncovering the "biomechanical stress" and "active discopathy" theories in low back pain
F. Bruno, C. Marsecano, M. Micelli, A. Splendiani, C. Macciocchi; L’Aquila/IT

B-0437 11:11
Oblique sagittal images prevent underestimation of neuroforaminal stenosis grade caused by disc herniation in cervical spine MRI
L. Kintzlel, C. Rehnitz, H.-U. Kauczor, M.-A. Weber; 1Heidelberg/DE, 2Rostock/DE

B-0438 11:19
Disc and vertebral changes after spinal fusion at serial CT imaging: correlation with disc mobility
N. Amini, E. Fomekong, C. Raftopoulos, B. Vande Berg; Brussels/BE

B-0439 11:27
Evaluation of colour-coded virtual non-calcium images reconstructed from dual-energy CT for detection of lumbar disc herniation in comparison to MRI: initial results

B-0440 11:35
The effect of radiographically detected vertebral osteoarthrosis (VO) on bone mineral density (BMD) and trabecular bone score (TBS)
A. Corazza, D. Albano, S. Rapisarda, V. Chianca, C. Messina, L.M. Sconfienza; Milan/IT, 1Palermo/IT, 2Naples/IT
Interventional Radiology

SS 609 Special image guidance in interventions

Moderators:
M. Tsitskari, Athens/GR
R. Uberoi, Oxford/UK

B-0441 11:43
Vertebral bone marrow composition: assessment of age and gender dependency using chemical shift encoding-based water-fat MRI

B-0442 11:51
A preliminary study of dual-energy CT spectral curve equation for the diagnosis of osteoporosis
L. Wang, S. Gong; Nantong/ CN

10:30 - 12:00 Room Z

B-0443 10:30
CT-guided transjugular drainage of deep pelvic abscess

B-0444 10:38
Virtual guidance of percutaneous transthoracic needle biopsy with c-arm cone-beam CT: diagnostic accuracy, risk factors and effective radiation dose
D. Fiori, D. Leni, F. Vacirca, L. Ippolito, S. Sironi, R. Corso; Monza/IT, Bergamo/IT

B-0445 10:46
Real-time 3D-guidance based on C-arm-acquired cone-beam CT (CBCT) in transjugular intrahepatic portosystemic stent shunt (TIPS) placement
G. Rönnig, W. Lüdemann, J. Chapiro, M. Jonczyk, B. Gebauer, J.S. Kirschke, D. Karampinos, T. Baum; Munich/DE

B-0446 10:54
Impact of personality and experience of interventional radiologists in outcome of CT-guided percutaneous lung biopsies

B-0447 11:02
MR-guided transrectal prostate biopsy with robotic assistance: initial experience
F. Cornud, A. Lefevre, P. Camparo, P. Soyer; Paris/FR, Amiens/FR

B-0448 11:10
Volumetric magnetic resonance-guided high-intensity focused ultrasound ablation of adenomyosis: the influence of TI perfusion in predicting treatment outcome
N.M. Diao, B. Keserci, H.Q. Huy, P.N. Hoa, P.M. Thong; Ho Chi Minh/ VN, Ho/ VN

B-0449 11:18
Transjugularrenal biopsy in patients with impaired coagulation status
P. Heil, B. Tyczynski, M. Reinbold, Y. Li, J. Thyesohn, S. Suntharalingam, J. Grüneisen, A. Kribben, A. Wetter; Essen/DE

B-0450 11:26
Development of a new image display system for angiography based on detection of electroencephalogram signals from operator’s brain
M. Sato, T. Ogura, S. Yamanouchi, N. Hayashi, H. Watanabe, K. Doi; Osaka/JP, Willowbrook, IL/US

B-0451 11:34
Contrast enhancement improves PET-US fusion navigation for tumour ablation targeting
N. Gennaro, G. Mauri, S. de Beni, T. Ierace, D. Poretti; V. Pedicini, A. Chtit, L. Solbiati; Milan/IT, Genova/ IT

B-0452 11:42
Prospective comparison US vs. CEUS guided percutaneous biopsy in the diagnosis of large intra-and retroperitoneal tumors
Z. Spiricher, P. Rudu, N. Al Hajjar, G. Kacso, T. Mocari; Cluj-Napoca/RO

10:30 - 12:00 Room O

Chest

SS 604 Optimisation of CT angiography: from single- to dual-energy CT

Moderators:
R.W. Bauer; St. Gallen/CH
T.R.C. Johnson; Munich/DE

B-0453 10:30
Oligaemia of tumour-involved lung displayed by Z-effect of dual-detector spectral CT
Y. Xue, X. Lu, Q. Guo; Shenyang/ CN

B-0454 10:38
Application value of dual-detector spectral CT in evaluation of metastatic lymph nodes in lung cancer
L. Gao, Y. Hou, Y. Ma, X. Lu, Z. Jia; Shenyang/ CN

B-0455 10:46
Evaluation of diagnostic value of iodine base material of dual-detector spectral CT for pulmonary aspergillosis invasion by ROC
B. Yuan, W. Zhang, X. Lu, Z. Jia; Shenyang/ CN

B-0456 10:54
Are there suboptimal CTPE studies in the DECT era: low mono-energetic images for pulmonary artery assessment
N. Lev Cohain, I. Leichter, J. Sosha; Jerusalem/IL

B-0457 11:02
Transient interruption of contrast (TIC) in CT pulmonary angiography: frequency and impact on the diagnostic value of CT examinations using a dual-source CT system
J. Hennicaux, A. Hutt, M. Kyheng, J.-B. Faivre, J. Remy, M. Rémy-Jardin; Lille/FR

B-0458 11:10
Incidence of transient interruption of contrast (TIC): a retrospective single-centre analysis in 225 consecutive CT pulmonary angiography studies
S. Sudarski, A. Lefevre, T. Ittermann, B. Mensel, J.-P. Kühn; Dresden/DE

B-0459 11:18
Assessment of optimal window settings for display of traditional and noise-optimised virtual monoenergetic imaging in dual-energy CTPA

B-0460 11:26
Optimal monochromatic energy levels in spectral CT pulmonary angiogram for the detection of pulmonary thromboembolism: using detector-based spectral CT
B-0462 11:34
Right heart thrombi and acute pulmonary embolism: analysability of right cardiac cavities in the conditions of routine dual-source chest CT angiographic examinations
C. Fantini, J. Henniaux, J.-B. Faivre, P. Felloni, J. Remy, M. Remy-Jardin; Lille/FR

B-0463 11:42
Automatic spectral chest CT assist protocol: can the improvement of the noise index setting further decrease the radiation dose and optimise the image quality?
R. Wang, J. Gao, Y. Zhou; Zhengzhou/CN

B-0464 11:50
Segmental and sub-segmental pulmonary embolism displayed by dual-detector spectral CT
Y. Yue, X. Lu, W. Zhang, Q. Guo; Shenyang/CH

10:30 - 12:00 Room N
Genitourinary

SS 607
Female pelvis
Moderators:
M. Basta Nikolic; Novi Sad/RS
N.N.

B-0465 10:30
Myometrial infiltration by deep pelvic endometriosis: MRI assessment
M. Francavilla1, D. Resta1, F. Lorusso2, G. Angelelli3, C. Tartaglia1, P. Pignataro1, M. Scioscia4, A.A. Stabile Ianora1, A. Scardapane1; ‘Bari’/IT, ‘Castellana Grotte’/IT, ‘Negrar, Verona’/IT

B-0466 10:38
Diffusion tensor imaging (DTI) for evaluation of sacral plexus abnormalities in patients with pelvic deep infiltrating pelvic endometriosis with pelvic pain: a pilot study
A.H. Kalovidouri; M.I. Vargas, B. Delattre, N. Pluchino, X. Montet, D. Botsikas; Geneva/CH

B-0467 10:46
Ovaries in patients with Mayer-Rokitansky-Küster-Hauser syndrome vs normal females: a retrospective cohort study with magnetic resonance imaging
Y. Wang, J. Lu, L. Zhu, R. Chen, B. Jiang, Z. Jin; Beijing/CN

B-0468 10:54
Invasive placenta: MRI prognosticators for patients’ clinical outcome
C. Bourgioti, K. Zafeiropoulou, K. Chatoupis, A. Antoniou, M. Nikolaidou, L.A. Moulopoulos; Athens/GR

B-0469 11:02
Colour Doppler unhappy surprise in transvaginal ultrasound evaluation of post-abortive vaginal bleeding: uterine arteriovenous malformations
S.A.H. Hassanen; Shebin el-kom/EG

B-0470 11:10
Ovarian ischaemia vs haemorrhagic infarction: differentiation by MRI in cases of adnexal torsion
Y. Ragab1, H. Kheir1, H. Hamza2, S. Maher; ‘Cairo/EG, ‘London/UK

B-0471 11:18
MRI predictive factors for vaginal stenosis in patients with cervical cancer after ChemoRadiation Therapy (CRT)
M. Sbarra, M. Miccò, B. Gui, E. Rodolﬁno, A.L. Valentini, R. Manfredi; Rome/IT

B-0472 11:26
Female Skene’s gland diseases: CT and MR imaging evaluation
H. Wang, J. Guan, Y. Guo; Guangzhou/CN

B-0473 11:34
Diagnostic value of MR perfusion in characterisation of complex adnexal masses
H.A.S. Sabet, R.M. El Kady, N.N. Omar, A.M. Abbas; Assuit/EG

B-0474 11:42
MRI in endometriosis: a new platform
W.R.A. Abdel Hamid; Cairo/EG

B-0475 11:50
Utility of histogram analysis of apparent diffusion coefficient maps obtained using 3.0T MRI for distinguishing uterine endometrial carcinoma from endometrial polyps
W. Wang, J. Cheng, Y. Zhang; Zhengzhou/CN

11:02
Quantitative CT-based radiomics as predictor of local resectability of pancreatic ductal adenocarcinoma
J. Van der Putten1, S. Zinger1, P.H.N. De With1, M.M. Prokop2; 10:30 - 12:00 Studio 2018
Radiomics and deep learning

SS 605
Moderators:
A. Alberich-Bayarri; Valencia/ES
W.H. Sommer; Munich/DE

B-0476 10:30
Radiomics of metastatic clear-cell renal carcinoma: reproducibility and correlation for feature reduction

B-0477 10:38
Application of radiomics and artificial intelligence in survival prediction of lung cancer patients
I. Shir1, P. Geramifar, H. Abdollahi, S. Shayesteh, H. Hajiyanfar, H. Pouraliakbar, A. Mohammadzadeh, A. Bitarafan-Rajabi; Tehran/IR

B-0478 10:46
Multimodality radiomics signature analysis improves prediction power against Stand-Alone analysis of PET, CT and MRI images
I. Shir1, P. Geramifar, H. Abdollahi, A. Bitarafan-Rajabi, A. Mohammadzadeh, H. Pouraliakbar; Tehran/IR

B-0479 10:54
A new radiomics approach to predict the evolution of PI-RADS score 3/5 prostate areas in multiparametric MR
N.C. D’Amico, E. Grossi, G. Valbusa, A. Malasevschi, G. Cardone, S. Papa; Milan/IT

B-0480 11:02
Quantitative CT-based radiomics as predictor of local resectability of pancreatic ductal adenocarcinoma
J. Van der Putten1, S. Zinger1, P.H.N. De With1, M.M. Prokop2; 10:30 - 12:00 Studio 2018
Radiomics and deep learning

B-0481 11:10
Radiomics: prediction of acoustic neuroma response to the CyberKnife treatment
N.C. D’Amico, I. Castiglioni, E. Grossi, G. Valbusa, G. D’Anna, F. Rigiroli, I. Bossi Zanetti, G. Scotti, S. Papa; Milan/IT

B-0482 11:18
Automated translation of radiologic reports with deep learning-powered translation engines: a feasibility study
T. Weikert1, R. Wytenbach2, G. Nicolas1, R. Hendel1, C. Giessgen1, J. Bremerich1, E.M. Merkle1; ‘Basle/CH, ‘Bellinzona/CH, ‘Würzburg/DE
B-0483 11:26
Automated detection and localisation of skull fractures from CT scans using deep learning
R. Ghosh1, S. Chilamkurthy1, P. Rao1, M. Biviji2; 1Mumbai/IN, 2Nagpur/IN

B-0484 11:34
Fast estimation of kidney volumes and time courses in DCE-MRI using convolutional neural networks
A.S. Lundervold1, K. Sprawka2, A. Lundervold1; 1Bergen/NO, 2Lodz/PL

B-0485 11:42
Automatic detection of intracranial calcifications in non-contrast CT
G. Bortsova, G. van Tulder, F. Dubost, A. van der Lugt, D. Bos, M. De Bruijne; Rotterdam/NL

B-0486 11:50
Automatic liver metastases detection on CT using multi-class patch based convolutional neural networks
E. Klang1, M. Frid2, I. Diamant2, A. Ben Cohen2, M. Di Segni3, E. Konen1, H. Greenspan2, M.M. Amitai1; 1Ramat Gan/IL, 2Tel Aviv/IL, 3Rome/IT

SS 608
Head and neck ultrasonography
Moderators:
N. Chidambaranathan; Chennai/IN
K. Markiet; Gdansk/PL

K-10 10:30
Keynote lecture
G. Madani; London/UK

B-0487 10:39
In vivo evaluation of optic nerve and periorbital structures’ biomechanical properties using shear-wave elastography in patients with glaucoma
M. Guazzaroni, S. Marsico, V. Girardi, T. Campagnuolo, S. Altobelli, R. Floris; Rome/IT

B-0488 10:47
Ultrasound elastography of solid thyroid nodules: how far could we get?
N.F. El Ameen, M.F. Amin; El Minia/EG

B-0489 10:55
Complementary diagnostic role of shear wave elastography (SWE) in assessment of thyroid nodules during ultrasound examination
M. Schiavone; Monza/IT

B-0490 11:03
Comparison of shear-wave elastography (SWE) and real-time elastography in the same thyroid nodules: which is more accurate?
Y. Fu; Beijing/CN

B-0491 11:11
Comparison between the US vs MRI features of papillary thyroid carcinoma
S. Hu; Zhenjiang/CN

B-0492 11:19
Role of ultrasound in management of indeterminate thyroid nodules (Bethesda III and IV)
E. Horvath, C. De la Barra, G. Aguilara, C. Silva, J. Slater, V. Skoknic, S. Majlis, M. Garcia, P. Gonzalez; Santiago/CL

B-0493 11:27
Prospective assessment of TIRADS US assessment and strain and Shear wave elastography to discriminate benign from malignant thyroid lesions
V. De Socco1, G. Alagna, V. Forte, M. Di Segni, V. Cantisani, E. Tassone, C. Catalano, P. D’Ambrosio; Rome/IT

B-0494 11:35
Ultrasonographic diagnosis of salivary gland atrophy after radio-iodine treatment for papillary thyroid cancer
E. Horvath, V.S. Skoknic, C. Silva, H. Tala, N. Sánchez, C. Whittle, J.P. Niedmann, S. Majlis, C. Schweinritz; Santiago/CL

B-0495 11:43
Sonographic evaluation of abdominal wall fat index, intima-media thickness and plaque score in obstructive sleep apnoea syndrome
N. Cetin, L. Gunes Tatar, O. Ergun, M. Yuceege; Ankara/TR

B-0496 11:51
Transverse and sigmoid sinus stenosis and pressure gradient in patients with pulsatile tinnitus
T. Su, L. Jin, Y. Han; Beijing/CN

B-0497 10:30
Histogram analysis of apparent diffusion coefficients for monitoring early response in patients with breast cancer undergoing concurrent chemotherapy
W. Wang, J. Cheng, Y. Zhang; Zhengzhou/CN

B-0498 10:38
Imaging of the hypoxic microenvironment in breast cancer using PET/MR
J.C. Carmona-Bozo, T. Torheim, R. Woitek, A.J. Patterson, O. Abeyakoon, C. Carraco, E. Provenzano, M.J. Graves, F. Gilbert; Cambridge/UK

B-0499 10:46
What is the diagnostic performance of 18-FDG-PET/MR and PET/CT in the initial staging of breast cancer?
D. Botsikas, I. Bagetakos, M. Picarra, S. Boudabbous, X. Montet, G.T. Lam, I. Mainta, A.M. Kalovidouri, M. Becker; Geneva/CH

B-0500 10:54
A proposal diagnostic algorithm for F-18FDG PET/CT-detected breast incidental lesion based on BI-RADS and SUVmax criteria
M. Bakshyeshkaram, S. Zahirifard, F. Aghahosseini, R. Hashemi Beni; Tehran/IR

B-0501 11:02
Breast MRI and dedicated breast PET (dbPET): friends and foes
M. Herranz1, S. Argibay-Vazquez1, I. Dominguez-Prado1, P. Ling Ling2, L. Graña2, M. Vázquez Caruncho2, A. Ruibal2; 1Santiago de Compostela/ES, 2Shanghai/CN, 3Lugo/ES

B-0502 11:10
Value of quantitative magnetic resonance imaging T1-relaxation time in predicting contrast-enhancement in breast cancer
X. Zhang, M. Li, L. Mao, C. Wang, S. He, M. Liu; Guangzhou/CN
B-0503 11:18
MRI of invasive mass breast cancer: correlation of global vascularity and ADC with pathological features
A. Milan1, R.M. Trimboli, L.A. Carbonaro, M. Codari, G. Di Leo, F. Sardanelli; 1Milan/IT

B-0504 11:26
Utility of diffusion in evaluating chest wall invasion of breast tumours

B-0505 11:34
MR evaluation of fibroglandular tissue (FGT) and background parenchymal enhancement (BPE) in breast cancer and its association with receptor status
S.B. Grover1, P. Jain1, S.K. Jain1, A.K. Manda1, H. Grover1; 1New Delhi/IN, 2Bridgeport, CT/US

B-0506 11:42
Implementation of imaging biomarkers of healthy breast tissue with multiparametric [18F]FDG-PET/MRI may aid breast cancer diagnosis
D. Leithner1, G.J. Wengert1, M. Weber1, T.H. Helbich1, P. Kapetas1, P.A.T. Baltzer2, E.A. Morris1, G. Karanikas2, K. Pinker1; 1New York, NY/US, 2Vienna/AT

B-0507 11:50
Are there differences in multiparametric breast [18F]FDG-PET/MR imaging biomarkers of contralateral healthy tissue in patients with and without breast cancer?
D. Leithner1, T.H. Helbich1, B. Bernard-Davila1, G.J. Wengert1, P. Kapetas1, P.A.T. Baltzer2, A. Haug2, E.A. Morris1, K. Pinker1; 1New York, NY/US, 2Vienna/AT

B-0508 10:30
Mechanical thrombectomy of M1 and M2 segment occlusions: a single-center experience with 546 patients
P. Sieker1, J. Pfaff1, U. Neuberger1, S. Nagel1, P.A. Ringleb1, M. Bendszus1, M.A. Möhlenbruch1, G. Karwacki1, K. Blackham1; 1Vienna/AT

B-0509 10:38
Impaired cerebral reactivity is at high risk of stroke in patients with intracranial stenosis
J. Papassin1, A. Kraunik1, O. Heck1, E. Condamine1, J. Pietras1, F. Tahon1, O. Detante1; Grenoble/FR

B-0510 10:46
Dual-energy computed tomography for optimised visualisation of early cerebral infarctions after endovascular stroke therapy
A.E. Grams1, T. Djurdjevic1, T. Schiestl1, M. Knoflach1, F. Dazinger1, E.R. Gitzwinski1, B. Gildroy1; Innsbruck/AT

B-0511 10:54
Mechanical thrombectomy in basilar artery occlusion: the presence of bilateral posterior communicating arteries is a predictor of favorable clinical outcome
V. Maus1, A. Kalkan1, C. Kabbasch1, N. Abdullayev1, U.B. Barnikol1, T. Liebig2, C. Dohmen1, G.R. Fink1, A. Mpotsaris1; 1Cologne/DE, 2Berlin/DE, 3Aachen/DE

B-0512 11:02
Intracranial carotid artery calcification and endovascular treatment effect in acute stroke patients due to large vessel occlusion
K. Compagne1, P. Clephas1, C.B. Majvoie1, W. Van Zwam1, A. van Es1, D.W. Dippel1, A. Van der Lugt1, D. Bos1, 1Rotterdam/NL, 2Amsterdam/NL, 3Maastricht/NL

B-0513 11:10
Ipsilateral thalamic diaschisis in acute ischaemic stroke: occurrence, perfusion characteristics, and association with morphologic and clinical outcome
P. Reidler1, K. Thierfelder1, M.P. Fabritius1, F. Schulier1, W.H. Sommer1, W.G. Kunz1; Munich/DE

B-0514 11:18
Improved assessment and evaluation of arterial occlusion in acute ischaemic stroke with contrast-enhanced MR angiography
S. Dhundass1, A. Collin1, L. Duron1, S. Escalard1, M. Obadia1, R. Blanc2, J.-C. Sadik1, J. Savatoavsky1, A. Lecler1; Paris/FR

B-0515 11:26
Combined measurements of clot density in unenhanced and enhanced CT of acute ischaemic stroke in complete vessel occlusions of the medial cerebral artery predict 90 day patient outcome
J. Kottkors1, C. Kabbasch1, V. Maus1, A. Mpotsaris1; 1J. Borggrefe1; Cologne/DE, 2Aachen/DE

B-0516 11:34
The influence of CT perfusion on the selection of stroke patients for endovascular therapy
J.M. Steck1, G. Karwacki1, K. Blackham1; Basle/CH

B-0517 11:42
Classification of CT perfusion infarct core in acute ischaemic stroke using automated measurements of tissue density on non-contrast CT
P. Reidler1, K. Thierfelder1, M.P. Fabritius1, W.H. Sommer1, W.G. Kunz1; Munich/DE

B-0518 11:50
Haemorrhagic transformation and aspirin therapy after thrombectomy: an inter- and intra-rater agreement study
A. Guenneg2, A. Lecler1, K. Premat1, C. Ducroux1, M. Roques1, R. Blanc1, M. Piotin1, R. Fahed1; 1Paris/FR, 2Toulouse/FR

B-0519 10:39
Impact of radiologist experience on detection of colorectal neoplasms at CT colonography screening
L. Pusceddu1, V. Vani1, G. Giannetto1, L. Morra1, L. Correale1, S. Delsanto1, C. Senore1, D. Regge1; 1Candiolo/IT, 2Turin/IT

SS 611 Stroke: diagnosis and intervention
Moderators:
P. Mordasini1, Berne/CH
T. Struffert1, Erlangen/DE

B-0508 10:30
Mechanical thrombectomy of M1 and M2 segment occlusions: a single-center experience with 546 patients
P. Sieker1, J. Pfaff1, U. Neuberger1, S. Nagel1, P.A. Ringleb1, M. Bendszus1, M.A. Möhlenbruch1, G. Karwacki1, K. Blackham1; 1Vienna/AT

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B-0510 10:46
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A.E. Grams1, T. Djurdjevic1, T. Schiestl1, M. Knoflach1, F. Dazinger1, E.R. Gitzwinski1, B. Gildroy1; Innsbruck/AT

B-0511 10:54
Mechanical thrombectomy in basilar artery occlusion: the presence of bilateral posterior communicating arteries is a predictor of favorable clinical outcome
V. Maus1, A. Kalkan1, C. Kabbasch1, N. Abdullayev1, U.B. Barnikol1, T. Liebig2, C. Dohmen1, G.R. Fink1, A. Mpotsaris1; 1Cologne/DE, 2Berlin/DE, 3Aachen/DE

SS 601b Colorectal imaging: CTC and beyond
Moderators:
V. Cappendijk1, Hertogenbosch/NL
D. Ramos-Andrade1, Coimbra/PT

K-11 10:30
Keynote lecture
T. Mang1; Vienna/AT
**B-0520** 10:47
Patients’ experience with, and factors for participation in flexible sigmoidoscopy and CT colonography screening insight from the Proteus Colon Trial
V. Vanò, G. Giannetto, L. Pusceddu, L. Morra, L. Correale, S. Del Santo, C. Senore, D. Regge; *Tirun/IT*

**B-0521** 10:55
Patient experience of screening CT colonography with reduced and full bowel preparation in a randomised trial
L. Sali, L. Ventura, A. Borgheresi, S. DelSanto, P. Mantellini, M. Mascalchi, M. Zappa, G. Grazzini; *Florence/IT, Turin/IT*

**B-0522** 11:03
Neoplasia yield with FIT two years after CTC screening
G. Giannetto, L. Pusceddu, V. Vanò, L. Morra, L. Correale, C. Senore, S. Del Santo, D. Regge; *Candiolo/IT, Turin/IT*

**B-0523** 11:11
Focal colorectal uptake in 18FDG-PET/CT: maximum standard uptake value as a trigger in a semi-automated screening setting
W. Luboldt; *Munich/DE*

**B-0524** 11:19
MRT T2WI and fat-suppressed-T2WI image fusion technology in improving image quality for the evaluation of anal fistulas
Z. Dong, S.-T. Feng, M. Huang, Y. Jia, H. Cai, Z.-P. Li, B. Shen; *Guangzhou/CN*

**B-0525** 11:27
Preoperative assessment of simple and complex anorectal fistulas: tridimensional endoanal ultrasound? Magnetic resonance or both?
F. Jacobelli, L. Roberto, L. De Pascale, R. Reila, R. Natella, A. Reginelli, R. Grasso; *Naples/IT*

**B-0526** 11:35
Identification of internal opening in perianal fistula: comparison of 3D cube vs 2D at 3.0 Tesla
V. Nyapathi; *Rajahmundry/IN*

**B-0527** 11:43
Can we reliably identify the appendix on unenhanced ultra-low-dose CT in the era of iterative reconstruction?
D. Ordu, L.-P. Rollandi, K. Rippel, C. Scheurig-Muenkler, T. Kröncke, F. Schwarz; *Augsburg/DE*

**B-0528** 11:51
Use of conventional defecography or dynamic MRI defecography in patients with symptomatic pelvic floor dysfunction: a retrospective intraindividual trial
M.C. Langenbach, M. Kaup, M. Beeres, J.-E. Scholz, C. Park, C. Frellesen, T.J. Vogl, T. Gruber-Rouh; *Frankfurt a. Main/DE*

**B-0530** 10:38
Single-source dual-energy computed tomography for the assessment of bone marrow oedema in vertebral compression fractures: a prospective diagnostic accuracy study
T. Diekhoff, N. Engelhard, M. Fuchs, M. Pumberger, M. Putzier, J. Mews, B. Hamm, K.-G. Hermann; *Berlin/DE, Neuss/DE*

**B-0531** 10:46
Contribution of ultra-low dose CT in lumbar spine trauma
F. Snene, A. Hamard, J. Greffier, P. Viala, J. Beregi, A. Larbi; *Nimes/FR*

**B-0532** 10:54
Evaluations of outcomes for drop in pain and analgesic use for kyphoplasty in the treatment of 249 patients with vertebral compression fractures: a single centre results
R. Marcello, G. Assegnati, A. Di Blasi, F. Cortese, S. Vitale; *Rome/IT*

**B-0533** 11:02
Vertebral body insufficiency fractures: detection of vertebrae at risk on clinical CT images using texture analysis and machine learning
U. Mühlematter, M. Mannil, T. Finkenstaedt, A.S. Becker, G. Osterhoff, R. Guggenberger, M. Fischer; *Zurich/CH*

**B-0534** 11:10
Comparing trabecular bone score and serum bone biomarker in predicting vertebral fracture for diabetes
Y.-C. Lin, A.Y. Cheung, S.-F. Ku, K.-H. Wu, C.-M. Sung, C.-M. Fan, F.-P. Chen; *Keelung/TW, Taoyuan/TW*

**B-0535** 11:18
Haemarthrosis of the knee and knee fracture: evaluation with high-resolution ultrasound
S.P. Ivanoski, V. Vasilievka Nikolodinovska; *Ohrad/MK, Skopje/MK*

**B-0536** 11:27
Anatomy-based MR classification of the iliopsoas muscle complex after pteracthronfercer femur fracture
M. Kaniewska, M. Schenkel, K. Eid, T. Bühler, R. Kubik-Huch; *Basel/CH*

**B-0538** 11:34
Are fractures of the anterior calcaneal process indicative of a more advanced Chopart joint injury?

**B-0539** 11:42
Comparing dGEMRIC and clinical outcome 6 years after FAI surgery with versus without microfracturing: a controlled pilot study
F. Schmaranzer, P. Haefeli, M. Hanke, T. Lerch, K. Siebenrock; *Bern/CH, Biel/CH*

**B-0540** 10:30
Impact of software parameter settings on image quality of Virtual Grid processed radiography images: a contrast-detail study
T. Gosswe, M. Peleman, P. Smets, E. Achten, K. Bacher; *Ghent/BE*

**SS 613**
Innovations in medical imaging
Moderators: M. Kortesniemi; Helsinki/FI
G. Sommer; Basle/CH

**B-0529** 10:30
Three-material decomposition with dual-layer spectral detector CT compared to MRI for the detection of bone marrow oedema in patients with acute vertebral fractures
B.J. Schwaiger, A. Gersing, J. Hammel, K. Mei, F.K. Kopp, E.J. Rummenny, K. Wörtler, T. Baum, P.B. Noel; *Munich/DE*
**B-0541 10:38**
X-ray dark-field and phase-contrast images facilitate the detection of wooden and glass foreign bodies on radiographs
K. Hellbach¹, E. Beller¹, A. Schmidtler¹, F. Schoppe¹, N. Hesse¹, A.B. Baumann¹, R. Schinner¹, C. Hauke³, F. Meinel¹; ¹Munich/DE, ³Forchheim/DE

**B-0542 10:46**
High-fidelity vessel visualisation in diagnostic CT: low-dose dynamic CTA via singular value decomposition-guided filter (SVGF)
P. Pisana¹, T. Henzler², H. Haubenreisser², E. Klotz², B. Schmidt², M. Kachelriess³; ²Heidelberg/DE, ³Mannheim/DE, ³Forchheim/DE

**B-0543 10:54**
Potential of spectral photon-counting CT for the differentiation between blood and iodine in a bovine brain
A.A. Fingerle¹,³, E.J. Rummeny¹, P.B. Noel¹,³, D. Muenzel¹,³; ¹Heidelberg/DE, ³Mannheim/DE, ³Forchheim/DE

**B-0544 11:02**
An automated alignment correction algorithm for CT imaging: evaluation based on a CT image quality phantom and application to sediment cores from cold-water coral mounds
S. Skornitzke¹, R. Schinner¹, G. Pahn¹, A. Bahr¹, J. Raddatz², H.-U. Kauczor¹, W. Stiller¹; ¹Heidelberg/DE, ²Frankfurt a. Main/DE

**B-0545 11:10**
Correcting for acoustic and optical inaccuracies in photocoagulative imaging using multimodal priors
S. Mandal, D. Komlenovic; ¹Heidelberg/DE

**B-0546 11:18**
Improved contrast-enhanced time-resolved MR angiography on a small bore 3T MRI system
S. Riederer¹, E. Stinson², H. Haubenreisser², E. Klotz², M. Lousada², M. Castelo-Branco¹, P.M. Martins¹; ¹Coimbra/PT, ²Aveiro/PT

**B-0547 11:26**
Fast field-cycling MRI for medical applications
L.M. Broche, J. Ross, G.R. Davies, D.J. Lurie; ¹Aberdeen/UK

**B-0548 11:34**
Radiopaque 3D printing of patient individual phantoms for computed tomography and radiation therapy
P. Jahnke, F.B. Schwarz, M. Ziegert, B. Hamm, M. Scheel; ¹Berlin/DE

**B-0549 11:42**
Gallium Arsenide hybrid photon counting x-ray detectors: towards large area single-shot spectral mammography
S. Gkoumas, M. Habl, V. Radicci, M. Rissi, T. Thuering, S. Traut, P. Trueb, P. Žampon, C. Broennimann; ¹Baden-Daettwil/CH

**B-0550 11:50**
Development of algorithms to degrade the image quality of mammograms for lesion detectability studies
J. Boita¹, A. Mackenzie¹, R. Van Engen¹, M.J. Broeders¹, I. Sechopoulos¹; ¹Northwood/UK

**B-0551 10:30**
MRI of children aged 4-9 without anaesthesia using communication at the children’s cognitive level
S. Scheffmann Olloni, N. Villadsen; ¹Odense/DE

**B-0552 10:38**
Development of an fMRI linguistic paradigm to monitor PPA patients: a pilot study
C. Ferreira¹, I. Cadório¹, A. Barbosa², A. Freixo², B. Silva², D. Figueiredo², M. Lousada², M. Castelo-Branco¹, P.M. Martins¹; ¹Coimbra/PT, ²Aveiro/PT

**B-0553 10:46**
1.5T vs 7T in determining changes of white matter in multiple sclerosis: preliminary studies
A. Pankowska, K. Kochalska, K. Dyndor, A. Łazorczyk, R. Pietura; ¹Lublin/PL

**B-0554 10:54**
A multi-centre study: qualitative and quantitative comparison of liver MR image quality
S. Ali Daghery, L.A. Rainford, A. McGee; ¹Dublin/IE

**B-0555 11:02**
Performance of single-use syringe versus multi-use MR contrast injectors: a prospective comparative study
F. Struijk, J.J. Futterer, M. van der Graaf, M.M. Prokop; ¹Nijmegen/NL

**B-0556 11:10**
Ambient experience in MRI
P. Pedersen¹, L. Fremmelevholm¹, S.H. Jørgensen¹, S. Moerup¹; ¹Odense/DK, ²Svendborg/DK

**B-0557 11:18**
Evaluation of occupational exposure from electromagnetic field radiation on mobile magnetic resonance imaging units
A.F.C. Sousa, J. Santos, A. Ferreira; ¹Coimbra/PT

**B-0558 11:26**
Detection of colorectal cancer liver metastases with MRI: is diffusion-weighted imaging (DWI) solely as good as DWI + dynamic T1-weighted sequences after extracellular Gd? A multi-centre study
M.N. Tettero; ¹Alkmaar/NL

**B-0559 11:34**
A data mining approach to the SAR values over large MR image repositories
A.C.C. Murraças¹, P.M. Martins¹, C. Ferreira², T.M. Godinho², M. Castelo-Branco², A. Silva¹; ¹Aveiro/PT, ²Coimbra/PT

**B-0560 11:42**
Optimisation of the Blade technique in the cervical spine MRI
R.M. Lopes¹, D. Carvalho²; ¹Vila Nova de Gaia/PT, ²Coimbra/PT

**B-0561 11:50**
Comparing the detection rate of melanoma metastases on gadolinium-based contrast-enhanced MRI brain scan compared to a non-enhanced scan
K. Thakor, V. Major, S. Patel, H.R. Bergman, W. McGuire, A. Lakhani; ¹Northwood/UK
**SS 603**

Update on large trials, registry and adverse event assessment

*Modera tors:*
 C.D. Claussen; Tübingen/DE
 P. Toia; Palermo/IT

**B-0562 10:30**

Correlation of a new formula measuring carotid-femoral pulse wave velocity with cardiovascular risk factors, major adverse events and mortality


**B-0563 10:38**

Acute adverse events in cardiac MR imaging with gadolinium-based contrast agents: results from the European Society of Cardiovascular Radiology (ESCR) MRCT registry in 72,859 patients


**B-0564 10:46**

Prevalence and clinical relevance of extra-cardiac findings in CMR imaging


**B-0565 10:54**

Results from the Italian Registry of Contrast Material use in Cardiac Computed Tomography (IRCM-CCT)


**B-0566 11:02**

Frequency and spectrum of incidental findings in cardiovascular disease CT screening trial


**B-0567 11:10**

Correlation between haptoglobin phenotypes and myocardial reperfusion injury in consecutive ST-elevation myocardial infarction as detected by cardiac magnetic resonance


**B-0568 11:18**

Basic haematological biomarkers are associated with coronary calcification


**B-0569 11:26**

Accuracy of an artificial intelligence deep learning algorithm for the detection of calcified plaques at coronary CT angiography


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**Paediatric**

**SS 612**

Paediatric abdominal imaging

*Modera tors:*
 K. Illilias; Brighton/UK
 D. Kljucevsek; Ljubljana/SI

**B-0573 10:30**

Magnetic resonance enterography (MRE) surveillance of asymptomatic paediatric Crohn’s disease patients

K. Wu, M. Gee, J. Kaplan; Boston, MA/US

**B-0574 10:38**

Fast acquisition abdominal MRI study for the investigation of suspected acute appendicitis in paediatric patients: prospective assessment of diagnostic accuracy and clinical efficacy

K. James, P. Duffy, R. Kavanagh, A. Feeley, D. Ryan, P. Murphy, C. Bogue, M. Maher, O.J. O’Connor; Cork/IE

**B-0575 10:46**

Comparison of image quality of the abdominopelvic computed tomography in paediatric patients: low-osmolar contrast media vs less iodine-containing iso-osmolar contrast media


**B-0576 10:54**

CT colonography in the diagnostic algorithm of examination of children with defaecation dysfunction

V. Ermolaeva, N. Marochka, A. Pingin, Khabarovsky/RU

**B-0577 11:02**

Value of structured report form for appendix ultrasound in paediatric patients: can we reduce negative appendectomy and additional CT?

H. Kim, H. Kim, S. Jang; Seongnam-si/KR

**B-0578 11:10**

Liver regenerative nodules in paediatric patients: diagnostic value of Gd-EOB-DTPA

E. Petrášová, E.V. Mikhailova, D. Sevrjukov, A. Nikulina; Moscow/ RU

**B-0579 11:18**

Simplified cystography protocol for dose exposure reduction in paediatric patients for the diagnosis of vesicoureteral reflux


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10:30 - 12:00 Room M 1

10:30 - 12:00 Room M 2

**B-0608 14:56**  High-field-strength MR imaging of the liver at 3.0T: comparative study with 1.5 T in cirrhotic population  K. Koryukova, M. Rossi, M. Di Martino, L. Saba, S.G. Ginanni Corradini, C. Catalano, Rome, IT, Cagliari, IT

**B-0609 15:04**  The influence of intravenous non-specific gadolinium-based contrast media application on image quality of T2-weighted MRC in preoperative evaluation of living liver donors  A. Jarczewski, I. Reimers, D. Geisel, T. Denecke

**B-0610 15:12**  Transient arterial phase respiratory motion-related artefact in liver MR imaging gadoxetic acid vs extracellular gadolinium. A within-patient cohort comparative study  A. Darnell, J. Rimola, E. Belmonte, A. Forner, V. Sapena, C. Ayuso, J. Bruix, Genova, IT

**B-0611 15:20**  Respiratory motion artefact affecting hepatic arterial phase MR imaging: comparison between gadoxetate disodium and gadobenate dimegglumine  K. Koryukova, L. Saba, M. Di Martino, C. Catalano, Rome, IT, Cagliari, IT

**B-0612 14:09**  Diffusion tensor imaging (DTI) in the evaluation of peripheral nerve sheath tumours: is it valuable for surgeons?  I. Capretti, F. Bruno, S. Quarchioni, E. Cannizzaro, C. Gianaarro, S. Mariani, F. Arrigoni, A. Barile, C. Masciocchi, L'Aquila, IT, Ferrara, IT

**B-0614 14:17**  Feasibility of shear wave elastography (SWE) in diagnosing carpal tunnel syndrome (CTS)  S. Rauch, Innsbruck, AT

**B-0615 14:25**  Ultrasound of the Thoracic Motor branch in Carpal Tunnel Syndrome  F. Zaottini, R. Picasso, S. Airaldi, Genova, IT

**B-0616 14:33**  High resolution Ultrasound of the Motor Branch of the Ulnar Nerve beyond the Guyon Tunnel  R. Picasso, F. Zaottini, S. Airaldi, Genova, IT, Savona, IT

**B-0617 14:41**  MRI assessment of the microstructural integrity of the peripheral nerves in Charcot-Marie-Tooth disease  F.I. Rozalli, F. Fadzi, T. Krisnan, K. Rahmat, L.K. Tan, N. Shahrizaila, N. Raml; Kuala Lumpur, MY

**B-0618 14:49**  Core muscle composition and fat distribution in Parkinson's disease  C.-K. Wang, H.-L. Chen, W.-C. Lin; Kaohsiung, TW


**B-0621 15:05**  Compression garments in delayed-onset muscle soreness (DOMS): randomised controlled trial with acoustic radiation force impulse (ARFI), contrast-enhanced ultrasound (CEUS) and MRI  R. Heiß, M. Kellermann, B. Swoboda, C. Grim, A.M. Nagel, M. Uder, T. Hofti, Erlangen, DE, Osnabrück, DE

**B-0622 14:00**  Feasibility study of microwave ablation system: localisation and eradication of tumourous lesions  T.J. Vogel, C. Reimann, M. Puentes-Damm, F. Hübner, B. Bazrafshan; Frankfurt a. Main, DE, Darmstadt, DE

**B-0623 14:08**  Microwave ablation (MWA) of pulmonary neoplasms: clinical performance of MWA with spatial energy control vs conventional low-frequency MWA  T.J. Vogel, L. Basten, N.N.N. Naguib, N.-E.A. Nour-Eldin; Frankfurt a. Main, DE

**B-0624 14:16**  Renal tumour cryoablation beyond T1a: outcomes for 56 T1b biopsy-proven RCC lesions  T.A. Gibson, N. Patel, N. McGill, A. King, D. Breen; Southampton, UK

**B-0625 14:24**  CT-guided percutaneous cryoablation treatment of renal cancer: an outcome analysis from our experience  S. Gittu, G. Calareso, T. Cascella, G. Greco, G. Greco, M. Vaiani, S. Stagni, R. Salvioni, C. Sprefico; Milan, IT

**B-0626 14:32**  Technical success and local control after image-guided microwave ablation (MWA) of T1a renal tumours with a new high-power generation system  M. Colombo, M.M. Panzeri, P. Marra, G. Brembilla, M. Venturini, U. Capitanio, F. Montorsi, A. Del Maschio, F. De Cobelli; Milan, IT

**B-0627 14:40**  Our experience in percutaneous ablative treatment of renal T1a e T1b lesions: results from 50 patients treated with MWA, RFA and CRA  E. Faella, D. Santucci, A. Alfonsi, G. Pacella, C. Altermare, C. Bernetti, C. Rollo, R.F. Grasso, B. Beomonte Zobel; Rome, IT
B-0647 14:33
Prediction of pathologic upgrading in biopsy-proven low-grade endometrial cancer: utility of diffusion-weighted imaging
J. Park1, C. Kim2; 1Daedeon/KR, 2Seoul/KR

B-0648 14:41
Utility of histogram analysis of apparent diffusion coefficient maps in differential diagnosis of uterine sarcoma and degenerated uterine leiomyoma
M. Huang; Zhengzhou/CN

B-0649 14:49
Diagnostic performance of MRI for assessing parametrial invasion in cervical cancer: a head-to-head comparison between oblique and true axial T2-weighted images
S. Woo1, S. Kim1, J. Choi1, S. Kim1; 1Seoul/KR, 2Daedeon/KR

B-0650 14:57
Blood oxygenation level-dependent MRI for prediction of clinical outcome in uterine cervical cancer treated with radiotherapy
J. Lee, C. Kim, K. Gu; Seoul/KR

B-0651 15:05
Primary vaginal malignancies: a single oncology centre experience
M. Lima, G. Rio1, M. Horta1, T.M. Cunha1; 1Porto/PT, 2Braga/PT

B-0652 15:13
Comparison of 18F-FDG PET/MRI and MRI alone for whole-body staging of 71 women with suspected recurrent pelvic cancer: a follow-up study
L.M. Sawicki1, J. Kirchner1, G. Alagna, V. Cantisani, V. De Socco, N. Di Leo, A. Rubini; 1Bari/IT, 2Bari/IT

SS 711a
Psychiatric disorders
Moderators:
E. Lotan; Tel-Aviv/IL
T.A. Youssry; London/UK

B-0653 14:00
Investigating direction of effective connectivity in obsessive compulsive disorder with resting state fMRI
H. Li1, X. Hu1, L. Zhang2, L. Lu1, X. Bu1, S. Tang1, X. Huang1; Chengdu/CN

B-0654 14:08
Structural magnetic resonance imaging study on schizophrenic patients with violence risk
Y. Li1, F. Fan2, Z. Feng1, W. Liang1, S. Tan1, F. Yang2; Beijing/CN

B-0655 14:16
Meta-analysis of resting-state functional connectivity of major depressive disorder in youth
S. Tang1; X. Hu1, Q. Gong1, X. Huang1; Chengdu/CN

B-0656 14:24
Relationship between peripheral Interleukin 10 and white matter integrity in stable medicated schizophrenia
G. Fu1, W. Zhang1, J. Liu1, Y. Xiao1, L. Yao2, J.A. Sweeney1; 1Cincinnati/OH, 2Cincinnati/US

B-0657 14:32
Support vector machine-based classification of first-episode drug-naive schizophrenia patients and healthy controls using structural MRI
Y. Xiao1, Z. Yan2, Y. Zhao3, B. Tao1, Q. Gong1, S. Lui1; 1Chengdu/CN, 2Wenzhou/CN, 3Cheng Du/CN

B-0658 14:40
LHPP gene polymorphism affects spontaneous brain activity in major depressive disorder
L. Cui1, F. Wang1, X. Gong2, M. Chang1, Z. Yin1, G. Fan1, Y. Tang1, K. Xu1; Shenyang/CN, 1Shanghai/CN

B-0659 14:48
Impaired mixed emotion processing in the right ventrolateral cortex in schizophrenia
A.G. Szabo, L.R. Kozák, K. Farkas, G. Csukly; Budapest/HU

B-0660 14:56
A fMRI comparison of paediatric patients with obsessive-compulsive disorder and controls during a Stroop task

B-0661 15:04
Posttraumatic stress disorder-related alterations in modular characteristic and white matter connectivity of brain structural networks
X. Sun1, D. Lei1, Q. Gong2; 1Chengdu/CN, 2London/UK

B-0662 15:12
Structural and functional brain abnormalities in schizophrenia: a cross-sectional study at different stages of the disease
C. Zhao; Beijing/CN

14:00 - 15:30 Room L 8
Head and Neck

SS 708
Thyroid and parathyroid imaging
Moderators:
A. Borges; Lisbon/PT
E. Scapin; Monserrato/IT

B-0664 14:00
Sonographic features of medullary thyroid carcinoma: application of Thyroid Imaging Reporting and Data System (TIRADS) classification
G. Yun1, Y. Kim1, S. Choi2; Seongnam-Si/KR

B-0665 14:08
Can valuable information be derived from the exploitation of quality maps along elasticity maps in SWE of thyroid nodules?
L. Chami1, G. Bera1, M. Lefort1, J. Griffon1, G. Lucidarme1, C. Peliot-Barakat2; 1Paris/FR, 2Orsay/FR

B-0666 14:16
Atypical ultrasonographic patterns of papillary thyroid carcinoma: how to recognise them

B-0667 14:24
Can S-detect provide accurate differentiation of thyroid nodules? - assessing the impact on the assessment made by operators with different experience
G. Alagna, V. Cantisani, V. Forte, V. De Socco, N. Di Leo, A. Rubini, M. Di Segni, F. D’Ambrosio, C. Catalano; Rome/IT
### B-0669 14:32
**Quantitative analysis of ADC values in differentiating papillary thyroid carcinoma and thyroid adenoma**  
S. Hu; Zhenjiang/ CN

### B-0670 14:40
**A novel mobile phone app to minimise bias and aid the FNAC decision-making process**  
A. McDermott, P. Navin, T. Tarmey, A. Weir, D. Bergin, J.F. Bruzzi, B. Voisin, D. Sheppard; Galway/ IE

### B-0671 14:48
**Comparison of the clinical utility of international guidelines to aid the decision on when to perform FNAC for thyroid nodules**  
A. McDermott, P. Navin, A. Weir, T. Tarmey, J.F. Bruzzi, B. Voisin, D. Sheppard; Galway/ IE

### B-0672 14:56
**Diagnostic performance of US-based fine-needle aspiration criteria for thyroid malignancy: comparison of three international society thyroid imaging reporting and data systems**  
S. Yoon, D. Na, H. Gwon; Gungneung/KR

### B-0673 15:04
**Ectopic parathyroids: incidence, localisation trends and diagnostic evaluation: retrospective study from a single tertiary institute**  
A.A. Singhal, S.S. Baijal, D. Sarin, S.K. Arora, A. Mithal, S. Mishra; Gurgaon/TR

### B-0674 15:12
**The diagnostic value of 4D MRI for the localisation of parathyroid adenomas**  
M. Ozturk, A.V. Polat, C. Celenk, M. Elmali, C. Polat; Samsun/TR

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### B-0680 14:32
**Detection of multiple cancers in a large UK screening population**  
S. Duan, S. Wilkinson, S. Mohammadi, V. Scott; London/UK

### B-0681 14:40
**Attendance in BreastScreen Norway by proportion of immigrants in a county**  
S. Bhargava, G. Mangerud, S. Hofvind; Oslo/ NO

### B-0682 14:48
**Comparison of phantom target detectability for digital mammograms, tomosynthesis and synthetic mammograms**  
L. Vancolle, L. Cockmartin, N. Marshall, H. Bosmans; Leuven/ BE

### B-0683 14:56
**Screening mammography’s pitfalls: a retrospective review of false positive recall**  
F. Leonardo, M. Orsi, A. Presaz, D. Mariani, M. Cellina, G. Oliva; Milan/ IT

### B-0684 15:04
**The impact of image quality and mammographic breast density on missed cancers in organised screening**  

### B-0685 15:12
**Piloting an international self-test: assessment of international mammography screening skills (AIMSS)**  

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### SS 702

#### Breast screening

**Moderators:**
- C. Colin; Pierre-Bénite/ FR
- N.A. Healy; Cambridge/ UK

### B-0675 14:00
**Incidence and tumour characteristics of bilateral and unilateral interval breast cancers at screening mammography**  
R.M.G. van Bommel; Eindhoven/ NL

### B-0676 14:08
**Missed and true screen-detected and interval breast cancers in a population-based breast cancer screening programme**  
T. Hovda1, Å.S. Hølen2, H. Bjørndal1, S. Sebuødøgard1, S. Hofvind1; 1Drammen/NO, 2Oslo/NO

### B-0677 14:16
**Interval breast cancer rates and histopathologic tumour characteristics after false-positive screening result in a population-based screening programme**  
S. Sebuødøgard, S. Hofvind; Oslo/NO

### B-0678 14:24
**Comparison between interval breast cancer (IBC) and screen detected cancer (SDC) in a single centre**  
F. Curto, M. Tonutti, F. Giudici, F. Zanconati, M. Bortul, M.A. Cova; Trieste/ IT
B-0691 14:40
Epidemiology of intracranial vertebral artery calcification observed on computed tomography in a cohort of trauma patients
C. Lucci, R. Kockelkoren, D. Bos, A. Van der Lugt, M. Geerlings, J. Hendrikse, P.A. de Jong; 1Utrecht/NL, 2Rotterdam/NL

B-0692 14:48
Standard diffusion-weighted imaging on the brain detects cervical internal carotid artery dissections
G.G.A. Adam, C. Cognard, F. Bonneville; Toulouse/FR

B-0693 14:56
Diagnostic performance of three-dimensional high resolution magnetic resonance imaging for intracranial aneurysms: comparison with digital subtraction angiography

B-0694 15:04
Scannographic density of intracranial venous sinuses in healthy patients and diagnosed with venous thrombosis at 2600 meters above sea level from 2008 to 2016
S. Andrade, S. Velasco, S. Bermúdez, N. Useche, A.J. Morillo; Bogota/CO

B-0695 15:12
Virtual non-contrast CT derived from dynamic CTA in acute stroke
E.J. Smit, F.J. Meijer, M.M. Prokop; Nijmegen/NL

B-0696 15:20
Neuroimaging signs and features of brain lesions with CADASIL
N. Kurochkina, A. Moroz, R. Konovalov, M. Krotenkova, S. Illarioshkin; Nijmegen/NL

B-0697 14:00
Can conventional MRI help to rectify grading of soft-tissue sarcomas (STS) on needle-core biopsy (NCB)?

B-0698 14:08
Machine learning approach on semantic and texture MRI features for early response evaluation in patients with high-grade soft-tissue sarcomas undergoing neoadjuvant chemotherapy
A. Crombie, C. Perier, O. Saut, B. Denis de Senneville, F. Le Loarer, E. Stoeckle, S. Cousin, A. Italiano, M. Kind; 1Bordeaux/FR, 2Talence/FR

B-0699 14:16
Calcium suppression in spectral detector computed tomography improves visualization of bone metastasis
N. Grosse Hokamp, N. Abdullayev, V. Neuhaus, J. Holz, D. Maintz, J. Borggreve; 1Cologne/DE, 2Cleveland, OH/US

B-0700 14:24
A deep learning-based radiomics model for classification of mammography mass lesions in breast cancer patients
I. Shiri, P. Geramifar, A. Bitarafan-Rajabi, A. Mohammadzadeh, H. Pouriakbar, S.P. Shayesteh; Tehran/IR

B-0701 14:32
IVIM MRI of oestrogen-receptor-positive breast cancer: association with quantitative IVIM parameters and Ki-67 proliferation status
R. Balaji; Chennai/IN

B-0702 14:40
Metastatic axillary lymph nodes in patients with breast cancer: value of quantitative shear wave elastography
Y. Kabin, O. Kostash, V. Kapustin, A. Gromov; Moscow/RU

B-0703 14:48
Quantitative PET parameters in predicting event free survival in patients with hodgkin lymphoma
I. Kriachok, O. Novosad, T. Skrypets, A. Gorbach; Y. Kmetyuk, O. Kozlova, M. Novikov, L. Mikhailova, V. Kozlov; Kiev/UA, Odessa/UA

B-0704 14:56
Diagnosis of diffuse spleen involvement in haematological malignancies using a spleen to liver attenuation ratio in CECT
C.P. Reintert, C. Hinterleitner, K. Nikolaou, M. Horger; Tübingen/DE

B-0705 15:04
Is whole body 18FDG-PET/CT including the extremities routinely warranted in melanoma patients?

B-0706 15:12
Integrated 18F-FDG PET/MR for the initial detection of lymph node metastases in malignant melanoma: Is sentinel lymph node biopsy still necessary?
B.M. Scharschmidt, J. Grueneisen, V. Steiner, L.M. Sawicki, C. Buchbender, P. Heusch, L. Umutlu, G. Antoch, T. Poeppel; Düsseldorf/DE, Essen/DE

B-0707 15:20
Usefulness of spleen size and volume measured by computed tomography for predicting clinical outcome in chronic myeloid leukemia

B-0708 14:00
Intravoxel incoherent motion diffusion-weighted MR imaging in gastro-esophageal cancer: correlation with 18F-FDG-PET and histopathology

B-0709 14:09
The concentration of iodine in perigastric adipose tissue: a novel index for assessment of serosal invasion in patients with gastric cancer after neoadjuvant chemotherapy
L. Yang; Shijiazhuang/CHN

B-0710 14:16
Use of CT perfusion parameters in assessment of early response of gastric cancer to neoadjuvant chemotherapy
P. Pilius, I. Shrainier, A. Klimenko, V.E. Sinitsyn; Moscow/RU
**B-0712** 14:24
The CTP for detection of primary oesophageal carcinoma
M. Kantarcı, A. Levent, R. Sade, S. Eren, H. Ogul, F. Guven, G. Bayraktutan; Erzurum/TR

**B-0713** 14:32
The value of dual-detector spectral CT imaging in the identification of gastric carcinoma and gastric lymphoma
S. Jiang, Y. Ren, H. Yan, X. Lu; Shenyang/CN

**B-0714** 14:40
Prognostic significance of systemic inflammation and FDG-PET bone marrow uptake in patients with oesophageal cancer
R.J. Pallis, K.G. Foley, T. Crosby, P.A. Fielding; Cardiff/UK

**B-0715** 14:48
MRI of the gastric antrum for the quantification of gastric mobility: comparison between obese and normal weight patients
S. Picchia, M. Rengo, D. De Santis, D.M. Bellini, S. Badia, A. Laghi; Latina/IT

**B-0716** 15:56
Prediction of gastric cancer with synchronous hepatic metastasis by enhancement pattern of primary lesion using multiphasic contrast-enhanced computed tomography
D. Tsurumaru, Y. Nishimuta, T. Muraki, Y. Asayama, H. Honda; Fukuoka/JP

**B-0717** 15:04
MRI for response assessment after neoadjuvant chemoradiotherapy in oesophageal cancer: added value of diffusion-weighted imaging
S.E. Vollenbrock, F.E. Voncken, D.M. Lambregts, M. Maas, L.C. ter Beek, M. Zanetti; Moderators:

**B-0718** 15:12
Perivascular infiltration and histologic difference: is it helpful to determine T stage of advanced gastric cancer in CT?

**B-0719** 14:00
Posterior tibial tendon dysfunction: clinical and magnetic resonance imaging findings having histology as reference standard
C. Messina1, D. Albano2, A. Corazza1, S. Rapisarda1, N. Martinelli1, A. Bianchi1, L.M. Sconfienza1; 1

**B-0720** 14:08
Factors related to bone marrow oedema of accessory navicular bone in the evaluation with MR imaging

**B-0721** 14:16
Detection of kinematic changes induced by sequential lateral ankle ligament section: a dynamic 4D-CT scan study

**B-0722** 14:24
Value of b-mode ultrasonography and real time sonoelastography for detecting injury of the lateral ligaments of the ankle joints
A. Karadayi, T. Ozer, N. Voyeroda, B. Fariz; Kocaeli/TR

**B-0723** 14:32
Subtalnar instability and lateral ankle instability: the difference with emphasis on subtalnar ligaments using 3-D isotropic MRI
D. Yoon, S. Moon; Seoul/KR

**B-0724** 14:40
Usefulness of T2 mapping sequences for the evaluation of Achilles tendinopathy with 3T MRI
E. Cannizzaro, S. Quarchioni, F. Bruno, C. Gianneramo, S. Mariani, F. Arrigoni, L. Zugaro, A. Barile, C. Masciocchi; L’Aquila/IT

**B-0725** 14:48
Importance of sonoelastographic assessment of ruptured and contralateral achilles tendons - prevention of further injuries
I. Dumic Cule, G. Ivanac, D. Lemac, B. Brijljacij; Zagreb/HR

**B-0726** 15:04
Diabetic foot complicated by osteomyelitis: the role of multiparametric magnetic resonance tomography
M. Zamyshhevskaya, V. Zavadovskaia, M. Zorkaltsev, V. Udodov, E. Grigoriev, Tomsk/RU

**B-0727** 15:12
T2 mapping of Achilles tendinopathy: our experience using T2 mapping sequences in the diagnosis and evaluation of treatment response after PRP therapy
I. Cappetti1, F. Bruno1, S. Quarchioni1, P. Palumbo1, S. Mariani1, F. Arrigoni1, L. Zugaro1, A. Barile1, C. Masciocchi1; L’Aquila/IT, 2Teramo/IT

**B-0728** 14:56
MRI T2 mapping: a sensitive and reliable approach to examine changes in muscle metabolism of extrinsic foot muscles
G. Bratke, S. Willwacher, K. Weiss, D. Maintz, G.-P. Brüggemann; Cologne/DE

**B-0729** 15:04
SS 710b
Ankle and foot

**B-0730** 14:00
Automatic computation of liver and lung perfusion parameters through the analysis of CT image sequences
S. Malavasi1, G. Gavelli2, V. Vilgrain3, A. Bevilacqua1; 1

**B-0731** 14:08
Use of calcium chloride as a calibration phantom material to aid identification of clinically significant compounds with spectral CT
T.E. Kirkbride, N. Anderson, A.Y. Raja; Christchurch/NZ

**B-0732** 14:16
The effect of motion blur and noise on the precision and accuracy of wrist joint kinematics detection from 4D-CT scans
G.J. Streekstra, M. de Roo, S.D. Strackee, I. Dobbe; Amsterdam/NL

**B-0733** 14:24
The effect of motion blur and noise on the precision and accuracy of wrist joint kinematics detection from 4D-CT scans
G.J. Streekstra, M. de Roo, S.D. Strackee, I. Dobbe; Amsterdam/NL
B-0733 14:24
Context-sensitive organ-specific evaluation and analysis of dual-energy computed tomography (DECT)
S. Dorn1, S. Chen2, F. Pisana1, M. Özdemir3, J. Maier1, S. Sawall1, M. Knaup1, A. Maier1, M. Lell1, M. Kachelrieß1; 1Heidelberg/DE, 2Erlangen/DE, 3Nürnberg/DE

B-0734 14:32
Deep convolutional neural network (D-CNN) for efficient and automatic lung cancer detection
I. Shiri, P. Geramifar, A. Bitarafan-Rajabi, A. Mohammadzadeh, H. Pouraiakbar, Tehran/IR

B-0735 14:40
A noise-robust and accurate measurement method for the wall thickness of small airways in low-dose CT scans
Z. Yang1, H. Jin1, J. Kim2; 1Suwon/KR, 2Seoul/KR

B-0736 14:48
Real-time x-ray scatter estimation for CT and CBCT using a deep convolutional neural network

B-0737 14:56
An innovative MRI harmonization method for multicentre radiomic analysis in glioblastoma
S. Reuzé1, A.-S. Dirand1, R. Sun1, F. Orlhac2, G. Louvel1, S. Ammari1; 1Villejuif/FR, 2Orsay/FR

B-0738 15:04
ROI-based phase analysis for neuronal current MRI

B-0739 15:12
MRI delta-radiomics feature robustness and reproducibility: the impact of image registration and day-to-day repeat-ability in GBM cancer patient

B-0740 15:20
Wavelet-based radiomics texture features stability in MRI of GBM patients: a test-retest study

B-0741 14:00
Relationships between image quality and radiation dose during paediatric pelvic radiography: a factorial phantom study
A.H. Mohammed Ali1, P. Hogg1, A. England2; 1Exeter/UK, 2Turku/FI, 3Oulu/FI

B-0742 14:08
PA vs AP positioning in digital radiography of lumbar spine: the impact of kVp in large-sized patient image quality
E.Y. Boatsen1, H.K. Shariat1, R.K. Sharma2, A. Sanderud2; 1Kongsvinger/NO, 2Oslo/NO

B-0743 14:16
Indexing DICOM metadata from medical imaging repositories: opportunities and challenges
M. Rodrigues dos Santos; Aveiro/PT

B-0744 14:24
Patient radiation dose and fluoroscopy time during ERCP: a single-centre retrospective study of influencing factors
E. Saukkoo1, J.M. Grönnros1, P. Salminen1, A. Henner1, M.T. Nieminen2; 1Turku/FI, 2Oulu/FI

B-0745 14:32
Dose reduction with PA projection in lumbar spine radiography
E. Alukic, D. Skirk, N. Mekis; Ljubljana/SI

B-0746 14:40
Construction of obese phantoms for dose optimisation and image quality purposes
S.J.M. Alqahtani1, 2K. Knapp1, R.M. Palfrey1, J.R. Meakin1; 1Exeter/UK, 2Najran/SA

B-0747 14:48
Personalised patient protocol for radiostereometric analysis
O. Muharemovic, A. Troelsen, M.G. Thomsen, T. Kallemsøe, K.K. Gosvig; Hvidovre/DK

B-0748 14:56
Large-sized patient chest radiography: a relative visual grading analysis study
F.P. Soares1, E. Aymon2, A.M. Burke1, S. Dijkstra4, J. Fosskaug5, S.N. Sanders, A.F.N. Silva1, A. Sanderud3; 1Florianopolis/BR, 2Lausanne/CH, 3Dublin/IE, 4Groningen/NL, 5Oslo/NO, 6Lisbon/PT

B-0749 15:04
Radiation dose reduction on thyroid in mammography

B-0750 15:12
Correlation measurements between positron emission tomography 18F-FDG dose and external exposure
Z.R. Janulcikas; Vilnius/LT

B-0751 15:20
Fabrication of fat tissue-equivalent substitutes (FTES) and lean tissue-equivalent substitute (LTES) to underpin obese phantom construction
Ž.R. Janulcikas; Vilnius/LT

B-0752 14:00
Diagnostic accuracy between low and high tube voltage third-generation dual-source coronary CT angiography using tailored contrast medium injection protocols
M. Albrecht1, C.N. De Cecco1, K. Otani1, J.W. Nance1, A. Varga-Szemes1, D. De Santis1, P. von Knebel Doeberitz1, T.J. Vogl1, U.J. Schoepf2; 1Frankfurt a. Main/DE, 2Charleston, SC/US, 3Tokyo/JP, 4Roma/IT

SS 714
Optimising radiographic practice
Moderators:
M. O’Connor; Dublin/IE
S. Savolainen; Helsinki/FI

B-0741 14:00
Relationships between image quality and radiation dose during paediatric pelvic radiography: a factorial phantom study
A.H. Mohammed Ali1, P. Hogg1, A. England2; 1Exeter/UK, 2Turku/FI, 3Oulu/FI

SS 703
New CT protocols to assess coronary artery and myocardium
Moderators:
M. Francone; Rome/IT
C.L. Schlett; Heidelberg/DE

B-0752 14:00
Diagnostic accuracy between low and high tube voltage third-generation dual-source coronary CT angiography using tailored contrast medium injection protocols
M. Albrecht1, C.N. De Cecco1, K. Otani1, J.W. Nance1, A. Varga-Szemes1, D. De Santis1, P. von Knebel Doeberitz1, T.J. Vogl1, U.J. Schoepf2; 1Frankfurt a. Main/DE, 2Charleston, SC/US, 3Tokyo/JP, 4Roma/IT
B-0753 14:08
Dual-energy coronary CT angiography: improved vascular contrast using noise-optimised virtual monoenergetic imaging
C. Arendt, D. Leithner, L. Lenga, S.S. Martin, T.J. Vogl, J.L. Wichmann; Frankfurt a. Main/DE

B-0754 14:16
Napkin-ring plaques can be identified on coronary CT angiography images using radiomic analysis
M. Kolossvary, J. Karady, B. Szilveszter, P. Kitslaar, B. Merkely, P. Maurovich-Horvat; Budapest/HU, Leiden/NL

B-0755 14:24
Diagnostic accuracy of coronary CT angiography performed with a novel whole-heart coverage high-definition CT scanner in patients with coronary artery bypass graft

B-0756 14:32
Cardiac CT for demonstrating non-calcified coronary atherosclerotic plaque: effect of knowledge-based iterative model reconstruction on image quality
T. Li, L. Yang; Beijing/CN

B-0757 14:40
Iodine quantification at rest and stress to differentiate ischaemic, infarcted and normal myocardium using dual-energy CT
M. van Assen, C.N. De Cecco, R. Vliegenthart, M. Oudkerk, U.J. Schoepf; Charleston, SC/US, Groningen/NL

B-0758 14:48
The value of wide-detector helical CT combined with adaptive statistical iterative reconstruction-V in patients with high heart rate during coronary CT angiography
H. Zhao; Zhengzhou/CN

B-0759 14:56
Study on the optimum keV and different contrast agent concentration in coronary stent imaging using spectral CT: in vitro study
L. Yang, Y. Hou, Y. Ma, Z. Jia, X. Lu; Shenyang/CN

B-0760 15:04
Assessment of image quality of coronary artery and left ventricular function and volume using low kVp, mA modulation and advanced model based iterative reconstruction
K. Choo, Y.-J. Jeong, M. Kim; Busan/KR

B-0761 15:12
Effect of image reconstruction algorithms on cardiovascular radiomic features using coronary CT angiography
M. Kolossvary, B. Szilveszter, J. Karady, B. Merkely, P. Maurovich-Horvat; Budapest/HU

B-0762 15:20
Motion elimination in low-dose 4D myocardial computed tomography perfusion (CTP) using the automated smooth temporal registration for analysis of 4D image data (ASTRA) algorithm
S. Lukas, S. Feger, M. Rief, E. Zimmermann, M. Dewey; Berlin/DE

B-0763 14:00
Fast magnetic resonance imaging (MRI) of invasive lung aspergillosis in immunocompromised children: comparison with HRCT

B-0764 14:08
Pulmonary MRI: diagnostic performance and detection of structural abnormality using ultrashort echo time in cystic fibrosis patients

B-0765 14:16
World Health Organization guidelines for achieving high-quality paediatric chest radiographs for use in epidemiological studies
S. Lacey, K. Mulholland, N. Fancourt, K. O’Brien, J. de Campo, M. de Campo, Parkville/AU, Baltimore, MD/US

B-0766 14:24
Value of paediatric chest CT in a representative patient cohort of 2019 examinations

B-0767 14:32
Influence of reconstruction algorithms to chest CT examination in children: comparison of image quality among standard-, reduced- and ultra-low-dose CTs in chest phantom study

B-0768 14:40
Technical challenges of quantitative chest MRI data analysis in a large cohort paediatric study

B-0769 14:48
Imaging findings of Loeys-Dietz syndrome in paediatric population

B-0770 14:56
Aortic & carotid intima-media thickness in term small for gestational age newborns and term normal newborns
S.M.s.a. Revanna, V. Kenchahannali Rangaswamy, V. Devappa, V.K. Shamchar; Bangalrove/IN

B-0771 15:04
What is the underestimation of radiation dose to the paediatric thyroid from contrast-enhanced CT, if contrast medium uptake is not taken into account?
P. Perisinakis, S. Pouli, A. Tzedakis, K. Spanakis, A.A. Hatzidakis, M. Raissaki, J. Damlilakis; Iraklion/GR
**B-0772** 15:12

**Dose distribution to radiosensitive organs using advanced thoracic CT imaging techniques**

A.F. Halaweit1, M. Siegel2, I. Duba1, K. Grant1, B. Schmidt3; 1Malvern, PA/US, 2St. Louis, MO/US, 3Forchheim/DE

**B-0773** 15:20

**Study of the feasibility of DAP-to-body-weight ratio as diagnostic reference level in paediatric interventional cardiology**

F. De Monte, L. Riccardi, A. Boschini, B. Castaldi, L. Baffoni, O. Milanesi, M. Paiusco; Padova/IT

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**B-0774** 14:00

**The image quality of turbo high-pitch dual-source CT coronary angiography in patients with free-breathing, free heart rate and any BMI**

K. Sun, B. Lu; Beijing/CN

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**B-0775** 14:08

**Machine-learning on-site CT-derived fractional flow reserve (FFR) compared to invasive FFR: influence of myocardial mass on accuracy**

E. Feldman, J. Bai, E. van Staalduinen; chest pain

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**B-0776** 14:12

**Comparison of sports activity between ambitious triathletes with and without myocardial late gadolinium enhancement**


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**B-0777** 14:40

**Stress-rest CMR for the assessment of myocardial perfusion reserve index modification after coronary sinus stent implantation**

A. Palmisano, G. Benedetti, F. Giannini, L. Baldetti, A. Del Maschio, F. De Cobelli, A. Esposito; Milan/IT

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**B-0778** 14:32

**Myocardial fibrosis imaging based on T1-mapping and ECV measurement in diabetes: diagnostic value compared with LGE imaging**

Y. Diao, Z. Yang, X. Liu; Chengdu/CN

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**B-0779** 14:44

**Correlation between liver density and epicardial fat volume: biomarkers of coronary artery disease**

C. Ferrari, G. Milanese, M. Silia, N. Giovannardi, M. Goldoni, E. Maffe, F. Cademartiri, N. Sverzellati; Parma/IT, Urbino/IT, Rome/NL

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**B-0780** 14:52

**Cardiac magnetic resonance in prognostic stratification of patients with acute myocardial infarction and preserved ejection fraction**

G. Daccquino, I. Carbone, N. Galea, L. Agati, G. De Rubeis, C. Catalano, M. Francone; Rome/IT

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**B-0781** 14:28

**Virtual monochromatic imaging improves the stent visualisation in lower extremity run-off CT angiography by dual-layer spectral detector CT**

D. Zhang, Z. Jin, H. Xue, S. Yu, R. Wu; Beijing/CN

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**B-0782** 14:40

**Quantitative oedema and late gadolinium enhancement thresholds for the diagnosis of myocarditis in suspect cases**


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**B-0783** 14:48

**Medication of anerdinal and late gadolinium enhancement**

Q. Zhao, X. Rong, Z. Yang, K. Diao, Y. Gao, Y. Guo; Chengdu/CN

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**B-0784** 14:12

**Incremental diagnostic value of myocardial perfusion stress testing for intermediate obstructive lesions on coronary CT angiography in acute chest pain**

E. Feldman, J. Bai, E. van Staaijduinen; Stony Brook, NY/US

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**B-0785** 14:44

**Correlation between liver density and epicardial fat volume: biomarkers of coronary artery disease**

C. Ferrari, G. Milanese, M. Silia, N. Giovannardi, M. Goldoni, E. Maffe, F. Cademartiri, N. Sverzellati; Parma/IT, Urbino/IT, Rome/NL

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**B-0786** 14:48

**Correlation between liver density and epicardial fat volume: biomarkers of coronary artery disease**

Q. Zhao, X. Rong, Z. Yang, K. Diao, Y. Gao, Y. Guo; Chengdu/CN

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**B-0787** 14:56

**4D flow MRI for the analysis of celiac trunk and mesenteric artery stenoses**


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**B-0788** 14:52

**Comparison of biphasic DE-CT with virtual unenhanced dual energy reconstruction and triphasic CT with true unenhanced images in patients with suspected acute bleeding**

S. Walter, S. Schneeweß, M. Maurer, M. Lescan, F. Bamberg, K. Nikolaou, A.E. Othman; Tübingen/DE

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**B-0789** 15:00

**Comparison of sports activity between ambitious triathletes with and without myocardial late gadolinium enhancement**


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**B-0790** 15:04

**Evaluation of dark blood LGE in assessing sub-endocardial MI and papillary muscle scar**


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**B-0791** 15:16

**Subclinical coronary and carotid atherosclerosis in asymptomatic high-risk patients**

M. Squatrito1, A. Guaricci1, V. Lorenzoni1, S. Mushtaq1, G. Muscogiuri1, E. Maffei2, F. Cademartiri1, R. Mark2, G. Pontone3, Milan/IT, 1Bar/IT, 2Monastier di Treviso/IT, 3Montreal, ON/CA, 4Maywood, IL/US
16:00 - 17:30 Sky High Stage

Neuro

**MY 8**

**Neuro**

**Moderators:**
Z. Mehemic; Sarajevo/BA
M. Vernooij; Rotterdam/NL

**B-0794** 16:00

Trajectories of imaging markers of the ageing brain: the Rotterdam study
E.J. Vinke, M. de Groot, V. Venkatraghavan, S. Klein, W.J. Niessen, M.A. Ikram, M.W. Vernooij; Rotterdam/NL

**B-0795** 16:04

The neural substrate of retinal neurodegeneration: the Rotterdam study

**B-0796** 16:08

Multi-parametric 11C-methionine-MR/PET for brain tumour imaging utilising MR fingerprinting
L. Umutlu1, M. Nittka2, R. Kirsch2, H. Quick1, K. Herrmann1, M. Gratz1, M. Forsting1, M. Forsting1; 1Essen/DE, 2Erlangen/DE

**B-0797** 16:12

Sum score of cerebral small vessel disease relates to risk of stroke, dementia and mortality in the Rotterdam study
P. Yilmaz, M. Ikram, W.J. Niessen, M. Ikram, M.W. Vernooij; Rotterdam/NL

**B-0798** 16:16

MRI brain atrophy can predict dementia in cognitively normal Parkinson's patients: a 7 year follow-up study
V. Pozdniakova1, R. Zivadinov1, T.O. Dalaker1, I. Dalen1, N. Bergsland1, K. Oppedal1, K. Pedersen1, O. Tysnes1, G. Alves1; 1Stavanger/NO, 2Buffalo, NY/US, 3Bergeb/NO

**B-0799** 16:20

Quantitative study of noninvasive prediction of glioma IDH1 gene status by APT combined with ASL imaging
J. Wen; Shanghai/CN

**B-0800** 16:24

Sex differences in resting-state cerebral activity alterations in internet gaming disorder
Y. Sun, Y. Zhou, Y. Wang, X. Han, W. Ding, J. Xu, F. Wang; Shanghai/CN

**B-0801** 16:28

3D neuromelanin imaging for differential diagnosis between Parkinson disease and essential tremor: a multicenter retrospective study
Y. Kwon1, W.-J. Moon1, M. Park1, H. Kim1, J. Choi2; 1Seoul/KR, 2Suwon/KR

**B-0802** 16:32

Ischaemic optic neuropathy: using track-weighted imaging to detect changes in the neuroretina
A. Attve1, C. Jean1, P. Remond1, A. Lecler1, F. Aptel1, C. Chiquet1, L. Lamaille1, A. Krainik1; 1Grenoble/FR, 2Paris/FR

**B-0804** 16:36

Intracranial atherosclerotic plaque enhancement associated with ischaemic stroke: a study with three-dimensional high-resolution magnetic resonance vessel wall imaging
X. Bai, J. Lin; Shanghai/CN

**B-0805** 16:40

Quantitative measurement of brain iron deposition in patients with peritoneal dialysis using susceptibility mapping
A.-N. Lin; Kaohsiung/TW
Interventional Radiology

MY 9 Interventional Radiology

Moderators:
R.F. Dondelinger; Liège/BE
P.M. Kitrou; Patras/GR

B-0814 08:30
Two year follow-up: results after acute stroke endovascular thrombectomy
A. Baldis, M. Radzina, K. Kupcs, E. Milglane, J. Savlovskis, H. Kidikas, A. Veiss; Riga/LV

B-0815 08:34
Comparison between not-stent retriever and stent retriever mechanical thrombectomy for the intra-arterial acute ischemic stroke treatment
E. Puglielli, R. Lattanzi, V. Di Mizio, S. Roiati, F. Navarra, V. Di Egidio; Teramo/IT

B-0816 08:38
Endoscopic ultrasound-guided hybrid thromblation in patients with stage III pancreatic adenocarcinoma: a clinical study with radiological perspectives
M. Barbera, S. Testoni, E. Dabizzi, S. Gusmini, M. Petrone, A. Esposito, A. Del Maschio, P. Arcidiacono, F. De Cobelli; Milan/IT

B-0817 08:42
Impacts of related risk factors on the efficacy of interventional treatment towards intractable postpartum haemorrhage
C. Zhao; Beijing/CN

B-0818 08:46
Is portal vein embolisation of liver segment IV mandatory before extended right hemihepatectomy?
C. Loberg, S. Keil, F. Goerg, C.K. Kuhl, P.L. Bruners; Aachen/DE

B-0820 08:50
Combined antegrade and retrograde approach in iatrogenic ureteral injuries: the rendez-vous technique
G. Pacella, E. Faieila, D. Santucci, A. Alfonsi, C. Altomare, B. Beomonte Zobel, R.F. Grasso; Rome/IT

B-0821 08:54
MR-guided focused ultrasound (MRgFUS) thalamotomy for the treatment of medically refractory essential tremor
S. Dababou1, C. Marrocchio1, C. Halpern2, J. Henderson2, A. Napoli1, C. Catalano1, K. Butts Pauly2, V. Santini2, P. Ghanouni2; 1Rome/IT, 2Stanford, CA/US

B-0822 08:58
CT-guided percutaneous synovial cyst rupture using a 11G Jamshidi needle: early experience and results of a novel technique
S. Islam; D. Johnson; London/UK

B-0823 09:02
Performance and safety of pancreas biopsy: are there more complications made by routes of risk?
J.M. Sastoque G; S. Lombardo, J.J. Espejo Herrera, I. Dominguez Paillacho, M. Perez Montilla, L.J. Zurera Tendero; Cordoba/ES

B-0824 09:06
TACE using mitomycin with or without irinotecan for HCC in European patients

B-0825 09:10
Randomised controlled trial of free-hand vs robotic-guided needle positioning in CT-guided thermal ablation of liver tumours
W.J. Heerink1, S.J.S. Ruiter1, M. Arnolli2, J. Penning3, B. Lansdorp4, R. Vliegenthart1, M. Oudkerk1, K.P. de Jong1; 1Groningen/NL, 2 Enschede/NL

B-0826 09:14
Vertebroplasty with trajectory planning and 3D road map applications: first experiences
M. Inecikli; Rize/TR

B-0827 09:18
Stent retriever single shot study (4S): multivariable analysis for first-pass recanalization in acute stroke
F.J. Melendez1, S. Rosati2, S. Aixut Lorenzo3, S. Remollo Friedemann4, M.F. Werner Reyes1, M. Ribó Jacobí1, D. Hernández Morales1, M. Martínez1, A. Tomaselto Wetz1; 1Barcelona/ES, 2Madrid/ES, 3Rielis / Viabrea/ES

B-0828 09:22
US-guided percutaneous renal biopsy: a 10 year retrospective analysis
J.A. Sheehan, R. Durganaudu, T. Tarmey, G.J. O’Sullivan, D. Sheppard; Galway/IE

B-0829 09:26
Treatment of intramural and submucosal uterine fibroids (UFs) using MRgFUS (magnetic resonance-guided focused ultrasound surgery)

B-0830 09:30
Evaluation of a 3D printed anthropomorphic phantom for simulation of CT-guided procedures
P. Jahnke, F.B. Schwarz, M. Ziegert, O. Abdelhadi, T. Almasi, M. Nunninger, B. Hamm, M. Scheel; Berlin/DE

B-0831 09:34
Recurrence and survival following image-guided percutaneous microwave ablation in primary lung malignancy
M. Tsakok, M. Little, R. Millington, G. Hynes, F. Gleeson, M. Anderson; Oxford/UK

B-0832 09:38
Sampling errors in image-guided liver biopsies: depiction of the biopsy site on immediate post-interventional CE MRI
B. Inecikli; W.J. Heerink, R. Vliegenthart; Amsterdam/NET

B-0833 09:42
Contrast-enhanced ultrasound (CEUS) as guidance system for ablative treatments of primary and secondary liver tumours: a multicenter study
G. Francica1, F. Meloni2, M. Pompili3, F. Terracciano4, E. Caturelli5, I. de Sio6; 1Rome/IT, 2Naples/IT, 3San Giovanni Rotondo/IT, 4Verona/IT

Abdominal Viscera

SS 1001a Advances in hepatobiliary CT and MRI

Moderators:
F. Agnello; Palermo/IT
B.I. Choi; Seoul/KR

B-0834 10:30
MRI imaging of branch-duct IPMN: evaluation of agreement between observers with different degrees of experience
L. Bertuzzo, G. Zamboni, R. Negrelli, R. Pozzi Mucelli; Verona/IT
B-0835 10:38
Intraindividual interscanner variation of virtual unenhanced attenuation values derived from twin-beam dual-energy CT in comparison to dual-source dual-energy CT in 126 patients
A. Cosentino, M. Obmann, J. Gehweiler, V. Kelsch, V. Hofmann, T. Re, D. Boll, M. Benz; 1Turin/IT, 2Basle/CH

B-0836 10:46
Diffusion-weighted magnetic resonance imaging in uveal melanomas: validation of early chemotherapeutic monitoring of targeted therapy
N. Guberina, S. Bauer, H. Richly, M. Scheulen, A. Wetter; Essen/DE

B-0837 10:54
MRI liver adenoma subtyping in animal models of glycogenosis type 1a
F. Rosa, L. Basso, R. Resaz, L. Secondini, I. Verardo, F. Grillo, V. Prono, A. Eva, C. Neumaier; Genoa/IT

B-0838 11:02
The role of visceral and subcutaneous adipose tissue measurements and their ratio by MRI in subjects with prediabetes, diabetes and healthy controls from a general population

B-0839 11:10
Non-invasive preoperative quantitative of pancreatic fibrosis and lipomatosis: correlation of magnetisation transfer imaging and multi-gradient echo MRI with histopathology

B-0840 11:18
Conventional liver fat quantification MRI vs complex chemical shift-encoded MRI in an oncologic population
G. Cornaglia, S. Eskreis-Winkler, S. Krebs, J. Zheng, L. Saba, L. Mannelli; New York, NY/US, Monserrato/IT

B-0841 11:26
Ability to diagnose disorders of liver haemodynamics in conditions of biliary hypertension with perfusion computed tomography
V. Malakhanov, P.V. Silverstov; Irkutsk/RU

B-0842 11:34
Comparison of stiffness values of peripheral and central liver tissues with MR elastography in patients with primary sclerosing cholagogitis
D. Kurz Oz, E. Peker, M. Kul, A. Erden; Ankara/TR

B-0843 11:42
Portal hypertension associated with oxaliplatin administration: incidence and natural history
M. Di Martino, K. Koryukova, C. Catalano; Rome/IT

B-0844 11:50
Learning from our errors: what are the common clinically important errors that radiologists repeatedly make in the UK’s largest teaching hospital and how can we best address them?
A. Koo, J.T. Smith; Leeds/UK

B-0845 10:30
Diffusion-weighted MR-volumetry and high-resolution MR-volumetry association with lymphovascular invasion and N-stages in resectable rectal cancer
H. Li, G.W. Chen, X.-L. Chen; Chengdu/CN

B-0846 10:38
Could perfusion heterogeneity assessed at DCE-MRI predict rectal cancer sensitivity to chemoradiotherapy?
A. Di Chiara, A. Palmisano, A. Esposito, P. Rancoita, P. Passoni, A. Del Maschio, F. De Cobelli; Milan/IT

B-0847 10:46
Radiomics analysis for preoperative prediction of lymph node metastasis in patients with rectal cancer
H. Liu, C. Zhang, J. Li, D. Wang; Shanghai/CN

B-0848 10:54
Locally advanced rectal cancer: the value of whole-tumour histogram-based texture analysis of baseline ADC map in predicting tumour response to neoadjuvant chemoradiotherapy
Y. Yang, B. Wu; Chengdu/CN

B-0849 11:02
T2-weighted signal intensity to predict complete and good response after neoadjuvant chemoradiation therapy in patients with rectal cancer
R.A.P. Dijkhoff; Maastricht/NL

B-0850 11:02
T2-weighted signal intensity to predict complete and good response after neoadjuvant chemoradiation therapy in patients with rectal cancer
R.A.P. Dijkhoff; Maastricht/NL

B-0851 11:10
Predictive value of functional imaging markers derived from PET/CT and diffusion-weighted MRI in response assessment of rectal cancer treatment
S. Diago, C. Talei Franzezi, S. Lombardi, A. Casiraghi, L. Guerra, S. Sironi, D. Ippolito; Monza/IT

B-0852 11:18
Texture analysis of magnetic resonance imaging in differential diagnosis of rectal tumours
M. Huang; Zhengzhou/CN

B-0853 11:26
Whole tumour texture analysis based on ADC maps as quantitative imaging biomarker in patients with locally advanced rectal cancer „responders” to neoadjuvant chemoradiotherapy
A. Grassi, A. Cirigliano, S. Carbone, M. Biondi, V. Nardone, L. Pirtoli, L. Vottieranni; Siena/IT

B-0854 11:34
Accurate localization of rectal cancer on preoperative magnetic resonance imaging: a prospective study using an anal verge marker
Y. Han, B. Park, M. Kim, D. Sung, N. Han, K. Sim, S. Cho; Seoul/KR

B-0855 11:42
Predictive factors of recurrence at MR examination performed before and after preoperative chemoradiotherapy in patients with rectal cancer: a retrospective study
F. Prampolini, S. Taschini, A. Pecchi, F. Sani, F. Gelsomino, A. Spallanzani, S. Kaleci, P. Torricelli; Modena/IT
Interventional Radiology

SS 1009
Vascular interventions: intra- and extracranial

Moderators:
C. Binkert; Winterthur/CH

N.N.

B-0856 10:30
Outcomes of endovascular treatment for acute large vessel ischaemic stroke more than 6 hours after symptom onset
R. Motyer1, H. Kok2, H. Asadi2, A. O’Hare1, P. Brennan3, P. O’Hare1, S. Looby1, P. Nicholson1, J. Thornton1, 1Dublin/IE, 2London/UK, 3Melbourne, Victoria/AU

B-0857 10:38
Endovascular thrombectomy beyond 12 hours of stroke onset: a stroke network’s experience of late intervention
R. Motyer, J. Thornton, S. Power, P. Brennan, A. O’Hare, S. Looby, D. Williams, B. Moynihan, S. Murphy; Dublin/IE

B-0858 10:46
Acute ischaemic stroke due to tandem occlusions of the internal carotid artery: results of endovascular recanalisation and clinical outcome
M. Voormolen, T. Van der Zijden, O. D’Arachambeau, L. Yperzeele, P. Vanacker, T. Baar, M. Muto, T. Menovsky, P.M. Parizel; Antwerp/BE

B-0859 10:54
Bronchial artery embolisation: tuberculosis patients with haemoptysis
K. Muhammad, I.A. Lutfi; 1Karachi/PK

B-0860 11:02
Pulmonary arterial occlusion treatment in patients with haemoptysis: a 32-case single-centre study
Z.C. Charline, M. Jaffro; Toulouse/FR

B-0861 11:10
Renal artery embolisation for vascular lesions following Nephron-sparing surgery: a five-year experience
E. Amodeo, A. Contegiacomo, N. Attampati, A. Paladini, C. Di Stasi, R. Manfredi; Rome/IT

B-0862 11:18
Alternative techniques in splenic artery embolisation in blunt splenic trauma
M. Citore, F. Mondaini, C. Raspanti, G. Gabbanini, E. Casamassima, G. Falcone, F. Fanelli; Florence/IT

B-0863 11:26
Management of acute occlusion of the superior mesenteric artery by local thrombolysis (multidisciplinary approach)
M.M.A.H. ElShafey, A. Elgendi; Alexandria/EG

B-0864 11:34
Endovascular treatment of haemodialysis arteriovenous fistula with vessel preparation and drug-coated balloon angioplasty: a single-centre study
J. Lučev, S. Breznik, D. Dinevski, R. Ekart, M. Rupreht; Maribor/SI

B-0865 11:42
Lysis-assisted balloon (LAB) thrombectomy - a method for declotting thrombosed arteriovenous dialysis grafts: results from a retrospective analysis of 241 endovascular procedures
P. Kitrou1, P. Papadimatos1, K. Katsanos1, S.C. Spiliopoulos2, N. Christeas3, D. Kárnabádis1; 1Patras/GR, 2Athens/GR

B-0866 11:50
Cumulative patency rate of forearm vs upper arm arteriovenous dialysis fistulae
A. Almehm, V. Narasimha Krishna, A.M. Abdel Aal; Birmingham, AL/US

SS 1004
Artificial intelligence in chest imaging

Moderators:
P. Doelling; Berlin/DE
J. Jacob; London/UK

K-15 10:30
Keynote lecture
J. Jacob; London/UK

B-0867 10:39
Artificial intelligence applied on the national lung screening trial dataset: a radiomics study
S. Martin, J. Hofmeister, S. Burgermeister, C.D. Becker, X. Montet; Geneva/CH

B-0868 10:47
Lung nodule risk stratification using Deep Learning on the complete US National Lung Screening Trial dataset
C. Arteta, L. Pickup, P. Novotny, Z. Sandford, J. Brabec, D. Dufek, J. Kunst, J. Declerck, T. Kadiri; Oxford/UK

B-0870 11:55
Automatic prediction of emphysema extent in low-dose CT by deep learning
G. Bortsova1, S.N. Ørting2, F. Dubost1, I. Katramados3, L. Hogeweg1, M.M. Willie1, L.H. Thomsen1, M. De Bruinj1, Rotterdam/NL, 1Copenhagen/DK, 2Groningen/NL, 3Hellerup/DK

B-0871 11:03
Fully automated segmentation of pulmonary fibrosis using different software tools
A. Giannakis1, T. Norajitra1, L. Kehler1, J. Dinkel2, O. Weinheimer3, C. van Lunteren1, M. Kreuter1, K. Maier-Hein1, C. Heussel1, Heidelberg/DE, 1Munich/DE

B-0872 11:11
Clinical validation of a deep learning algorithm for quantification of the idiopathic pulmonary fibrosis pattern
T.R. Nimmada1, P. Rao2, P.S. Sanghavi1, V. Venugopala1, P. Warier1, Z. Udawadia1, B. Jankharia1; Mumbai/IN, New Delhi/IN

B-0873 11:19
Risk assessment of lung cancer development in Idiopathic Pulmonary Fibrosis (IPF) patients using quantitative HRCT analysis
D. Falsaperla1, S.E. Torrisi1, A. Torcito1, G. Russo1, A. Stefano1, A. Vancheri1, A. Basile1, C. Vancheri1, S. Palmucci1; Catania/IT, 1Cefalu/IT

B-0874 11:27
Radiomics signature for non-small cell lung cancer recurrence risk prediction after surgery: quantitative analysis of the tumour and peritumoural lung parenchyma on presurgical MDCT

B-0875 11:35
Lung adenocarcinoma radiogenomics predicts clinical outcome
A. Leonardi, A. Napoli, R. Scipione, M. Anzidei, S. Bababou, C. Catalano; Rome/IT
SS 1007
Renal and adrenal imaging

Moderators:
G. Aringhieri, Pisa/IT
J. Belted, Liverpool/UK

B-0876 11:43
Can texture analysis predict non small cell lung cancer recurrence after surgery?
R.S.R. Lopes do Rosario, N. Michoux, V. Lacroix, B. Gaye; Brussels/BE

B-0877 10:30
Diagnostic accuracy of primary macronodular adrenal hyperplasia on CT: a quantitative and qualitative study
S.M. Arndt, F.M. Coelho, P.C. Viana, L.G. Gomes, M.B.V. Fragoso, F.I. Yamauchi, Sao Paulo/BR

B-0878 10:38
Hallowed adrenal gland sign in patients of septic shock: prevalence, CT appearance and consequence
Q. Xie, H. Wang, J. Guan; Guangzhou/CN

B-0879 10:46
Histogram analysis of adrenal lesions with a single measurement: feasibility and incremental value for diagnosing adenomas

B-0880 10:54
CT numbers of kidneys in virtual noncontrast images acquired from dual-source dual-energy dynamic CT of kidney: comparison with standard noncontrast CT
Y.-M. Lin; Taipei/TW

B-0881 11:02
Optimal energy level for renal lesion detection and characterisation on virtual monoenergetic images

B-0882 11:10
Diffusion weighted magnetic resonance imaging in assessment of parenchymal damage in chronic kidney disease

B-0883 11:18
Towards renal metabolic imaging of fatty kidney
I. Dekkers, P. de Heer, A.P.J. de Vries, H.J. Lamb; Leiden/NL, Amsterdam/NL

B-0884 11:26
DKI of microstructural alterations in the kidneys of patients with hyperuricemia
X. Cai, Z. Chen; Guangzhou/CN

B-0885 11:34
Can renal artery resistive index predict disease activity in lupus nephritis?
S.M. Mehana; Alexandria/EG

B-0886 11:42
Deep learning for automated MRI-based cyst load determination in PKD patients
M. Gattoni, A.artenstein, E. Siewert, T. Denecke, B. Hamm, D. Geisel, T. Penzkofer; Berlin/DE

B-0887 11:50
An integrated CAD system of DWI MRI and laboratory biomarkers in the diagnosis of kidney transplant dysfunction
M. Shehata, M.E. Abu El-Ghani, T. El-Diasty, A. EL-Baz; Louisvile, KY/US, Mansoura/EG, Louisville, KY/US

B-0888 10:30
A 2 minute, ultra-fast wholebody PET/CT enabled by digital photon counting PET detector technology
M.I. Knopp, C.L. Wright, K. Binzel, F.L. Giesel, J. Zhang, P. Maniawski, M.V. Knopp; Columbus, OH/US, Heidelberg/DE, Cleveland, OH/US

B-0889 10:38
Practice-based evidence for clinical benefit of PET/CT - results of the first oncologic PET/CT registry in Germany
C. Pfannenberg, L. Wang, B. Gückel, S. Gathidis, S.-C. Olthof, M. Reimold, C. La Fougère, K. Nikolau, P. Martus; Tuebingen/DE

B-0890 10:46
Patients' perception of radiologists in an oncologic imaging department
C. Giaconi, F. Cerimele, A. Bulleri, C. Basile Fasolo, E. Neri; Pisa/IT

B-0891 10:54
How to structure the attendance of radiologists to oncologic multidisciplinary team meetings
C. Giaconi, F. Cerri, C. Arena, A. Bulleri, E. Neri; Pisa/IT

B-0892 11:02
Open access prescription in oncologic imaging: one-year trial
F. Cerri, C. Giaconi, F. Cerri, A. Buller, C. Basile Fasolo, E. Neri; Pisa/IT

B-0893 11:10
Integrated versus separate reporting of FDG-PET/CT and MRI for abdominal malignancies: effect on diagnostic confidence and staging outcomes
L.A. Min, W. Vogel, M.J. Lahaye, M. Maas, M. Donswijk, E. Veg, R.G.H. Beets-Tan, D.M. Lambregts; Amsterdam/NL, Maastricht/NL

B-0894 11:18
New insights for spectral CT imaging in staging of patients with hypervascularised abdominal tumours

B-0895 11:26
Application of 80-kVp scan and raw data-based iterative reconstruction for reduced iodine load PET/CT in an oncological setting: a win-win technique
R. Balaji; Chennai/IN
**B-0899 10:30**

**Metal artefact reduction in computed tomography (Smart MAR): improvement of image quality and diagnostic confidence in patients with metallic dental implants**

F. Feldhaus, G. Böning, U. Fehrenbach, J. Kahn, M.H. Maurer, M. Lell; 1

**B-0900 10:38**

**Next generation imaging of head and neck cancer using dual-layer spectral CT**

F. Lohöfer, G. Kaisiss, F. Köster, M. Rasper, E. Einspieler, C. Gerngross, A. Fichter, E.J. Rummery, R. Braren; Munich/DE

**B-0901 10:46**

**Staging of head and neck cancer by dual energy CT: comparison of dual and single source dual energy**

M. Wiesmüller, W. Wüst, M.S. May, M. Uder; Erlangen/DE

**B-0902 10:54**

**Oral cavity cancer staging by CT for the new TNM-8: using an extrapolated measurement to evaluate the depth of invasion**


**B-0903 11:02**

**Does performing staging MRI for lateral tongue tumours after biopsy of the primary tumour overestimate tumour dimensions and staging?**

B. Chillon, D. Pawar Hao; Norwich/UK

**B-0904 11:10**

**Assessment of mandibular involvement by oral cavity and oropharyngeal squamous cell carcinoma: CT scan and MRI evaluation**

R.K.N. Solanki, I.N. Patel; Ahmedabad/IN

**B-0905 11:18**

**Automatic adaptive iterative metal artifact reduction**

A.F. Halaweish, B. Schmidt, K. Grant, T. Flohr, C. Hofmann; Malvern, PA/US, Forchheim/DE

**B-0906 11:26**

**Virtual monochromatic images can reduce metal artefacts caused by dental implants in computed tomography**

N. Grosse Hokamp, K.R. Laukamp, S. Lennartz, D. Zopf, D. Maintz, J. Borggrefe; Cologne/DE, Cleveland, OH/US

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**B-0907 11:34**

**Diagnostic accuracy of FDG-PET and contrast-enhanced CT in patients with head and neck cancer of unknown primary origin**

D. de Haan, A. van der Hoorn, H.E. Westerlaan; Almelo/NL, Groningen/NL

**B-0908 11:42**

**Can MR textural analysis improve detection of extracapsular nodal spread in patients with oral cavity cancer?**

R. Frood, E.Y.A. Pakhi, M. Barnfield, R. Prestwich, S. Vaidyanathan, A. Scarsbrook; Leeds/UK

**B-0909 11:50**

**Comparison of local shim coils and slice-specific integrated shimming in EPI-based DWI of the head and neck region**

S. Walter, M. Notohamiprodjo, M. Keil, K. Nikolao; P. Martin, S. Gatisits; Tübingen/DE, Erlangen/DE
B-0916 11:27
The incremental value of preoperative MRI for evaluation of extent of disease in IDC vs ILC
T. Alster, E. Carmon, B. Malý, T. Selia; Jerusalem/IL

B-0917 11:35
The role of MRI in predicting irradical surgery and local recurrence after breast conserving surgery in T3 breast cancer patients after neoadjuvant chemotherapy
I. Joan², J. van Urk², D.K. Schouten¹, M.E. van der Noordaa², M. Vanrракen Peeters², R.G.H. Beets-Tan², G. Winter-Warnars², C. Loo²; ¹San Donato Milanese/IT, ²Amsterdam/NL

B-0918 11:43
Accuracy of breast magnetic resonance imaging compared to mammography in the preoperative detection and measurement of pure ductal carcinoma in situ
H. Preibisch, J. Beckmann, G. Blumenstock, A. Staebler, B. Wietek, K. Nikolau, B. Wiesinger; Tübingen/DE

B-0919 11:51
Non-mass enhancement in breast-MRI: which BI-RADS descriptors for distribution and internal enhancement patterns have the highest likelihood of malignancy?
M. Lunkiewicz¹, S. Forte², B.K. Freiwald³, G. Singer³, R.A. Kubik-Huch³; ¹Baden/CH, ²Basle/CH

B-0920 10:39
Covert brain ischaemia and its impact on cognition in the Polish population: preliminary results of the PURE - mind (Prospective Urban and Rural Epidemiological) cohort study

B-0921 10:47
Clinical and MRI characteristics of patients with pontine hyperintense lesions in a series of ischaemic strokes
M. Maier, S. Colombani, M. Mej dubi, ¹Fort De France/FR

B-0922 10:55
Collateral filling velocity predicts malignant oedema development in acute ischaemic stroke

B-0923 11:03
Collateral scores and perfusion parameters for outcome prediction in acute ischaemic stroke: how many scans are needed?
K. Schregel, I. Tsoogkas, D. Behme, C. Peter, I. Maier, J. Liman, M. Knauth, M.-N. Psychogios; ¹Göttingen/DE

B-0924 11:11
The utility of CAD software in acute stroke protocol workflow for automatic evaluation of infarct core size
D. Justkani, A. Petrovicova, S. Holly; Nitra/SK

B-0925 11:19
Voxel-based lesion symptom mapping of NIHSS scores in patients with acute media infarction
J. Jessee¹, B. Dinsel², J. Baldo², A. Arévalo³, M. Bendszus¹, K. Schlamp³; ¹Heidelberg/DE, ²Martinez, CA/US, ³São Paulo/BR

B-0927 11:27
Clinical outcome after mechanical thrombectomy in diabetic patients with major ischaemic stroke of the anterior cerebral circulation
J. Borggreve, B.K. Glück, C. Kabbasch, O. Onur, N. Abdullayev, V. Maus, G.R. Fink; ¹Malmö/SE, ²Cologne/DE, ³Aachen/DE

B-0928 11:35
MRI morphology of the corpus callosum in patients with small vessel diseases of the brain
D. Bazhenova, V.E. Sinitsyn, R.N. Konovalov; Moscow/RU

B-0929 11:43
The aspect of intracranial haemorrhage of cranial CT at the moment of admission is useful to predict the clinical and radiological evolution
S. Bonilla, E. Pascual Goni; Barcelona/ES

10:30 - 12:00 Room F1

SS 1016b
Improvements in neuro-oncology imaging
Moderators:
L. Hermoye; Brussels/BE
L. Jacobi-Postma; Maastricht/NL

B-0930 10:30
Whole tumour histogram analysis of T2-weighted, diffusion-weighted, and postcontrast T1-weighted images in medulloblastoma: assessment risk of recurrence
Q. Li; Zhengzhou/CN

B-0932 10:38
The role of diffusion weighted imaging for the differentiation of malignant and benign peripheral nerve sheath tumours
L. Well, K.I. Geier, M. Kaul, L. Späth, T. Derlin, J. Herrmann, G. Adam, J. Salamon; ¹Hamburg/DE, ²Hannover/DE

B-0933 10:46
Relaxation-compensated multi-pool CEST signal at 7T MRI of glioblastomas is dependent on the anatomic localisation
C. Dreher¹, J. Windschuht¹, F. Sahm¹, P. Bachert¹, M. Ladd¹, M. Zais², H.-P. Schlemmer¹, A. Radbruch¹, D. Paech¹; ¹Heidelberg/DE, ²Tübingen/DE

B-0934 10:54
Metabolic imaging of tumours employing dynamic ¹⁷O MRI: initial results in glioma patients

B-0935 11:02
 Histogram analysis of apparent diffusion coefficient maps for distinguishing lateral ventricle central necrotomy from ependymoma
W. Wang, J. Cheng, Y. Zhang; Zhengzhou/CN

B-0936 11:10
Nedd4-1 expression promotes tumour progression in gliomas and relationship between Nedd4-1 expressions and DKI features in gliomas
X. Chena, J. Cheng; Zhengzhou/CN

10:30 - 12:00 Room E2

Neuro

SS 1011a
Stroke: prediction of outcome
Moderators:
F. Bozzetti; Parma/IT
K.D. Kurz; Stavanger/NO

K-17 10:30
Keynote lecture
B.K. Velthuis; Utrecht/NL

B-0920 10:39
Covert brain ischaemia and its impact on cognition in the Polish population: preliminary results of the PURE - mind (Prospective Urban and Rural Epidemiological) cohort study

B-0921 10:47
Clinical and MRI characteristics of patients with pontine hyperintense lesions in a series of ischaemic strokes
M. Maier, S. Colombani, M. Mej dubi, ¹Fort De France/FR

B-0922 10:55
Collateral filling velocity predicts malignant oedema development in acute ischaemic stroke

B-0923 11:03
Collateral scores and perfusion parameters for outcome prediction in acute ischaemic stroke: how many scans are needed?
K. Schregel, I. Tsoogkas, D. Behme, C. Peter, I. Maier, J. Liman, M. Knauth, M.-N. Psychogios; ¹Göttingen/DE

B-0924 11:11
The utility of CAD software in acute stroke protocol workflow for automatic evaluation of infarct core size
D. Justkani, A. Petrovicova, S. Holly; Nitra/SK
B-0939 11:34
Evaluation of the apparent diffusion coefficient in patients with recurrent glioblastoma under treatment with bevacizumab with radiographic pseudoresponse
T.A. Auer, F. Marini, M. Renovanz, M.A. Brockmann, Y. Tanyildizi; Mainz/DE

B-0940 11:42
The predictive capacity of DWI vs perfusion imaging in response assessment of brain metastases following stereotactic radiosurgery
P. Arcuri, S. Roccia, G. Fodero, R. Mole, A. Destito, C. Bertucci, D. Lagana; Catanzaro/IT, London/UK

10:30 - 12:00 Room F2
Emergency Imaging

SS 1017 Non-traumatic emergencies
Moderators:
R.M.M. Hinzpeter, Zurich/CH
D.J.M. Tolan, Leeds/UK

K-18 10:30
Keynote lecture
D.R. Kool; Amsterdam/NL

B-0941 10:39
Simulation-based training for radiology professionals in the management of acute emergencies following contrast media reactions

B-0942 10:47
Clinical impact of iterative model reconstruction algorithm in a department of emergency radiology in a large series of patients with an international survey by the European Society of Musculoskeletal Radiology
A. Pecorelli, D. Ippolito, A. de Vito, S. Lombardi, L. Riva, C. Talei Francesi, S. Sironi; Monza/IT, Bergamo/IT

B-0943 10:55
Age dependency of the Wells Score for pulmonary embolism
S. Nagel, I. Steffen, T. Elgeti; Berlin/DE

B-0944 11:03
Ruling out acute kidney injury (AKI) with "admission" reno-caval ultrasound (ARCUS) examination
N. Attempati, A. Contegiacomo, E. Amodeo, M. Barone, A. Cina, R. Manfredi; Rome/IT

B-0945 11:11
When ultrasound is not enough: predicting downstream utilisation of CT after ultrasound in patients with acute abdomen

B-0946 11:19
How accurate are we and how can we get better in diagnosing acute appendicitis by unenhanced multidetector computed tomography: a large meta-analysis and literature review
A. Mishra, R. AlSaady, S. Patel, S.A. Mahemood, T.S. Abdulla, A.A.W. Hussain; Doha/QA

B-0947 11:27
Comparing diagnostic performance of ultra-low-dose CT compared to abdominal plain films

B-0948 11:35
CT signs of bowel necrosis in CL-SBO
C. Rondenet, I. Millet, L. Corno, I. Boulay Coletta, P. Taourel, M. Zins; Paris/FR, Montpellier/FR

B-0949 11:43
Contribution of ultra low-dose CT in extremities trauma
F. Snene, T. Addala, J. Greffier, P. Viala, J.P. Beregi, A. Larbi; Nîmes/FR

B-0950 11:51
Diagnostic performance of quiescent interval single-shot (QISS) non-contrast MRA at 3 Tesla for the diagnosis of acute lower limb ischaemia
Y. Ragab, A. Al Marakby, H.M. Hamza, A. Hasanin; Cairo/EG, London/UK

10:30 - 12:00 Room D
Musculoskeletal

SS 1010 Shoulder imaging and intervention
Moderators:
J.-L. Drapé; Paris/FR
N.N.

B-0951 10:30
Inferior glenohumeral vertical distance: a novel radiographic marker better suited for detection of rotator cuff tears involving the infraspinatus tendon
M. Alfagih, S. Soni, S. Flacke, Y. Andrabi, D. Elentuck, R. French; Burlington, MA/US

B-0952 10:38
Imaging of avascular necrosis of the humeral head by 3.0 T MRI and its association with rotator cuff tears involving the infraspinatus tendon and subscapularis tendon pathologies
A. Misra, M. Inal, V. Burulday, T. Kultur; Ankara/TR

B-0953 10:46
Reliability of strain elastography in the supraspinatus tendon
K. Braze; Odense M/DK

B-0954 10:54
Evaluation of tendinopathy of the long head of the biceps tendon by strain and shear wave elastography
M.H. Sahan, M. Inal, V. Burulday, T. Kultur; Kirikkale/TR

B-0955 11:02
How, when, why in magnetic resonance arthrography: an international survey by the European Society of Musculoskeletal Radiology
D. Albano, C. Messina, A. Tagliafico, L.M. Sconfienza; Palermo/IT, Milan/IT, Genoa/IT
SS 1014

Quality issues in ultrasound and CT

Moderators:
O.P. Bansal; New Delhi/IN
A. England; Salford/UK

B-0962 11:18
Reduction of contrast agent using virtual monochromic image in haemodynamics aortic phantom
F. Washizuka, T. Kitamura, T. Hatakeyama, H. Nakano; Tokyo/JP

B-0963 10:30
Development and reliability of an ultrasound protocol to evaluate quadriceps muscle mass and diaphragm structure: a pilot study
A. André, J. Pinto2, D. Oliveira2, C. Aguiar2, S. De Francesco2, A. Oliveira2, A. Marques2, P. Martins2; Coimbra/PT, Aveiro/PT

B-0964 10:38
Orbital ultrasound evaluation of the optic nerve sheath diameter
H.I.M.G. Ferraz1, R.A. Santos2; Peso da Régua/PT, Coimbra/PT

B-0965 10:46
Effects of smoking on carotid artery structures and haemodynamics: role of the radiographer in ultrasound assessment

B-0966 10:54
Abdominal and lumbar muscle evaluation by ultrasound
R.A.M. Santos, R. Barreiro; Coimbra/PT

B-0967 11:02
Vastus lateralis stiffness assessed by SSI elastography
R.A. Santos2, P. Armada-da-Silva2; Coimbra/PT, Lisbon/PT

B-0968 11:10
Use of ultrasound for diagnosis of schistosomiasis mansoni
H.M.K. Masha; Nairobi/KE

SS 1003

Myocardial tissue characterisation: mapping, texture analysis and spectral CT

Moderators:
L. Musayeva; Baku/AZ
O. Stukalova; Moscow/RO

B-0971 11:50
Implementation of a multi-phase contrast injection: single-pass acquisition trauma CT protocol
D.J. Biddle, S. Freeman, A. Barker, C. Walker, R. Higgins, S. Upponi; Cambridge/UK

B-0972 11:50
Optimisation of contrast delivery using quantitative and qualitative analysis in a clinical based CTPA setting
C. McKay, S. Maguire, P. Gilligan, C. Walsh, J. Matthews, S. Eustace; Dublin/IE

B-0973 10:30
T1 based myocardial tissue characterisation in healthy volunteers: reference values for novel parameters of tissue dispersion
S. Rueppel, S. Lyschik, M.C. Halfmann, S. Benz, J. Eichstädt, C. Düber, K.-F. Kreitner, T. Emrich, F. Hahn; Mainz/DE

B-0974 10:38
Novel T1 map parameters of tissue heterogeneity are not influenced by age and gender in healthy volunteers
S. Lyschik, S. Rueppel, S. Benz, M.C. Halfmann, J. Eichstädt, C. Düber, K.-F. Kreitner, T. Emrich, F. Hahn; Mainz/DE

B-0975 10:46
Artifacts in myocardial mapping
C. Eilers, J. Eichstädt, K.-H. Schmidt, C. Düber, T. Emrich, K.-F. Kreitner; Mainz/DE

B-0976 10:54
Myocardial T1 and T2 mapping in severe aortic stenosis: novel insights into the pathophysiology of myocardial remodelling
Myocardial tissue characterisation by cardiac magnetic resonance imaging in left ventricular non-compaction: new insights with T1 mapping and extracellular volume quantification

ECV mapping without HCT: comparison between two different synthetic ECV-calculation methods and clinical applicability
L. Bottoni, E. Gavazzi, M. Ravanelli, M. Zanirato, A. Greiser, D. Farina, R. Maroldi, Brescia/IT, Erlangen/DE

Diagnostic potential of texture analysis applied on cardiac magnetic resonance T1 and T2 mapping in patients with biopsy-proven chronic myocarditis
B. Baessler, C. Lücke, K. Klingel, R. Kandolf, G. Schuler, D. Maintz, Tubingen/DE

Texture analysis of myocardial infarction of CT: impact of iterative reconstruction
M. Mannil, J. von Spiczak, A. Mühlematter, A. Thanabalasingam, R. Manka, H. Alkadhi, Zurich/CH

Texture analysis and machine learning for detecting myocardial infarction in non-contrast low-dose CT
M. Mannil, J. von Spiczak, R. Manka, H. Alkadhi, Zurich/CH

Myocardial textural analysis and machine learning for differentiating normal myocardium vs chronic infarct on non-contrast CT scan
A.A. Albweady, S. Raja, S. George, M. Alharibi, K. Aldossari, Gassim/SA, Riyadh/SA, Houston, TX/US

Initial in vivo comparison of a spectral photon counting CT and a spectral dual-layer CT system for non-invasive evaluation of soft-plaque-restenosis in coronary artery stents

Implications of 2-hydroxyglutarate in gliomas with IDH1/2 mutations
L. Wang, Z. Yang, Z. Liu, H. Mao, Shenzhen/CN, Atlanta/US, Nanchang/CN

Magnetic resonance spectroscopy of the placenta: a feasibility study
C.M.J. Beaumont, E.H. Whitby, Sheffield/UK

Imaging glycolytic heterogeneity of HCC in real time using dynamic hyperpolarised magnetic resonance spectroscopy: a personalised medicine approach

The early study of DWI and 1H-MRS in rabbit VX2 transplanted tumours after radiation comparison with pathology changes
Y.-M. Li, D.-D. Lin, Z. Xing, Y. Chuan, X. Xu, Fuzhou/CN

BAT activity in Type I and Type II diabetes mouse models: multimodal imaging study using 7T MRI and intravital microscopy

In vivo tracing of superparamagnetic iron oxide-labelled bone marrow mesenchymal stem cells transplanted for traumatic brain injury by susceptibility weighted imaging
Y. Zhang, Zhengzhou/CN

Molecular imaging heterogeneity study of breast tumours as a new diagnosis parameter

Small animal imaging using a clinical PET/CT system: high throughput imaging enabled by next-generation digital PET
M.V. Knopp, K. Briley-Saebo, M.I. Menendez, A. Siva, K. Binzel, J. Zhang, Columbus, OH/US

Preliminary analysis of ultrasound imaging-based thermometry in ex vivo biological tissues

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Preliminary analysis of ultrasound imaging-based thermometry in ex vivo biological tissues
Scientific Sessions / My Thesis in 3 Minutes

B-0996 10:38
Quantitative assessment of spatial and temporal gadolinium deposition within the deep brain nuclei
G. Marie, P. Požeg, J. Son Forget, J.P. Maeder, R. Meuli; Lausanne/CH

B-0997 10:46
Gadolinium retention in the brain: an MRI relaxometry study comparing linear and macrocyclic types of gadolinium-based agents
Y. Forslin, J. Martola, S. Shams, S. Fredrikson, M. Kristoffersen Wiberg, T. Granberg; Stockholm/SE

B-0998 10:54
Increased signal intensity of dentate nucleus in multiple sclerosis patients with history of higher gadolinium-enhanced MRI scans
H. Naghibi, M. Mohammadzadeh, A. Fallahian, M. Shakiba, P. Sabetrasekh, H. Sorouch; Tehran/IR

B-0999 11:02
USPIO-enhanced MRI study on electroacupuncture alleviating inflammatory response of permanent focal subacute-stage cerebral ischaemia in rats
S. Yang, F. Lu, S. Zhan; Shanghai/CN

B-1000 11:10
MRI perfusion weighted imaging and von Willebrand factor antigen plasmatic levels (VWF:Ag) as predictors of prognosis in grade IV gliomas (GBM)
F.M. Doniselli, G. Marfia, S.E. Navone, L. Guarnaccia, R. Campanella, P. Summers, A. Costa; Milan/IT

B-1001 11:18
3D high-resolution post-contrast imaging at 3T for the delineation of enhancing brain tumours: a comparison of three different techniques
L. Danieli1, D. Distefano1, E. Pravatà1, E. Ventura1, G.C. Riccitelli1, M. Reinert1, A. Kaelin1, A. Cianfoni1,2, E. Pravatà1; 1Lugano/CH, 2Bern/CH

B-1002 11:26
Comparison of arterial spin-labeling and dynamic susceptibility contrast MRI in detecting crossed cerebellar diaschisis in patients after glioma resection
T. Lin, F. Feng, Y. Lv, H. You; Beijing/CN

B-1003 11:34
MR-perfusion characteristics and PET/CT comparison in patients with gliomas after radiotherapy
A.V. Smirnova1, O.V. Lukina2, M. Cherkashin2, N. Plakhotina2, A. Tkachev2, M. Anishkin2, M. Rukhlenko1, St. Petersburg/RU, 2Saint-Petersburg/RU, 3Volgograd/RU

B-1004 11:42
Can unenhanced brain magnetic resonance imaging be used in routine follow-up of meningiomas to avoid gadolinium deposition in the brain?
F. Kural Rahatti, F. Yildirim Donmez, Ç. Kesim, k. Haberal, H. Turnaoglu, A. Agildere; Ankara/TR

B-1005 11:50
Perfusion abnormality in posterior inferior cerebellar artery termination of vertebral artery on arterial spin labelling and dynamic susceptibility contrast perfusion MRI
D. Park, T. Kim; Guri/KR
MY 13 Musculoskeletal

Moderators:
M.S. Posadzy; Poznan/PL
M.F. Reiser; Munich/DE

B-1012 08:30
Spectral detector-computed tomography iodine density thresholds for the detection of vertebral metastases

B-1013 08:34
Combining fractal- and entropy-based bone texture analysis for the prediction of osteoarthritis: data from the multicentre osteoarthritis study (MOST)
Z. Bertalan1, S. Nehrer2, R. Ljuhar1, A. Fahrleitner-Pammer3, D. Ljuhar1, H.-P. Dimai1; Vienna/AT, 2Krems/AT, 3Graz/AT

B-1014 08:38
Delayed gadolinium-enhanced MRI of menisci and cartilage (dGEMRIM/dGEMRIC) in overweight patients with knee osteoarthritis
S. Hangaard1, H. Gudbergsen1, C.L. Daugaard, H. Biliddal1, J.D. Nybing1, V. Casula2, M.T. Nieminen3, C.J. Tiderius1, M. Boesen1, 1Frederiksberg/DK, 2Copenhagen/DK, 3Oulu/FI, 4Lund/SE

B-1015 08:42
Ultrasound of the posterior interosseous nerve in the arcade of Frohse
C. Tulay, S. Aubry, A. Podda, J. Behr; Besancon/FR

B-1016 08:46
Safety and efficiency of treatment of partial supraspinatus tendon tear with injection of PRP and HA
C. Luo1, A. Meli2, V. Incarbone2, N. Casamassima2, L. Callegari2; 1Palermo/IT, 2Varese/IT

B-1017 08:50
Improving the sensitivity of bone mineral density assessment using spectral detector CT
S. van Hedent, K.-H. Su, F. Liang, J.-W. Kuo, D.W. Jordan, B. Eck, P.R. Ros, R. Muzic; Cleveland, OH/US

B-1018 08:54
Virtual bone mineral density imaging with third-generation dual-energy CT for diagnosis of osteoporosis: a preliminary study
L. Wang, G. Shenchu, B. He, J. Chen; Nantong/CN

B-1019 08:58
Quantitative MRI of knee articular cartilage in hyperuricemia
X. Cai, X. Liu; Guangzhou/CN

B-1020 09:02
In vivo quantitative 4D-CT analysis of carpal kinematics with radio-scaphoid and luno-capitate angles during radio-ulnar deviation: feasibility and clinical interest
A. Rauch; Nancy/FR

B-1021 09:06
Detection of osseous metastases using dual-energy CT with material decomposition algorithms: phantom development and preliminary clinical validation
H.-C. Huang1, B.M. Yeh2, R. Srinivasan3, Y. Sun2; 1Taipei City/TW, 2San Francisco, CA/US

B-1022 09:10
High diagnostic accuracy of k10 on dynamic contrast-enhanced MRI perfusion in identifying vertebral malignancy
M. Verma1, S. Sood, B. Singh, M. Thakur, S. Sharma, S. Sharma; Shimla/IN

B-1023 09:14
Complementary metal artefact reduction of total hip replacements by monoenergetic and O-MAR reconstructions in spectral-detector computed tomography

B-1024 09:18
Ultra-high field 7 Tesla MRI and biomechanical investigation of vertebral bone microarchitecture
D. Guenoun1, A. Foure, M. Pithioux, S. Guis, T. Le Corroller, V. Pauly, P. Chabrand, P. Champsaur, D. Bendahan; Marseille/FR

B-1025 09:22
Postoperative evaluation of a arthroscopic coracoid bone block surgery with CT-Scan.
O. Andreani1, P. Gendre2, C. Dekimpe1, A. Rudel1, N. Amoretti1, P. Boileau; Nice/FR, 2Cagnes sur Mer/FR

B-1026 09:26
Volumetric bone mineral density assessment of the lumbar spine using a novel phantomless dual-energy CT postprocessing algorithm in comparison to dual x-ray absorptiometry
C. Booz1, P.C. Hofmann2, M. Sedimair2, T. Flohr1, B. Schmidt1, S.S. Martin1, D. Leitner1, T.J. Vogl1, J.L. Wichmann1; 1Frankfurt a. Main/DE, 2Forchheim/DE

B-1027 09:30
Learning curve of an ultrasound-guided percutaneous release of carpal tunnel: a cadaveric study
O. Andreani1, C. Dekimpe1, C.-P. Raffaelli1, N. Amoretti1; Nice/FR

B-1028 09:34
The accuracy of ultrasound with and without sonoelastography in the diagnosis of partial-thickness rotator cuff tears with MDCT arthrography and arthroscopic verification
V.E. Gazhonova1, M. Emelianenko, M. Onishchenko; Moscow/RU

B-1029 09:38
Iterative reconstruction improves image quality in virtual non-calcium images of the spine for the detection of bone marrow edema in patients with vertebral compression fractures
N. Engelhard1, K.-G. Hermann1, M. Fuchs2, M. Pumberger1, M. Putzier1, J. Mews2, B. Hamm1, T. Diekhoff1; Berlin/DE, 2Neuss/DE

B-1030 09:42
T2 relaxometry of cartilage and meniscus and semi-quantitative assessment of the knee using DESS: a 5-minute MRI scan
S. Eijgenraam1, A. Chaudhari1, G. Gold1, M. Reijman1, E. Oei1, B. Hargreaves2; 1Rotterdam/NL, 2Stanford, CA/US

B-1031 09:46
Correlation of body mass index with paraspinal muscle fatty degeneration in non-diabetic patients with lumbar spinal canal stenosis: results from 685 patients
S. Winklhofer1, J. Burgstaller1, U. Held1, T. Finkenstaedt1, F. Del Grandel2, G. Andreiskel1, J. Steurer1; 1Nicolase, 2Bolog4; 1Nancy/FR, 2Riefheim/DE, 3Münsterlingen/CH, 4Munich/DE

MSK 14 Musculoskeletal

Moderators:
K.R. Laukamp; Munich/DE
K. Winward; Poznan/PL
M.F. Reiser; Munich/DE

B-1032 09:50
Delayed gadolinium-enhanced magnetic resonance imaging (dGEMRIC) of early osteoarthritis
S. Wahlers1, K. Winward1, N. Kammert1, U. Husser1, J. Komenda1, J. Bley1, A. Schmitz1, J. Hinterwürden1, 1Berlin/DE

B-1033 09:54
A comparative study of dynamic contrast-enhanced MRI and histology in OA: analysis of cartilage fissures
S. Ruppin1, M. Auer1, G. Krämer1, J. Feldmeier1, N. Kammert1, 1Berlin/DE

B-1034 09:58
Quantitative ultrasound in osteoarthritis
T. Sauerbier1, M. Esparza1, 1Berlin/DE

B-1035 10:02
High resolution MRI of ligament laxity in chronic rotator cuff tears
C. Bickel1, C. Kiesling1, 1Zürich/CH

B-1036 10:06
Comparative study of spectral and dual-energy CT in the assessment of vertebral metastases
O. Andreani1, P. Gendre2, C. Dekimpe1, A. Rudel, N. Amoretti1, P. Boileau1; Nice/FR, 2Cagnes sur Mer/FR
**Neurodegeneration/dementia**

**Neurodegeneration/dementia**

**Moderators:**
- E. Gangemi, Rome/IT
- M. Vasco Aragão; Recife, PE/BR

**K-19 10:30**

**Keynote lecture**
- M. Vasco Aragão; Recife, PE/BR

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**B-1032 10:39**

**Diffusion tensor imaging in idiopathic normal-pressure hydrocephalus:**
- clinical and CSF flowmetry correlations
  - I. Grazzini, G. Cuntoe, F. Redi, C. Caccialupi, K. Sammartano, C. Cicchitta; Arezzo/IT

**B-1033 10:47**

**A survey for neuroimaging harmonization needs for large-scale neurodegenerative biomarker studies**
- J. Jovicich, F. Barkhof, C. Babiloni, K. Herholz, B.N. van Berckel, C. Müller, G. Frisoni, 3; SANED JPND Working Group
  - Amsterdam/NL, London/UK, Rome/IT, Manchester/UK
  - Hamburg/DE, Brescia/IT, Geneva/CH

**B-1034 10:55**

**Subcortical nuclei in Alzheimer’s disease: a volumetric and diffusion kurtosis imaging study**
- M.-L. Wang, W. Li; Shanghai/CH

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**B-1035 11:03**

**Structural and functional changes in resting brain activity in neurodegeneration according to VBM and rsfMRI comparison**
- E. Seliverstov, Y. Seliverstov, M. Kotenko, R. Konovalov, A.N. Sergeeva, S. Ilarioshkin, S. Morozova; Moscow/RU

**B-1036 11:11**

**Determining leader nodes in dementia networks**
- Y. Yazicioglu, K. Pinkert, A. Tahmassebi, A. Meyer-Baese; Boston, MA/US, Vienna/AT, Tallahassee, FL/US, Maastricht/NL

**B-1037 11:19**

**Differential functional connectivity changes of subregions of the dorsal premotor cortex in healthy ageing**
- B. Sigl, C. Jockwitz, S. Eickhoff, F. Hofstaedter, C. Rubbert; Munich/DE

**B-1038 11:27**

**Automatic quantification of enlarged perivascular spaces on brain MRI**

**B-1039 11:35**

**Dementia imaging in Europe: results from the European Society for Neuroradiology (ESNR) Diagnostic Subcommittee Survey**
- M.W. Vernooij, M. De Bruijne; Rotterdam/NL, Delft/NL, Copenhagen/DK

**B-1040 11:43**

**Sulcal-based morphometry for the diagnosis of normal-pressure hydrocephalus in patients with ventriculomegaly**
- G. Kuchinski, C. Jacob, M. Barconci, J. Dumont, C. Delmaire, L. Defevre, J.-P. Pruvo, X. Leclerc; Lille/FR

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**Vascular**

**Peripheral arteries/arteritis**

**Peripheral arteries/arteritis**

**Moderators:**
- E. Dosa; Budapest/HU
- C. Herzog; Munich/DE

**B-1042 10:30**

**Preliminary results of DWI sequences in detecting arterial wall inflammation in patients with giant cell arteritis**
- A. Napolitano, G. Ironi, E. Tombetti, E. Incerti, S. Leoni, M. Picchio, L. Gianoli, L. Dagna, F. De Cobelli; Milan/IT

**B-1043 10:38**

**Ultrasound biomicroscopy in the diagnosis of giant cell arteritis**
- C.-P. Raffaelli, A. Hombreux, N. Tieulie, S. Lassalle, N. Azulay, P. Giordana; Nice/FR

**B-1044 10:46**

**Dynamic 4D CT angiography (DCTA) of the lower extremities with a 256-slice CT**
- N. Buls, Y. De Brucker, H. Devos, A. Aarden, G. Van Gompel, P.T. Boonen, K. Nieboer, J. de Mey; Brussels/BE, Emmel/BE, Jette/BE

**B-1045 10:54**

**Establishing a new protocol for aortofemoral CT angiography using the lowest possible contrast contrast with the advent of faster scanners**
- A. Hatem, B.K. Hazaimeh, A. Alhyari, S. Salman, A. Al-Omari; Amman/LB

**B-1046 11:02**

**Combined assessment of peripheral artery disease by MRI-based vascular calcification visualisation and quiescent interval single-shot (QISS) MRA**

**B-1047 11:10**

**Quiescent-interval single-shot (QISS) MRA for interventional procedure planning: a feasibility study in patients with peripheral artery disease**

**B-1048 11:18**

**Accuracy of diameter measurement of vascular model: comparison of virtual monochromatic imaging in dual-energy CT with conventional 120-kVp scan**

**B-1049 11:26**

**Modified calcium subtraction in dual-energy CT angiography of the lower extremity runoff: impact on diagnostic accuracy for stenosis detection**
B-1050 11:34
Quantification of blood velocity from time-resolved CT angiography on a 256-slice CT
PT. Boonen1, N. Buls1, J. Vandemeulebroucke2, G. Van Gompel3, Y. De Brucker1, D. Aerden1, J. De Mey1; 1Jette/BE, 2Etterbeek/BE

B-1051 11:42
Resveratrol treatment does not reduce vascular inflammation in male subjects at risk of developing type 2 diabetes: an [18F-FDG PET/CT study
E. Boswik1, M. de Ligt1, M.F. Habets1, W. van Marken Lichtenbelt1, J.E. Wildberger1, F. Mottaghy1, F. Schrauwen1, J. Bucerus1, Maastricht/DE

B-1052 11:50
Automated tube potential selection of the lower extremity runoff: comparison to fixed kV with mAs modulation
M. Beeres1, K. Juhee1, A.M. Bucher1, C. Frelesien1, M.H. Albrecht1, J.L. Wichmann1, T.J. Vogl1, T. Gruber-Rouh1, Frankfurt a. Main/DE

B-1053 10:50
Treatment of non resectable HCC: SIRT vs TACE liver toxicity comparison with MELD score
J. Delicque1, C. Allimant1, C. Cassinotto1, L. Piron1, L. Escal1, A.-D. Ilonca1, E. Assenat1, B. Guiu1, Montpellier/FR

B-1054 10:38
TACE of HCC using mitomycin and lipiodol with or without DSM for HCC: comparative study
T. Gruber-Rouh1, T.J. Vogl1, Frankfurt a. Main/DE

B-1055 10:46
Safety and efficacy of transarterial chemoembolization using very small drug-eluting beads for advanced stage hepatocellular carcinoma
A.K. Abdel Aal1, S. Tatum1, K. Mahmoud1, S. Moawad1, N. Ertel1, R. Oser1, S. Saddekn1, N.A. Aboueldahab1, A. Gunn2, Birmingham, AL/US, 1 Cairo/EG

B-1056 10:54
Comparing HCC tumour vascualisation on baseline imaging and after Lipiodol cTACE: how do estimations of enhancing tumour volumes differ on contrast-enhanced MR and CT?
W. Lidemann1, F. Colletti1, D. Grisel1, D. Schnapauff1, G. Wiener1, T. Gebauer1, J. Chapiro1, J. Kahn1, Berlin/DE, New Haven, CT/US

B-1057 11:02
Tumour targeting and 3D voxel-based dosimetry to predict tumour response, toxicity and survival after Y-90 resin microsphere radioembolisation in HCC
C. Allimant1, M. Kafrouni1, J. Delicque1, A.-D. Ilonca1, M. Fourcade2, D. Mariano-Goulard2, C. Cassinotto1, L. Piron1, B. Guiu1, Montpellier/FR

B-1058 11:10
Transarterial Radio-embolisation with 131I-Lipiodol for Hepatic metastases: experience intertaily care oncology centre in India
V. Bhargavi1, S. Subbanna1, S.S. Swamy1, Bangalore/IN

B-1059 11:18
Prospective randomised trial: tumour response of colorectal liver metastasis after transarterial chemoembolisation with two different protocols using MRI
T.J. Vogl1, M.C. Langenbach1, R. Hammerstring1, J. Scholz1, T. Gruber-Rouh1, Frankfurt a. Main/DE

B-1060 11:26
Idarubicin-loaded beads for chemoembolisation of HCC: interim analysis of IDASPHERE II (FFCD 1307) multicentre single-arm phase II trial
B. Guiu1, P. Chevalier3, A. Rode1, A. Bouvier1, P.-J. Valette1, C. Cassinotto1, L. Piron1, M. Boulin1; Montpellier/FR, Nice/FR, Lyon/FR, Angers/FR, Dijon/FR

B-1061 11:34
Transradial versus transfemoral access for hepatic chemo-embolisation: intraindividual prospective single-center study
A. Posa1, R. Iezzi1, F. Carchesio1, C.A. Barone1, A. Gasbarrini1, R. Manfredi1, Rome/IT

B-1062 11:42
A comparative study of a new generation robotic angiography system based on patient dose and image quality during transarterial chemoembolisation
T.J. Vogl1, L. Alizadeh1, M.H. Albrecht1, P. Tischendorf1, Frankfurt a. Main/DE

B-1063 11:50
Generation I vs new-generation cone-beam CT, digital subtraction angiography and digital fluoroscopy in patients undergoing TACE: comparison of radiation dose and image quality
T.J. Vogl1, L. Alizadeh1, K. Graef1, N.-E.A. Nour-Eldin1, Frankfurt a. Main/DE

B-1064 10:38
Prediction of minimal extraprostatic extension with MRI: correlation with whole-mount histological sections
S. Pedalino1, E. Appendino1, E. Tabone1, S. Mazzetti1, D. Regge1, F. Russo1, Candidolo1/IT

B-1065 10:46
Added value of MRI tractography of periprostatic nerve plexus to conventional T2-WI in detection of extra-capsular extension of prostatic cancer
A. Cybulski1, M. Catanian1, R. Negrelli1, E. Boninsegna1, S. Brancato1, A. Tafuri1, G. Zamboni1, S. Siracusano1, R. Pozzi1, Verona/IT

B-1066 10:54
How to predict anterolateral extracapsular tumour extension in patients with prostate cancer
H. Ahn1, S.I. Hwang1, H.J. Lee1, Seongnam/KR

SS 1407
Prostate cancer staging and active surveillance
Moderators:
F. Cornud1, Paris/FR
M. de Rooij1, Nijmegen/NL

B-1070 10:30
To evaluate the role of 68Ga-PSMA PET-CT in patients with newly diagnosed high-risk prostate cancer
S.M. Shaikh1, Hyderabad/IN

B-1064 10:38
Prediction of minimal extraprostatic extension with MRI: correlation with whole-mount histological sections
S. Pedalino1, E. Appendino1, E. Tabone1, S. Mazzetti1, D. Regge1, F. Russo1, Candidolo1/IT

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B-1066 10:54
How to predict anterolateral extracapsular tumour extension in patients with prostate cancer
H. Ahn1, S.I. Hwang1, H.J. Lee1, Seongnam/KR
B-1067 11:02
T-staging of prostate cancer: prevalence and predictive value of frequently used signs of extracapsular extension on prostate MRI
F. Pesapane, C. Standaert, P. De Visschere, G. Vileirs; Ghent/BE

B-1068 11:10
Development of an extraprostatic extension imaging score based on multiparametric MRI and histopathology correlations
R. Camara, V. Salmo, M. Pecoraro, M. Del Monte, V. Panebianco, C. Catalano; Rome/IT

B-1069 11:18
Whole-body MRI for bone metastasis detection in prostate cancer: the roles of static field intensity and contrast media in focus
D. Kovacevic, I. Papageorgiou, R.L. Chelaru, S. Winzler, A. Malich; Nordhausen/DE

B-1071 11:26
Multiparametric magnetic-resonance to confirm eligibility to an active surveillance programme for low-risk prostate cancer: intermediate time results of a high-volume centre protocol

B-1072 11:34
Evaluation of MRI parameters for prediction of prostate cancer upgrading in active surveillance
D. Portalez, M. Jaffro; Toulouse/FR

B-1073 11:42
Added value of multiparametric magnetic resonance (mpMR) and transrectal ultrasound-MR fusion biopsy in active surveillance for prostate cancer
F. Ciccarese, B. Corcioni, C. Gaudiano, M. Garattoni, F. Busato, R. Golfieri; Bologna/IT

B-1074 11:50
Impact of upfront risk stratification on the negative predictive value of multiparametric MRI in patients under active surveillance
M. Abihanns, C. Melodelima¹, P.-C. Moldovan, R. Souchon, A. Ruffion¹, M. Colombel¹, S. Crouzet¹, O. Rouviere¹; Lyon/FR, ²Grenoble/FR

SS 1416
Advances in oncologic imaging of the abdomen

Moderators:
T.K. Helmberger; Munich/DE
S. Jovanovic; Ghent/BE

B-1075 10:30
Combined diffusion-weighted MRI with conventional T2 and T1 in-phase/out-of-phase sequences: a short screening protocol for liver metastases
S. De Vuysere¹², V. Vandecaveye¹, R. Dresen¹, ‘Leuven/BE, ²Bonheiden/BE

B-1076 10:38
CT attenuation of liver metastases of colorectal cancer is a prognostic factor of overall survival
M.F. Froelich, V. Heinemann, W.H. Sommer, J. Holch, J. Ricke, D. Modest, F.O. Hofmann; Munich/DE

B-1077 10:46
Predicting the response of colorectal cancer liver metastases (CRCLM) to preoperative chemotherapy using gadoxetic acid-enhanced MRI
N.V.V.P. Costa¹, N. Basti¹, S. Potter-Lang², Z. Guengoern³, Y. Bican³, A. Ba-Ssalamah³; ¹Lisbon/PT, ²Vienna/AT

B-1078 10:54
MRI-based treatment response assessment for liver metastasis stereotactic radiotherapy

B-1079 11:02
Multi-parametric MRI assessment of acute response to stereotactic body radiation therapy in patients with hepatocellular carcinoma or non-small cell lung cancer
X. Yang, E. Miller, P. Subramanian, T.M. Williams, M.V. Knopp; Columbus, OH/US

B-1080 11:10
Impact of the MRI sequence and observer on the gross tumour volume (GTV) in patients with oesophageal and gastro-oesophageal junction (GOJ) cancer

B-1081 11:18
Comparison of 4'-[methyl-11C] thiothymidine (4DST) PET/CT and FDG PET/CT for predicting response to neoadjuvant therapy in patients with oesophageal cancer
M. Hacki³, R. Minamimoto¹, K. Yamada¹, K. Yokoyama¹, J. Toyohara²; ¹Shinjyuku-ku, Tokyo/JP, ²Itabashi-ku, Tokyo/JP

B-1082 11:26
Efficiency of perfusion CT in pancreatic mass characterisation
S. Aslan, M. Nural, I. Camlidag, M. Danaci; Samsun/TR

B-1083 11:34
Pancreatic ductal adenocarcinoma: association of RECIST1.1 and Choi criteria with survival data and clinical outcome
K. Kouvelakis², K. Young², K. Kouvelakis², D.-M. Koh³, V. Calamai³, N. Starling⁴, M.A. Ball⁴, Ferrara/IT, ²London/UK

B-1084 11:42
Virtual touch quantification technology in differentiation between benign and malignant solid small pancreatic tumors: initial results
X. Dong, F. Mao, J. Cao, P. Fan, W. Wang; Shanghai/CN

B-1085 11:50
Dedicated DW-MR imaging as an accurate selection tool for hyperthermic intraperitoneal chemotherapy (HIPEC) in patients with peritoneal carcinomatosis (PC) from colorectal origin
B-1086 10:30
Role of one-pass breast lesion excision system in complete excision of high-risk breast lesions expressed as clusters of microcalcifications
A. Christou, V. Koutoulidis, D. Kouloucheri, K. Zografos, G. Zografos, Doncaster/UK, Athens/GR

B-1087 10:38
Prognostic characteristics of B3 lesions detected by mammographic screening programmes in the Veneto region
I. Brillì, E. Tosí, M. Zorzi, A. Rizzo, C. Fedato, E. Orvieto, M. Lo Mele, M. Baracco, A. Fiore, Padua/IT, Treviso/IT, Dorsoduro/IT

B-1088 10:46
A prospective study on uncertain biological potential lesion (B3) overtreatment in tomosynthesis breast screening: role of tomosynthesis-guided biopsy (DBT-VAB)
G. Romanucci, S. Brunelli, A. Caneva, S.A. Montemezzi, F. Caumo, Verona/IT, San Bonifacio/IT, Padua/IT

B-1089 10:54
Radial scars detected at screening mammography: is surgical excision always indicated?

B-1090 11:02
Atypical ductal hyperplasia: our experience in the management and long-term clinical follow-up in 71 patients
L. Nicosia, A. Latronico, A. Faggian, C. Cannataci, S. Penco, E. Cassano, Milan/IT, Acerra/IT, Msida/MT

B-1091 11:10
Intraductal papilloma without atypia in breast biopsies: rate of upgrades to carcinoma at excision and radiological features predictive of an upgrade

B-1092 11:18
Imaging findings of papillary lesions of the breast with histopathologic correlation: a five-year study from Instituto Nacional de Ciencias Médicas y Nutrición “Salvador Zubirán”
D. Lara Núñez, P. González Balboa, M. Chapa Ibargüengoitia, R.E. Fuentes Corona, F. Candanedo González, M. Licano Zubiate, K.P. Castro German, Mexico/MX

B-1093 11:26
Probably benign findings (Bi-RADS 3) at breast MRI: frequency and malignancy rate

B-1094 11:34
Optoacoustic imaging increases the sensitivity of mammography and specificity of US: implications for practice

B-1095 11:42
Phyllodes tumours of breast: histogram analysis of the apparent diffusion coefficient for assessment of tumour grade
W. Tang, Y. Zhang, J. Cheng; Zhengzhou/CN

B-1096 11:50
Variations in BI-RADS mammographic density classification between radiologists at three breast centres
T. Hovida, A.S. Holen, H. Bjørndal, S. Sebuødegård, S. Hofvind, Drammen/NO, Oslo/NO

B-1097 10:30
Preliminary clinical application of high-resolution MRI of the optic nerve using a small loop coil combined with head coil
Q. Dai, Z. Yang, G. Hong, L. Rao, P. Geng; Shenzhen/CN, Guangzhou/CN

B-1098 10:38
Selection of coil for high-resolution MRI of the optic nerve
Q. Dai, Z. Yang, G. Hong, L. Rao, P. Geng; Shenzhen/CN, Guangzhou/CN

B-1099 10:46
The impact of trigeminal nerve atrophy and vascular compression on outcomes of trigeminal neuralgia after stereotactic radiosurgery

B-1100 10:54
Measurement of normal optic nerve sheath diameter and nerve diameter on high resolution MRI
Q. Dai, Z. Yang; Shenzhen/CN, Guangzhou/CN

B-1101 11:02
Diagnostic efficiency of ultrasonography in case of peripheral nerve traumatic injuries
E. Zhurbin, A. Gayvoronskiy, I. Zheleznyak, V. Dekan; St. Petersburg/RU

B-1102 11:10
Opportunities for the combined use of ultrasonography and neuromonitoring during the intra-operative phase of ultrasound guidance for the surgical treatment of radial nerve injury
V. Dekan, E. Zhurbin, A. Grishchenkov; St. Petersburg/RU

B-1103 11:18
Preliminary application study of optic nerve DTI in non-neoplastic lesions
Q. Dai, Z. Yang, G. Hong, L. Rao; Shenzhen/CN, Guangzhou/CN

B-1104 11:26
High-resolution MRI findings of the normal optic nerve using a small loop coil combined with head coil
Q. Dai, Z. Yang, L. Rao, G. Hong, P. Geng; Shenzhen/CN, Guangzhou/CN
### Breast

#### SS 1402b

**DWI of the breast**

*Moderators:*
P.A.T. Baltzer; Vienna/AT
I. Thomassin-Nagagara; Paris/FR

- **B-1105 11:34**
  Automated three-dimensional detection of dural ectasia in Marfan syndrome by means of isotropic MRI and shape-based machine learning
  F. Rengier1, O. Naas1, T. Norajitra1, M. Messerli2, K. Kallenbach1, M. Karck1, K. Maier-Hein1, H.-U. Kauczor1; Heidelberg/DE, 2Zurich/CH

- **B-1106 11:42**
  The role of diffusion tensor imaging parameters in characterisation and differentiation of the spinal cord tumours
  B. Szemplinski1, E. Ma1, W. Szeszczowski2, M. Prokopienko1, A. Cieszanowski1, A. Marchel1, O. Rowinski1; Warszawa/PL, 2Warsaw/PL

- **B-1107 11:50**
  Three years of experience with magnetic resonance spectroscopy in spinal cord
  P. Wawrzyniak, A. Hebda, B. Bobek-Billewicz; Gliwice/PL

#### B-1108 10:30

**Apparent diffusion coefficient at 3T MRI in differentiating benign and malignant breast lesions: a quantitative analysis**

P. Gupta, M. Popli, K. Diwan; New Delhi/IN

#### B-1109 10:38

**High reproducibility of breast lesion ADC values based on fixed size and shape region of interest in diffusion-weighted imaging**

M. Wielema, M. Dorrius, E. Langius, G. De Bock, M. Oudkerk, P. Sijens; Groningen/NL

#### B-1110 10:46

**A comparative study of the DKI model and the traditional DWI model in the diagnosis of breast cancer**

T. Li, K. Li, Y. Xiong; Shanghai/CN

#### B-1111 10:54

**Preoperative diagnostic value of DKI combined with quantitative dynamic contrast-enhanced MRI in breast lesions**

T. Li, Y. Xiong, K. Li; Shanghai/CN

#### B-1112 11:02

**Non-mass-like enhancement in MR imaging of the breast: lesion characterisation with morphologic criteria and diffusion-weighted imaging**

W. Buchberger, K. Gautsch, W. Oberaigner; Innsbruck/AT

#### B-1113 11:10

**DTI of the breast: is it worth the hassle?**

W.R.A. Abdel Hamid; Cairo/EG

#### B-1114 11:18

**Comparison of FOCUS (field-of-view optimised and constrained undistorted single-shot)-DWI with standard DWI-MRI and DCE-MRI in the qualitative assessment of breast lesions**

L. Vassallo, V. Doronizio, G. Cappello, E. Tabone, D. Regge, L. Martinich; Candriolo/IT

### Musculoskeletal

#### SS 1410

**Advanced imaging techniques, algorithms and measurements**

*Moderators:*
M. Froeling; Utrecht/NL
J. Hodler; Zurich/CH

- **B-1115 11:26**
  Breast MRI: circularity metrics in mass shape assessment of benign and malignant breast tumours
  M. Nadrijanski, Z. Milosevic; Belgrade/RS

- **B-1116 11:34**
  Background parenchymal enhancement at breast magnetic resonance imaging: association with tumour response to neoadjuvant chemotherapy
  E. Horvath, E.H. Castillo-Balladareg, C. Silva, C. Darrás, M. Uchida, M.A. Pinochet, A. Altamirano, E. Broguetti; C. Galleguillos; Santiago/CL

- **B-1117 11:42**
  Ultra-high field dynamic contrast-enhanced MRI (DCE-MRI) of the breast at 7T with pharmacokinetic (PK) modeling accurately differentiates between benign and malignant breast tumours
  R.E. Ochoa Albiztegui1, J.V. Horvat1, S. Thakur1, B. Bernard-Davila1, S. Trattnig1, T.H. Helbich1, E.A. Morris1, K. Pinker1; New York, NY/US, 2Vienna/AT

- **B-1118 11:50**
  Characterisation of breast lesions by whole lesion texture analysis of high b value diffusion-weighted imaging (DWI)
  A. Christou1, A. Ghiatas2, K. Velou2, D. Priovolos2, H. Bougias2; 1Doncaster/UK, 2Athens/GR, 3Ioannina/GR

#### B-1118 10:50

**Keynote lecture**

C. Weidekamm; Vienna/AT

#### B-1119 10:39

**Reduction of metal artefacts in patients with spinal fusions: metal artefact reduction algorithms and measurements**

N. Grosse Hokamp1,2, N. Abdullayev1, V. Neuhaus1, A. Mpotsaris1, D. Maintz1, J. Dangelmaier, B.J. Schwaiger, A. Gersing, D. Münzel, J. Dangelmaier, P.M. Prodinger, M. Nadrijanski, Z. Milosevic; Belgrade/RS

#### B-1120 10:47

**MR imaging with metal artefact reduction for the differentiation between patients with and without infected total hip arthroplasty**

B.J. Schwaiger, A. Gersing, D. Münzel, J. Dangelmaier, P.M. Prodinger, C. Suren, E.J. Rummeny, K. Wörtler; Munich/DE

#### B-1121 10:55

**Comparison of metal artifact reduction by OMAR, MonoE or combined techniques derived from dual-layer spectral CT**

J. Dangelmaier, B.J. Schwaiger, A.S. Gersing, A. Sauber, I. Riederer, D. Muenzel, A.A. Fingerle, E.J. Rummeny, P.B. Noel; Munich/DE

#### B-1122 11:03

**Bone marrow adiposity assessed by 3T MR-spectroscopy in the hip of women with anorexia nervosa**

S. Badr1, V.M. Pansini1, I. Legroux-Gérot1, J. Vignau1, R. Stefan2, D.C. Karampinos1, C. Chauveau1, B. Cortet1, A. Cotten1; 1Lille/FR, 2Munich/DE, 3Boulogne-sur-Mer/FR
B-1123 11:11
Augmented reality-guided lumbar facet joint injections
C.A. Agten, C. Dennler, A.B. Rosskopf, L. Jaberg, C.W. Pfirrmann, M. Farshad; Zurich/CH

B-1124 11:19
3D MR-based simulation of hip impingement as is accurate as 3D CT-based impingement simulation

B-1125 11:27
Performance of an automated vs manual MR scanner workflow of whole-body MRI

B-1126 11:35
CAM type femoracetabular impingement: correlations between alpha angle vs volumetric measurements and surgical findings

B-1128 11:43
FDG-PET/CT for diagnosis of infection in post-traumatic non-unions
L. Antunovic, M. Catalano, L. Di Mento, E. Malagoli, L. Balzarini, A. Chiti, A. Kirienko, M. Berlusconi, N. Trenti; Rozzano/IT

10:30 - 12:00 Room G
Physics in Medical Imaging

SS 1413
Image quality evaluation and optimisation in CT
Moderators:
I. Hernandez-Giron; Leiden/NL
O. Rampado; Turin/IT

B-1129 10:30
Iterative reconstruction algorithms in computed tomography: is it possible to go beyond Fourier metrics for image quality assessment?
N. Pecorcin, R. Villa, S. Morzenti, C. Spadavecchia, M. Signoriello, D. Ippolito, A. Crespi; Monza/IT

B-1130 10:38
Image quality of conventional images of dual-layer spectral CT: a phantom study

B-1131 10:46
Evaluation of the effect of image noise on CT perfusion measurements using digital perfusion phantoms
S. Skornitzke, H.-U. Kauczor, W. Stiller; Heidelberg/DE

B-1132 10:54
The optimal energy level of virtual monochromatic images from spectral CT for reducing beam-hardening artefacts due to contrast media in the thorax

B-1133 11:02
Sub-millisievert multiphasic acquisitions for coronary CT angiography of congenital coronary anomalies in paediatric patients
J. Le Roy, H. Vernhet Kovacsik, H. Zarqane, M. Vincenti, A. Lacampagne, P. Amedrio; Montpellier/FR

10:30 - 12:00 Room K
Radiography

SS 1414
Radiography education
Moderators:
K. Knapp; Exeter/UK
D. Miletić; Rijeka/HR

B-1140 10:30
Development of a radiological anatomy free software as a teaching tool
M.V.L. Oliveira, P. Geambastiani, G.A. Lopez, M. Cambuí; Salvador/BR

B-1141 10:38
Pregnancy and radiation: video as a tool for health professionals communicating knowledge and risks
A.F. Reitan, H.M. Olerud, A. Borthne; Oslo/NO, Kongberg/NO, Larssenkrig/NO

B-1142 10:46
Application of the cognitive load theory in simulation experiences to stimulate critical thinking in 2nd year radiography students
A. Louw; University of Johannesburg/ZA

B-1143 10:54
Enhancing radiographer threshold CT competencies through simulation
M. Hardy, M.A. Harris; Bradford/UK, Wakefield/UK

B-1134 11:10
A preliminary study about the robustness of quantitative CT features of pancreatic NEN: inter-observer variability assessment in delineation of lesions contours on CT images
G. Benedetti, M. Panzeri, M. Mori, C. Sini, M. Barbera, S. Partelli, M. Falconi, C. Fiorino, F. De Cobelli; Milan/IT, Potenza/IT

B-1135 11:18
Comparison of clinical and phantom image quality for low-contrast liver lesions in a prospective multicentre dose optimisation protocol
H. Brat, B. Racine, S. Montandon, S. Behzad Imansard, B. Rizk, D. Fourrier; Sion/CH, Lausanne/CH, Gland/CH, Epalinges/CH, Villars-sur-Glâne/CH

B-1136 11:26
Endoleak detection with ultra-low radiation exposure CT based on sparse sampling and reduced tube current

B-1137 11:34
Optimisation of abdominal CT examinations across different scanners in one hospital using a new liver phantom

B-1138 11:42
Feasibility of whole-body low-dose CT using spectral shaping for detection of osteolytic lesion in patients with multiple myeloma
S. Suntharalingam, C. Mikat, A. Wetter, N. Guberina, A. Salem, P. Heil, M. Forsting, K. Nassenstein; Essen/DE

B-1139 11:50
A procedure towards optimised prenatal CT scan protocols for low dose imaging of suspected skeletal dysplasia
I. Indesteege, L. Cockmartin, J. Binst, W. Coudyzer, H. Bosmans, M. Aertsen; Leuven/BE

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SPEAKERSUPPORTED BY
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<tr>
<td>B-1144</td>
<td>11:02</td>
<td>A systematic methodology for the development and validation of inventories of biomedical imaging physics learning outcomes for radiography and radiology specialties</td>
<td>J. Castillo, C. Caruana, A. Mizzi, P.S. Morgan, C. Westbrook; San Gwann/MT, Mt. Sinai/MT, Attard/MT, Nottingham/UK, Cambridge/UK</td>
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| B-1145      | 11:10 | Periodic refresher course for the radiographers of multimodal radiology department: the role of IT technologies | A. Fedorov, M. Cherkashin, St. Petersburg/RU  
A. Henner, E. Metsälä, N. Richli Meystre, C. Sá dos Reis, B. Strom, J. Pires Jorge, T. Kukkes; Oulu/Fl, Helsinki/Fl, Lausanne/CH, Bergen/NO, Tartu/EE |
| B-1146      | 11:18 | Eyes on the future of mammography education and training: what needs to be focused to match the demands of the clinical practice? | A. Henner, E. Metsälä, N. Richli Meystre, C. Sá dos Reis, B. Strom, J. Pires Jorge, T. Kukkes; Oulu/Fl, Helsinki/Fl, Lausanne/CH, Bergen/NO, Tartu/EE |
| B-1147      | 11:26 | Comparison of curricula, clinical experiences and attributes of radiography programmes delivered by four European educational institutions | C.S. Reis, S. Mæhle, J.A. Pires Jorge, H. York, L. Flaction, S. Johansen; Perth/AU, Oslo/NO, Lausanne/CH, Herts/UK |
| B-1148      | 11:34 | The development of a CAD tool employing TELTA, designed to support the training of radiographers in chest pattern recognition | S. Deletrive, A. Neil, L. Rainford, H.A. Lawrence; Johannesburg/ZA, Dublin/IE |
| B-1150      | 11:50 | The use of moulage to prepare first year diagnostic radiography students for the sight of open wounds: initial findings of a doctoral pilot study | N. Shiner, Derby/UK |
|             | 10:30 - 12:00 | Room M 1                                                                 |                                                                                          |

**Cardiac**

**SS 1403**

**Myocardial MRI: perfusion, tissue tracking and fibrosis**

**Moderators:**
- F. Secchi, Milan/IT
- E.J.R. van Beek, Edinburgh/UK

**K-21 10:30**

**Keynote lecture**
- R. Vliegenthart, Groningen/NL

**B-1151 10:39**

**Impact of local native T1 times on pixel-wise quantification of myocardial blood flow**
- C. Kräuter, U. Reiter, C. Reiter, A. Schmidt, M. Fuchsjäger, R. Stollerberger, G. Reiter; Graz/AT

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<td>B-1152</td>
<td>10:47</td>
<td>Cardiac magnetic resonance T1 reactivity in coronary artery disease</td>
<td>M. van Assen, R. van Dijk, D. Kuijpers, R. Vliegenthart, M. Oudkerk, Groningen/NL</td>
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<tr>
<td>B-1153</td>
<td>10:55</td>
<td>Myocardial microvascular dysfunction in patients with end-stage renal disease: assessment with 3.0T cardiac magnetic resonance</td>
<td>R. Xu, H. Xu, Z. Yang, Y. Guo; Chengdu/CN</td>
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<td>B-1154</td>
<td>11:03</td>
<td>Impaired segmental myocardial microvascular dysfunction in chronic kidney diseases patients: assessed by cardiac magnetic resonance first-pass perfusion imaging</td>
<td>H. Xu, Z. Yang, Y. Guo, W. Peng, W. Peng; Chengdu/CN</td>
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<td>B-1155</td>
<td>11:11</td>
<td>Semi-quantitative and quantitative magnetic resonance perfusion analysis: a meta-analysis</td>
<td>R. van Dijk, M. van Assen, R. Vliegenthart, G. de Bock, P. van der Harst, M. Oudkerk, Groningen/NL, Charleston, SC/US</td>
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<td>B-1159</td>
<td>11:43</td>
<td>Taking CMR strain into the next dimension</td>
<td>S. Benz, M.C. Halfmann, J. Eichstädt, A. Lollert, C. Düber, K.-F. Kreitner, T. Emrich, Mainz/DE</td>
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<td>B-1160</td>
<td>11:51</td>
<td>Age and sex dependency of myocardial strain in CMR: an urgent need to standardise</td>
<td>M.C. Halfmann, S. Benz, J. Eichstädt, A. Lollert, C. Düber, K.-F. Kreitner, T. Emrich, Mainz/DE</td>
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<td>10:30 - 12:00</td>
<td>Room M 2</td>
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**Paediatric**

**SS 1412**

**Foetal and neonatal imaging**

**Moderators:**
- F.E. Avni, Lille/FR
- D. Piotrowska-Kownacka, Warsaw/PL

**K-22 10:30**

**Keynote lecture**
- D. Prayer, Vienna/AT
**B-1161 10:39**
Establishing age-specific reference values of lung volume in preterm born infants using MR-based volumetry

**B-1162 10:47**
Towards an elastographic atlas of the neonatal brain
E.F. Garcés Iñigo, L. Marti-Bonmatí, R. Llorens, M. Vento Torres; Valencia/ES

**B-1163 10:55**
Respiratory distress syndrome in neonates-comparison between lung ultrasound and chest x-ray
I. Sefic-Pasic, A. Đžanovic, M. Bukvic, S. Terzic, M. Agovic, S. Vegar-Zubovic; Sarajevo/BA

**B-1164 11:03**
The role of lung ultrasound in the differential diagnosis of respiratory distress syndrome and transient tachypnoea in preterm and newborn infants
M. Mughetti, G. Gardelli, E. Giampalma, M. Zompatori; 1

**B-1165 11:11**
Italian guidelines for diagnostic exposure in neonatal intensive care units
A. del Vecchio, S. Salerno, M. Barbagallo, M. Campoleoni, V. Cannata, G. Chirico, C. Granata, A. Loria, A. Magistrelli; 1
Bologna/IT

**B-1166 11:19**
Magnetic resonance imaging of congenital lung lesions
C. Axamopoulou, J. Geiger, P. Grehten, R. Gnannt, P. Bode; 1
Munich/DE

**B-1167 11:27**
The meconium sign in foetal MRI performed for the diagnosis of diaphragmatic hernia
C. Sofia, M. Tropea, L. Di Grazia, P. Spillare, N. Boscolo Bariga, M. Marino, A. Tregnaghi; 1
Venice/IT, 2Messina/IT

**B-1168 11:35**
Fetal-MRI based segmentation of the diaphragm in fetuses with congenital diaphragmatic hernia: a retrospective pilot study

**B-1169 11:43**
Post-mortem magnetic resonance imaging appearances of foeticide in perinatal deaths
S.C. Shelmerdine, M. Hickson, N.J. Sebire, O.J. Arthurs; London/UK

**B-1170 11:51**
High-resolution isotropic diffusion-weighted imaging in neonatal death investigation
S.C. Shelmerdine, A. Mcdowell, D. Carmichael, O.J. Arthurs; London/UK

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**B-1171 10:39**
Orthotopic lung cancer: molecular imaging-monitored intratumoral radiofrequency heat-enhanced HSV-TK gene therapy
Q. Wang, F. Zhang, F. Xiong, Y. Jin, J. Song, M. Chen, J. Hu, J. Ji, X. Yang; 1Seattle, WA/US, 2Lishui/CN

**B-1172 10:47**
Radiofrequency hyperthermia-enhanced intratumoral herpes simplex virus-thymidine kinase (HSV-TK) gene therapy of ovarian cancer: monitored by ultrasound and optical imaging
Y. Li, F. Zhang, S. Zhao, G. Jin, L. Zhao, Y. Zhou, P. Li, X. Yang; 1Guiyang/CN, 2Seattle, WA/US, 3Shanghai/CN, 4Wenzhou/CN

**B-1173 10:55**
In vivo tracking of the tropism of mesenchymal stem cells to malignant gliomas using reporter gene-based MR imaging
M. Cao; 1

**B-1174 11:03**
Tumour microenvironment-responsive intelligent nanocomposites for efficient theranostics of glioma
H. Liu, W. Zhang; Chongqing/CN

**B-1175 11:11**
Fluorescence molecular imaging of infection and inflammation utilizing a novel probe specific for myeloperoxidase
B. Pulli, C. Wang, G.R. Wojtkiewicz, J. Chen; Boston, MA/US

**B-1176 11:19**
Integrin-targeted multispectral optoacoustic tomography with MRI correlation for monitoring a BRAF/MEK inhibitor combination therapy in a murine model of human melanoma
P.M. Kazmierczak, N.C. Burton, G. Keinrath, H. Hirner-Eppeneder, M. Schneider, R.S. Eschbach, M.F. Reiser, J. Ricke, C.C. Cyran; 1Munich/DE

**B-1177 11:25**
Molecular MR imaging of myeloperoxidase reveals a new myeloid cell treatment effect of interferon-beta in experimental multiple sclerosis
B. Pulli, R. Forghani, C. Wang, G.R. Wojtkiewicz, J. Chen; 1Boston, MA/US, 2Montreal, QC/CA

**B-1178 11:35**
Naluf, for spectral CT in the diagnosis of osteoscarcoma
Y. Jin, L. Gao, F. Han, Y. Lv, J. Zhang; Shanghai/CN

**B-1179 11:43**
Ultrasound molecular imaging of breast cancer in mcf-7 orthotopic mice model using a novel dual-targeted ultrasound contrast agent
L. Xu, F. Li, J. Du; Shanghai/CN

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**B-1180 10:30 - 12:00**
**Room M 3**

**SS 1406**
**Molecular Imaging**

**K-23 10:30**
Keynote lecture
F.A. Gallagher; Cambridge/UK

Moderators:
F.A. Gallagher; Cambridge/UK

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**B-1171 10:39**
Orthotopic lung cancer: molecular imaging-monitored intratumoral radiofrequency heat-enhanced HSV-TK gene therapy
Q. Wang, F. Zhang, F. Xiong, Y. Jin, J. Song, M. Chen, J. Hu, J. Ji, X. Yang; 1Seattle, WA/US, 2Lishui/CN

**B-1172 10:47**
Radiofrequency hyperthermia-enhanced intratumoral herpes simplex virus-thymidine kinase (HSV-TK) gene therapy of ovarian cancer: monitored by ultrasound and optical imaging
Y. Li, F. Zhang, S. Zhao, G. Jin, L. Zhao, Y. Zhou, P. Li, X. Yang; 1Guiyang/CN, 2Seattle, WA/US, 3Shanghai/CN, 4Wenzhou/CN

**B-1173 10:55**
In vivo tracking of the tropism of mesenchymal stem cells to malignant gliomas using reporter gene-based MR imaging
M. Cao; 1

**B-1174 11:03**
Tumour microenvironment-responsive intelligent nanocomposites for efficient theranostics of glioma
H. Liu, W. Zhang; Chongqing/CN

**B-1175 11:11**
Fluorescence molecular imaging of infection and inflammation utilizing a novel probe specific for myeloperoxidase
B. Pulli, C. Wang, G.R. Wojtkiewicz, J. Chen; Boston, MA/US

**B-1176 11:19**
Integrin-targeted multispectral optoacoustic tomography with MRI correlation for monitoring a BRAF/MEK inhibitor combination therapy in a murine model of human melanoma
P.M. Kazmierczak, N.C. Burton, G. Keinrath, H. Hirner-Eppeneder, M. Schneider, R.S. Eschbach, M.F. Reiser, J. Ricke, C.C. Cyran; 1Munich/DE

**B-1177 11:25**
Molecular MR imaging of myeloperoxidase reveals a new myeloid cell treatment effect of interferon-beta in experimental multiple sclerosis
B. Pulli, R. Forghani, C. Wang, G.R. Wojtkiewicz, J. Chen; 1Boston, MA/US, 2Montreal, QC/CA

**B-1178 11:35**
Naluf, for spectral CT in the diagnosis of osteoscarcoma
Y. Jin, L. Gao, F. Han, Y. Lv, J. Zhang; Shanghai/CN

**B-1179 11:43**
Ultrasound molecular imaging of breast cancer in mcf-7 orthotopic mice model using a novel dual-targeted ultrasound contrast agent
L. Xu, F. Li, J. Du; Shanghai/CN
B-1181 10:30
Evaluation of the differentiation in head and neck squamous cell carcinoma with PET/MR
H. Dang, Y. Chen, Z. Jin, H. Xue, B. Hou, F. Li; Beijing/CN

B-1182 10:34
Is it benign or malignant? Assessing isolated lymphadenopathy of the head and neck using textural analysis
S. Chin, A. Kamalasanan, S. Henderson, T.A. Sudarshan; Dundee/UK

B-1183 10:38
Head and neck cancer heterogeneity assessed by CT texture analysis: can it predict the human papilloma virus status?
F. Mungai, M. Pietragalla, L. Bonasera, M. Bartolucci, V. Berti, V. Miele; Florence/IT

B-1184 10:42
Estimation of the irradiation dose of children exposed to CBCT for various dental pathologies
M. Muccu, M. Hedesiu; Cluj-Napoca/RO

B-1185 10:46
Disrupted brain functional network architecture in long-term sensorineural hearing loss patients
X.-M. Xu, G. Teng; Nanjing/China

B-1186 10:50
Elastography shear wave contribution when evaluating thyroid follicular nodules comparing to histological findings
P.H.D. Moraes, M. Chammas, M. Schelini; São Paulo/BR

B-1187 10:54
Metrics and textural features of MRI diffusion to improve classification of common parotid gland tumours
Z. Zhang, J. Cheng; Zhengzhou/China

B-1188 10:58
The diagnostic value of combination of US < MRI preoperative prediction for the extrathyroidal extension of papillary thyroid carcinoma
S. Hu; Zhenjiang/China

B-1189 11:02
Use of the previously proposed (2013) ultrasound total malignancy score (TMS) in the management of thyroid nodules

B-1190 11:06
A multivariate analysis combining DCE and IVIM derived parameters to improve parotid tumours differential diagnosis

B-1191 11:10
Does RFA induce neoplastic change of benign thyroid nodules
S. Ha, J. Shin, J. Baek, D. Song, S. Chung, Y. Choi, J. Lee; Seoul/KR

B-1192 11:14
Prognostic significance of PET-based radiomic image features in locally advanced laryngeal and hypopharyngeal squamous cell carcinoma
H.L. Nelstrop, R. Prestwich, M. Barnfield, G.M. McDermott, A. Scarsbrook; Leeds/UK

B-1193 11:18
Lateralisation effects on functional connectivity of the auditory network in patients with unilateral pulsatile tinnitus as detected by functional MRI
H. Lv, P. Zhao, Z. Liu, X. Liu, H. Ding, S. Gong, Z. Wang; Beijing/China

B-1194 11:22
Shear wave elastography in the evaluation of level VI lymph nodes in papillary thyroid carcinoma
W. Chang, M. Chen; Shanghai/China

B-1195 11:26
Diagnostic value of dual-energy CT imaging for cervical lymph node metastasis in patients with papillary thyroid cancer
M. He; Fuzhou/China

B-1196 11:30
Multiphasic CT vs dynamic contrast-enhanced MRI in the characterisation of parotid gland tumours
N. Tharwat Mohammed El-Sayed; Mansoura/Egypt

B-1197 11:34
An innovative 3D-3D superimposition for assessing anatomical uniqueness of frontal sinuses (FS) through segmentation on CT scans
M. Cellina, D. Gibelli, C. Sforza, G. Oliva; Milan/IT

B-1198 11:38
Diagnostic efficacy of dynamic manoeuvres in computed tomographic evaluation of oral cavity lesions
R.V. Mathilakath; Davangere Karnataka/India

B-1199 11:42
Diagnostic value of contrast-enhanced 3D FLAIR sequence in acute optic neuritis
P. Turlayadechanont, T. Panyaping, P. Cheecharoen, P. Jindahra; Bangkok/Thailand

B-1200 11:46
Radiological diagnosis of desomorphine-associated osteonecrosis
A. Babkova, N.S. Serova, S.P. Pasha, M. Shariya; Moscow/Russia

14:00 - 15:30 Room Z

Interventional Radiology

SS 1509
Liver, lung and thyroid ablation
Moderators:
F. Collettini, Berlin/DE
K.A. Hausegger, Klagenfurt/Austria

B-1201 14:00
Microwave ablation (MWA) in the treatment of colorectal liver metastases (CRLM): an eight-year follow-up study
T.J. Vogl, M. Zitsch, W. Bechstein, J. Trojan; Frankfurt a. Main/Germany

B-1202 14:08
Comparison between microwave and radiofrequency ablation in local control of colorectal liver metastases
**B-1203 14:16**
Risk factor-based prediction algorithm for liver function damage in patients with hepatocellular carcinoma after microwave ablation
Y. Zhou, X. Jing, J. Ding; Tianjin/CN

**B-1204 14:24**
CT texture parameters to evaluate outcome after thermal ablation for colorectal liver metastases
E. Klompenhouwer, R.G.H. Beets-Tan, G.L. Beets, M. Maas; Amsterdam/NL

**B-1205 14:32**
Microwave ablation (MWA) of liver malignancies: outcomes and prognostic factors of local tumour progression (LTP) with a new generation system
P. Marr, P. Diana, F. Ratti, F. Cipriani, M. Salvioni, S. Gusmini, M. Venturini, L. Aldighetti, F. De Cobelli; Milan/IT

**B-1206 14:40**
Microwave ablation therapy of giant hepatic cavernous haemangiomas
S. Cakir, M. Baykara Ulusan, I.N. Mutlu, N. Kilickesmez, C. Turan Bektas, A. Yardimci; Istanbul/TR

**B-1207 14:48**
The effect of oesophageal varices on the outcome of RF ablation in patients with HCC
M. Ahmad; Sohag/EG

**B-1208 14:56**
Feasibility, effectiveness and safety of percutaneous MR-guided ablation of small hepatic malignancies
J. Weiß, R. Hoffmann, E. Kessler, H. Rempp, K. Nikolaou, S. Clasen; Tübingen/DE

**B-1209 15:04**
A new software for immediate volumetric assessment of tumour ablation completeness: could it allow to spare local retreatments?
R. Muglia1, M. Solbiati2, L. Solbiati2, 1Pieve Emanuele/IT, 2Milano/IT, 3Rozzano (Milano)/IT

**B-1210 15:12**
Ablation therapy of non-colorectal cancer lung metastases: retrospective analysis of tumour response post LITT, RFA and MWA
N.-E.A.N. Mohammed, N.N.N. Naguib, T. Gruber-Rouh, I. Burck, T.J. Vogl; Frankfurt a. Main/Main/DE

**B-1211 15:20**
Application of contrast-enhanced ultrasound during microwave ablation for large benign thyroid nodules
W. Wang, F. Mao, J.Y. Cao, P. Fan, Y. Dong; Shanghai/CN

**B-1212 14:09**
Proposal of imaging reporting and data system for cervical lymph node based on computed tomography
K. Lee1, J. Baik2; 1Ras Al Khaimah/AE, 2Busan/KR

**B-1213 14:17**
Diagnostic value of real-time ultrasound image fusion compared to ultrasound-only-guided lymph node fine-needle aspiration in head and neck cancer patients
P. De Koekkoek-Doll, M. van den Brekel, W. Vogel, L. Smit, J.J. van Griethuysen, M. Maas; Amsterdam/NL

**B-1214 14:25**
Computer-aided quantification of intranodal vascularity enhanced the accuracy of ultrasound in distinguishing metastatic and tuberculous cervical lymph nodes
T.-C.M. Ying, S. Cheng, A. Ahuja; Hong Kong/HK

**B-1215 14:33**
Cervical adenopathies: diagnostic efficacy of DCMR
L. Aghaghazvin, F. Hashemi, H. Sharifian, B. Rasuli, N. Yazdani; Tehran/IR

**B-1216 14:41**
Role of RI (resistive index) value as imaging bio marker in differentiating benign and malignant cervical lymphnodes
K.A. Bhagwat; Davangere/IN

**B-1217 14:49**
The use of micro-flow imaging (MFI, Philips Medical Systems) in ultrasound guided tissue sampling of head and neck masses
H. Toghyan, A. Al-Khatib, B. Stenberg, A. McQueen; Newcastle upon Tyne/UK

**B-1218 14:57**
Higher definition head and neck imaging enabled with digital photon counting PET/CT: an intra-individual comparison with conventional photomultiplier PET/CT
C.L. Wright1, K. Binzel1, J. Zhang2, P. Maniawski2, M.V. Knopp1; Columbus, OH/US, 2Cleveland, OH/US

**B-1219 15:05**
Correlation between apparent diffusion coefficient and standardised uptake values in head and neck carcinomas
N. Vorobyov; St. Petersburg/RU

**B-1220 15:13**
MRI-based surveillance for patients with recurrent head and neck cancer after hypofractionated stereotactic (SBRT) re-irradiation
P. M. Plakhota, A. Mikhailov, A.V. Smirnova, D.I. Kuplevatskaya, N. Vorobyov; St. Petersburg/RU

**B-1221 15:21**
Perineural spread of fungal sinonasal infections: CT scan and MRI findings
M. Mohammadzadeh, A. Mohammadzadeh, Z. Haghighi, H. Sharifian, V. Mohammadzadeh, S. Kardiar, Tehran/IR, Rasht/IR

**SS 1508**
Cancer and lymph node imaging
Moderators:
S. Bisdas; London/UK
N.I. Traykova; Plovdiv/BG

**K-24 14:00**
Keynote lecture
S. Connor; London/UK

**B-1213**
Proposal of imaging reporting and data system for cervical lymph node based on computed tomography
K. Lee1, J. Baik2, 1Ras Al Khaimah/AE, 2Busan/KR
B-1223 14:08
3D-printed heart model to guide LAA closure: preliminary results
A.-L. Hachulla, S. Noble, G. Guglielmi, D. Agugliaro, H. Muller, J.-P. Vallee; Geneva/CH

B-1224 14:16
Left atrial appendage closure guided by 3D-printed patient-specific models
M. Guglielmi1, A. Guaricci2, D. Andreini1, M. Conti1, S. Marcon1, F. Auricchio1, M. Pepe3, C. Tondo1, G. Pontone1; 1Milan/IT, 2Bari/IT, 3Pavia/IT

B-1225 14:24
3D printing of aortic root based on cardiac computed tomography and cardiac magnetic resonance imaging: preliminary experience on pre-procedural planning for aortic valve sizing

B-1226 14:32
Fusion of coronary CT angiography and whole-heart 3D CMR myocardial perfusion: building a framework for comprehensive 3D cardiac imaging
J. von Spiczak, R. Manka, A. Gotschy, S. Oebel, H. Alkadhi; Zurich/CH

B-1227 14:40
3D image fusion of whole-heart dynamic cardiac MR perfusion and late gadolinium enhancement: identifying areas for revascularisation
J. von Spiczak, M. Mannil, H. Alkadhi, R. Manka; Zurich/CH

B-1228 14:48
Prognostic impact of myocardial perfusion single-photon-emission computed tomography in patients with major extracardiac findings by computed tomography for attenuation correction
Z.C. Charline; Toulouse/FR

B-1229 14:56
3D analysis and planning of septal reduction therapy based on CT coronary angiography in patient with hypertrophic cardiomyopathy
B. Ratsak; Kiev/UA

B-1230 15:04
Assessment of post-operative pulmonary regurgitation by pre-operative RV and pulmonary artery imaging characteristics in pediatric TOF repaired with trans-valve surgeon
Y. Gao, Z. Yang, K. Shi, K. Diao; Chengdu/CN

B-1231 15:12
Modified myocardial performance index for evaluation of foetal cardiac function in small for gestational age foetuses
A. Taori; Indore/IN

B-1232 15:20
Diagnostic accuracy of non-contrast self-navigated free-breathing MRA in paediatric patients with coronary anomalies using CTA as reference standard
M. Albrecht1, A. Varga-Szemes1, C.N. De Cecco2, T.J. Vogl3, J.W. Nance1, D. De Santis1, M. Eid1, D. Piccin1, U.J. Schoepf1; 1Frankfurt a. Main/DE, 2Charleston, SC/US, 3Rome/IT, 4Lausanne/CH

B-1223 15:08
3D-printed heart model to guide LAA closure: preliminary results
A.-L. Hachulla, S. Noble, G. Guglielmi, D. Agugliaro, H. Muller, J.-P. Vallee; Geneva/CH

B-1224 14:16
Left atrial appendage closure guided by 3D-printed patient-specific models
M. Guglielmi1, A. Guaricci2, D. Andreini1, M. Conti1, S. Marcon1, F. Auricchio1, M. Pepe3, C. Tondo1, G. Pontone1; 1Milan/IT, 2Bari/IT, 3Pavia/IT

B-1225 14:24
3D printing of aortic root based on cardiac computed tomography and cardiac magnetic resonance imaging: preliminary experience on pre-procedural planning for aortic valve sizing

B-1226 14:32
Fusion of coronary CT angiography and whole-heart 3D CMR myocardial perfusion: building a framework for comprehensive 3D cardiac imaging
J. von Spiczak, R. Manka, A. Gotschy, S. Oebel, H. Alkadhi; Zurich/CH

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3D image fusion of whole-heart dynamic cardiac MR perfusion and late gadolinium enhancement: identifying areas for revascularisation
J. von Spiczak, M. Mannil, H. Alkadhi, R. Manka; Zurich/CH

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B-1230 15:04
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Y. Gao, Z. Yang, K. Shi, K. Diao; Chengdu/CN

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A. Taori; Indore/IN

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M. Albrecht1, A. Varga-Szemes1, C.N. De Cecco2, T.J. Vogl3, J.W. Nance1, D. De Santis1, M. Eid1, D. Piccin1, U.J. Schoepf1; 1Frankfurt a. Main/DE, 2Charleston, SC/US, 3Rome/IT, 4Lausanne/CH
Oncologic Imaging

**SS 1516**

**Prostate cancer: what’s next?**

Moderators:
I. Blazic; Belgrade/RS
U.G. Mueller-Lisse; Munich/DE

**B-1244** 14:00

Radiological Wheeler staging system: a valid tool to improve the local staging of organ-confined prostate cancer with mp-MRI

E. Tabone1, V.M. Doronzo1, E. Appendino1, V. Romano1, S. Pedalino1, M. Manfredi2, S. Mazzetti2, D. Regge1, F. Russo1, & Candiolo/IT, 2Orbassano/IT

**B-1246** 14:08

Comparison of prostate cancer detection rates between MR-targeted and saturation TRUS-guided biopsy

V. Romano1, E. Tabone1, E. Appendino1, S. Mazzetti1, V. Giannini1, A. Giacobbe2, G. Muto2, F. Russo1, D. Regge1, Candiolo/IT, Milan/IT

**B-1247** 14:16

Targeted MRI/TRUS fusion-guided biopsy in patients with suspicious pararectal lymph nodes after radical prostatectomy

V. Kapustin, A. Gromov, V. Shirokorad, Y. Subbotin; Moscow/RU

**B-1248** 14:24

Could mpMRI really improve the detection of clinical recurrence of prostate cancer with low PSA value and efficacy of radiation treatment?

F. Kossov, P. Bulychkin, D. Romanov, M.A. Shorikov, E. Tarachkova, V. Panov, S. Tkachev, B. Dolgushin, HAGVERDIYEVA; Moscow/RU

**B-1249** 14:32

11C-Choline PET/CT in the detection of oligometastatic prostate cancer recurrence

D. Pursanova1, I. Aslanidis1, O. Mukhortova1, I. Ekaeva1, T.A. Trifonova1, V.I. Shirokorad, D.A. Roshchin; Moscow/RU

**B-1250** 14:40

Comparisons of imaging biomarkers on simultaneous choline PET and multiparametric MRI between TNM staging in high-risk prostate cancer patients

L.-J. Wang, J.-R. Tseng, Y.-C. Lin; Taoyuan/TW

**B-1251** 14:48

Prospective evaluation of extent of disease in prostate cancer biochemical relapse by [(Ga)PSMA-HBED-CC PET/CT

G. Chong, D. Barahona-Z., A. Balcells, D. Hasson, G. Schiappacasse, A. Labra Weitzler, Santiago de Chile/CL

**B-1252** 14:56

The impact of [(Ga)PSMA I&PET/CT on radiotherapy planning in patients with biochemical cancer relapse after radical prostatectomy in prostate cancer.


**B-1253** 15:04

Clinical utility of [(NaF)PET and [(Ga]-PSMA PET-CT as prognostic marker in patients with metastatic prostate cancer treated with Radium-223

S.S. Medina-Ornelas, F. Garcia-Perez; Mexico City/MX

**B-1254** 15:12

Assessment of response to therapy in bone metastases from prostatic malignancy beyond mono-exponential diffusion imaging

R. Balaji; Chennai/IN

**MY 15**

Abdominal and Gastrointestinal

Moderators:
M. Dewey; Berlin/DE
M. Zins; Paris/FR

**B-1255** 14:00

The efficacy of MRI in the diagnostic work-up of cystic fibrosis-associated liver disease

S. Potter-Lang, K. Stauffer, P.A.T. Baltzer, D. Tamandi, D. Muin, N. Bastati-Huber, E. Halilbasic, L. Kazemi-Shirazi, A. Ba-Ssalamah; Vienna/AT

**B-1256** 14:04

T. mapping on gadoxetic acid-enhanced MR imaging potentially predicts recurrence of HCC after hepatectomy


**B-1257** 14:08

Magnetic resonance imaging of hepatitis B virus-related hepatocellular carcinoma: correlations with imaging features and molecular marker glypican-3

S. Wang, J.H. Li; Beijing/CN

**B-1258** 14:12

Differentiation of inflammatory pseudo-tumour from colorectal liver metastases on gadoxetic acid-enhanced magnetic resonance imaging


**B-1259** 14:16

Dynamic-enhanced CT of multiple solid pancreatic lesions: prevalence and features of non-malignancies


**B-1260** 14:20

Diagnostic accuracy and interobserver agreement: CEUS-LI-RADS vs MRI-LI-RADS


**B-1261** 14:24

Evaluating autoimmune pancreatitis under corticosteroid treatment with T1 mapping

L. Zhu1, H.-D. Xue1, Z.-Y. Sun1, D. Nickel2, T.-Y. Qian1, Z.-Y. Jin1; Beijing/CN, 1Erlangen/DE

**B-1262** 14:28

Non-hypervascular pancreatic neuroendocrine tumours: spectrum of MDCT imaging findings and differentiation from pancreatic ductal adenocarcinoma

E. Belousova, G. Karmazanovsky; Moscow/RU

**B-1263** 14:36

Application of CT texture analysis in evaluating histologic grade of pancreatic neuroendocrine tumours

S.-h. Cheng1,2, L. Zhu1, H. Xue1, Z. Jin1; Beijing/CN, Chengdu/CN

**B-1265** 14:40

The efficacy of superb microvascular imaging for diagnosing acute cholecystitis: comparison with conventional ultrasonography

J. Ra, E. Lee, H. Park, J. Lee, S. Park, B. Choi; Seoul/KR
B-1266 14:44
MR T2 mapping of hepatocellular carcinoma: sequence parameters optimisation and its correlation with Ki-67 proliferation status, histological grades and microvascular density
L. Cao, B. Song; Chengdu/CN

B-1267 14:48
Readout-segmented echo-planar diffusion-weighted MR for the evaluation of aggressive characteristics of rectal cancer
X. Chunhao, Z.-L. Li; Chengdu/CN

B-1269 14:52
Comparison of liver stiffness measurements between point shear wave elastography (ElastPQ) and two-dimensional shear wave elastography (ElastQ imaging) equipped on a same machine
W. Hong, S.M. Lee, M.J. Kim, H. Ha, K. Lee, D. Lee, S. Lee; 1Anyang/KR, 2Seoul/KR

B-1270 14:56
MRI-detected extramural vascular invasion is one of the strongest risk factors in predicting metastasis in rectal cancer
P. Tripathi, S. Rao, W. Guo, B. Rai, M.-S. Zeng; 1Shanghai/CN, 2Wuhan/CN

B-1271 15:00
Radiomics analysis for preoperative prediction of synchronous distant metastasis in patients with rectal cancer
H. Liu, C. Zhang, J. Li, D. Wang; Shanghai/CN

B-1272 15:04
CT-based radiomics for prediction of neoadjuvant chemotherapy outcomes in locally advanced gastric cancer: a pilot study
Z. Li; Kunming/CN

B-1273 15:08
Can emergency CT reliably detect significant blunt bowel and mesenteric injury?
N. Keller, T. Zingg, F. Agri, J.-F. Knebel, S. Schmidt Kobbe; Lausanne/CH

B-1274 15:12
MRI vs FDG PET-CT for response assessment after neoadjuvant chemoradiotherapy in oesophageal cancer

16:00 - 17:30 Sky High Stage

B-1275 16:00
Comparison of double-reading of mammography-2D with single-reading of tomosynthesis plus synthesised mammography: is it time to change the way we work in breast-screening programmes?
S. Romero, J.L. Raya Povedano, M. Cara Garcia, A.L. Santos, M. Pedrosa Garrigue; Cordoba/ES

B-1276 16:04
Radiomics signature from enhanced T1-weighted MR image helps to improve the differential diagnosis performance of sub-1cm breast mass
L. Wang, D. Wang, X. Li; 1Shanghai/CN, 2Guangzhou/CN

B-1277 16:08
Correlation between optoacoustic imaging and molecular subtypes of malignant breast masses
G. Menezes, R.M. Pinappel, C. Meeuwis, B. Bisschops, J. Veltman, P. Lavín, M. van de Vijver, R.M. Mann; 1Utrecht/NL, 2Arnhem/NL, 3Dordrecht/NL, 4Almeio/NL, 5Framingham, MA/US, 6Amsterdam/NL, 7Nijmegen/NL

B-1278 16:12
Diagnostic values of magnetic resonance imaging in mammography detected BI-RADS 4 category calcifications
Y. Jiang, H.-U. Kauczor; Heidelberg/DE

B-1279 16:16
Characterising mammographic calcification as a prognostic biomarker for breast tumour phenotypes
J. Li, Y. Song, Y. Wu, H. Cai, L. Li; Guangzhou/CN

B-1280 16:20
Intravoxel incoherent motion diffusion-weighted magnetic resonance imaging in characterisation of axillary lymph nodes: preliminary animal experience
Y. Zhu, X. Li, F. Wang, Z. Ye; Tianjin/CN

B-1281 16:24
Radiomics with MRI for early prediction of the response to neo-adjuvant chemotherapy in breast cancer patients
A. Tahmassebi, A. Meyer-Baese, G.J. Wengert, T.H. Helbich, K. Pinker-Domenig; 1Tallahassee, FL/US, 2Vienna/AT

B-1282 16:28
The role of arterial spin labelling (ASL) and diffusion tensor imaging (DTI) and to differentiate between malignant and benign breast lesions
A.N. Kambale, A. Kamble, M. Popli; 1New Delhi/IN, 2Mumbai/IN

B-1283 16:32
Earlier detection of breast cancer using artificial intelligence
A. Watanabe, W. Bradley, V.D. Lim, C.Y.R. Chim; 1Manhattan Beach, CA/US, 2San Diego, CA/US

B-1284 16:36
Sensitivity of contrast-enhanced spectral mammography (CESM) versus digital mammography (DM) for detecting breast cancer in dense or extremely dense breasts
E. Gioutlaki, C. Tzimas, E. Feida, A.N. Chalazonitis; Athens/GR

B-1285 16:40
MRI analysis after neoadjuvant chemotherapy on breast cancer: correlation between radiological and pathological response

B-1286 16:44
Screen-detected breast cancer: differences in mammographic tumour features between agreement and disagreement recall
M. Orsi, M. Cellina, F. Leone, D. Mariani, A. Presazzi, C. Floridi, G. Oliva; Milan/IT

B-1287 16:48
Interpretation of patterns of enhancement on contrast-enhanced digital mammography: an approach to a standardised scheme
S. Gareer, Y. Mounir, M.H. Helal, O. Mokhtar, A. Abdel Aziz, H. Kassas, L. Bassam; 1Wuhan/CN, 2Guangzhou/CN

B-1288 16:52
Screen-detected breast cancer: an argument for starting screening mammography at age 40 in the community-based setting
R. Benjamin, 1M. Aujero, K.S. Traylor, M. Gerges, 2J. Holt; 1Newark, DE/US, 2Philadelphia, PA/US
B-1289 16:56
Abbreviated breast MRI: do we still need contrast media?
A. D’Angelo1, J. Al Mohanna2, P. Clauser3, P. Kapetas4, P. Rinaldi5,
C. Zuiani6, T.H. Helbich7, K. Preidler8, P.A.T. Baltzer9; 1Rome/IT,
2Riyadh/SA, 3Vienna/AT, 4Udine/IT

B-1290 17:00
Mammography, breast MRI and histopathological features of pure ductal carcinoma in situ
Y. Jiang, H.-U. Kauczor; Heidelberg/DE

B-1291 17:04
Molecular subtypes of invasive breast cancer: correlation between PET/CT and MRI findings
M. Akin, I.S. Örgüc, F. Aras, A. Kandiloglu; Manisa/TR

B-1292 17:08
Focal breast categorisation according to the BI-RADS-US lexicon: role of a computer-aided decision-making support
A. Orlando, F. Amato, M. Di Vittorio, C. Lupo, L. Spatafora,
M. Safina, F. Ienzi, R. Ienzi, T.V. Bartolotta; Palermo/IT

B-1293 17:12
Comparison of automated vs bilateral handheld whole-breast US in screening patients regarding efficacy and patient preference
B. Tutar, G. Esen, H. Kara, N. Guidogan, C. Uras; Istanbul/TR

B-1294 17:16
Breast cancer staging with automated breast volume scanner (ABVS) and digital breast tomosynthesis (DBT): a comparison with magnetic resonance imaging (MRI)
R. Girometti, L. Tomkova, M. Zanotel, M. Lorenzon, A. Linda, V. Londero,
C. Zuiani; Udine/IT
Radiographers

**MY 17**

**Radiographers**

Moderators:
- C. Beardmore; London/UK
- D. Katsifarakis; Athens/GR

**B-1295 08:30**
Clinical value of dynamic contrast-enhanced MRI and diffusion-weighted imaging on diagnosis of central gland prostate carcinoma
W. Jing, X. Zhang; Shenyang/CN

**B-1296 08:34**
Development and validation of a low-cost paediatric pelvic phantom for digital radiography dose optimisation
A.H. Mohammed Ali, P.H. Hogg; England, Salford/UK, Manchester/UK

**B-1297 08:38**
80kV vs 100kV in the CT pulmonary angiography protocol: an evaluation of the impact on patient dose and image quality on two CT machines
A. Rusandu, A. Bédégard; G.C. Enghi, H.M. Olerud; Trondheim/NO, Kongberg/NO

**B-1298 08:42**
Atypical functional connectivity between cerebral and cerebellar resting state networks in autism spectrum disorder
Y. Wang, W. Zhang, S. Lui; Chengdu/CN

**B-1299 08:46**
Morphological characteristics of carotid atherosclerotic plaques: comparison based on CTA and MRI
N. Giannotti, J. McNulty, S. Foley, P. Kelly; Dublin/IE

**B-1300 08:50**
The impact of the smartphone application (app) on MR radiographers’ knowledge and confidence in relation to MR image-quality-related errors
W. Alsharif, M. Davis, L.A. Rainford, A. McGee; Dublin/IE

**B-1301 08:54**
Role of renal ultrasound in pelvic imaging: to scan or not to scan?
K. Cronin, S. Foley, S. Simpson, A. Kelly; Dublin/IE

**B-1302 08:58**
Implementing mobile radiography services: a qualitative study of managers’ experiences of success criteria and barriers to overcome
E. Kjelle, J. McNulty, S. Foley, P. Kelly; Dublin/IE

**B-1303 09:02**
Paediatric lifetime cancer risk for head CT protocols of a 1-year-old child

**B-1304 09:06**
How can we improve the patient experience of nuclear medicine hybrid imaging procedures? A systematic review of the evidence
S. King; Bristol/UK

**B-1305 09:10**
Air embolism on coronary computed tomography angiography: its incidence associated with the preparation of intravenous infusion
S. Kayano; K. Ono, T. Yamaguchi; H. Ota; Sendai/JP, Sapporo/JP

**B-1306 09:14**
Evaluating the roles of CT radiographers in the UK
M.A. Harris; M. Hardy; Wakefield/UK, Bradford/UK

**B-1309 09:18**
Digital radiography: impact of a lower tube voltages on image quality and radiation dose in chest phantom radiography

**B-1310 09:22**
Patient doses in plain chest x-ray compared to national DRLs
A. Henner, K. Paalimäki-Paakki; Oulu/FI

**B-1311 09:26**
Radiography on wheels for nursing home residents may reduce healthcare costs
E. Kjelle, L. Kleven, H. Olerud, H. Melberg; Kongsberg/NO, Oslo/NO

**B-1312 09:30**
Evidence-based practice in diagnostic imaging departments - involving the patients in procedure-development
L. Hammerstrøm; Sarpsborg/NO

**B-1313 09:34**
Relationship between body fat by DEXA and cardiovascular risk factors
R.A.M. Santos, A.C. Girão, J.P. Figueiredo; Coimbra/PT

**B-1314 09:38**
Exposure to electromagnetic fields during a gradient echo sequence in a 3T MRI scanner along z-axis
V.M.F. Silva, I. Ramos, M. Marques, J. Moreira; Porto/PT

**10:30 - 12:00**

Room C

**Abdominal Viscera**

**SS 1801**

**Liver: beyond morphology**
Moderators:
- P. Bonaffini; Monza/IT
- N. Elmas; Coimbra/PT

**B-1323 10:30**
Diagnostic performance in the stage of liver fibrosis: comparison of magnetic resonance T1 rho and acoustic radiation force impulse
J. Li, C. Zhang, H. Liu, S. Yang, Y. Wang, W. Chen, D. Wang; Shanghai/CH

**B-1315 10:38**
Evaluation of T1 measurement methods of the liver in chronic liver disease

**B-1316 10:42**
Assessment of histological stage of fibrosis using relative liver enhancement in patients with primary sclerosing cholangitis
J. Yamamura, A. Aigner, C. Schramm, R. Zenouzi, G. Adam, S. Keller; Hamburg/DE

**B-1317 10:46**
Assessing liver fibrosis with diffusion-weighted MRI: comparison between conventional and kurtosis models
L. Yang, M. Zeng, S. Rao; Shanghai/CH
**B-1319** 11:02
The potential role of Gadoxetate disodium (Gd-EOB-DTPA) and diffusion-weighted magnetic resonance imaging in primary sclerosing cholangitis
J. Yamamura1, J. Sedlacik1, T. Schuler1, R. Buchert2, H. Kooijman-Kurfuerst1, C. Schramm1, J. Fiehler1, G. Adam1, S. Keller1; 1Hamburg/DE, 2Berlin/DE

**B-1320** 11:10
Tumour response to preoperative chemotherapy in patients with colorectal liver metastases: can ADC values evaluated at 3T MRI replace RECIST criteria?
F. Donati, P. Boraschi, R. Cervelli, F. Pacciardi, G. Tarantini, M. Castagna, L. Urbani, D. Caramella, F. Falaschi; Pisa/IT

**B-1321** 11:18
Liver function estimation using gadoxetic acid-enhanced liver MRI
J.-H. Yoon1, E. Kim1, T. Okuaki2, J. Lee1; 1Seoul/KR, 2Tokyo/JP

**B-1322** 11:26
Pathologic alterations in hepatic vasculature in primary sclerosing cholangitis: correlation with morphologic spectrum and abnormal hyperintensity in T2-weighted MR images
M. Kul, D. Kuru Öz, A. Erden; Ankara/TR

**B-1323** 11:34
The positive effects of bariatric surgery on NAFLD at early postoperative period: proof with ideal IQ sequences obtained by 3.0 Tesla MRI
Y. Metin1, N. Orhan Metin1, S. Kalcan1, O. Özdemir1, M. Çolakoğlu1, A. Küpeli2; 1Rize/TR, 2Mus/TR

**B-1324** 11:42
Contrast-enhanced MR imaging 3D texture analysis as a potential tool for preoperative prediction of microvascular invasion in hepatocellular carcinoma
Y. Zhu, X. Ma, X. Zhao; Beijing/CN

**Vascular**

**SS 1815**
**Pulmonary circulation and venous imaging**

Moderators:
N.J. Screaton; Cambridge/UK
W.H. Sommer; Munich/DE

**K-25** 10:30
Keynote lecture
N.J. Screaton; Cambridge/UK

**B-1326** 10:39
Virtual monoenergetic image reconstruction from spectral detector CT improves objective image quality and subjective assessment of pulmonary emboli
N. Grosse Hokamp1,2, R. Kessner3, R. Gilkeson1, A. Gupta2; 1Cologne/DE, 2Cleveland, OH/US

**B-1327** 10:47
CT pulmonary angiography at reduced radiation exposure and contrast material volume in obese patients using IMR and iDose® in comparison to FBIP
A. Quitzke1, J. Schmidt-Holtz, C. Behzadi, G. Adam, M. Regier; Hamburg/DE

**B-1328** 10:55
Model-based iterative reconstruction on low-dose CT pulmonary angiography: image quality and radiation dose saving compared with hybrid iterative reconstruction CTPA
A. de Vito1, D. Ippolito1, C.R. Talei Franzesi2, L. Riva1, S. Drago1, S. Sironi2; 1Monza/IT, 2Milan/IT

**B-1329** 11:03
High temporal resolution dynamic CE MRA in detection of reperfused pulmonary arteriovenous malformations (PAVMs) in HHT-patients
G. Schneider, A. Bücker, A. Massmann; Hamburg/DE

**B-1330** 11:11
The frequency of coexistence of renal artery and vein variations on abdominal CT
S. Gurel, O. Yilmaz, A. Kiyani; Bolu/TR

**B-1331** 11:19
Evaluation of pelvic congestion syndrome with time-resolved MR angiography
S. Wassel, A. Stolpen; Iowa City, IA/US

**B-1332** 11:27
Determination of inferior vena cava diameter: is it true on cavoigraphy?
C. Ma; Changsha/CN

**B-1333** 11:35
Evaluation of radiation dose and image quality of dual-detector spectral CT portal venography of swine using a low-concentration iodinated contrast agent and low tube current
C. Chen, X. Lu, H. Liu, Z. Lu; Shenyang/CN

**B-1334** 11:43
Treatment of varicose veins with endovenous laser ablation using low linear endogenous density
S. Sangma1, U. Gorsl1, M. Yadav2, T. Yadav, N. Khandelwal1; 1Chandigarh/IN, 2New Delhi/IN

**B-1335** 11:51
Multiparameter ultrasound in the diagnosis of deep vein thrombosis of the lower extremities
A. Demidova, I. Rychkova, N. Krivosheeva, E.A. Zubareva, A. Kuznetsova; Moscow/RU

**Interventional Radiology**

**SS 1809**
**Bone and spine interventions**

Moderators:
V. Chianca; Naples/IT
B.A. Radeleff; Hof/DE

**K-26** 10:30
Keynote lecture
A.D. Kelekis; Athens/GR

**B-1336** 10:39
Percutaneous combined treatment for lumbar disc herniation: how we do it
G. Galvano1, M. Raciti1, G. Scavone1, S. De Luca1, A. Cannella1, C. Di Lorenzo1, G. Tigan1, A. Scavone1; 1Catania/IT, 2Pavia/IT

**B-1337** 10:47
CT-guided pulsed radiofrequency treatment of the lumbar dorsal root ganglion in patients with acute radicular low back pain
A. Napoli1, S. Bababou, H.-P. Erasmus, C. Marrocchio, R. Scipione, C. Catalano, Rome/IT
B-1357 10:39
Learning the language of PI-RADS version 2: correlation between prostate MRI lexicon terms and malignancy
M. Rudolph, A. Baur, M. Haas, S. Mahjoub, H. Cash, P. Asbach, B. Hamm, T. Penzkofer; 
Berlin/DE

B-1358 10:47
Diagnostic performance of PI-RADS version 2 in detecting prostate cancer using whole-mount histology after radical prostatectomy as the standard of reference
R. Girometti1, S. Bednarova1, S. Sioletic1, V. Ficarra2, F. Greco1, A. Crestani1, C. Zuiani1, Udine/IT, Messina/IT

B-1359 10:55
Diagnostic yield of prostate biopsies and PI RADS version 2 scoring of MRI prostates
G. Chilvers, U. Udedhi; Worcester/UK

B-1360 11:03
Clinical value of the PI-RADS score in predicting benign and malignant conditions at MRI-guided prostate biopsy: a correlation of 54 patients with suspicion of prostate cancer
K. Engelhardt, K. Bogner, F. Schneider; Nürnberg/DE

B-1361 11:11
Audit of diagnostic yields of prostate cancer in biopsy naive patients at high risk of cancer on the London Cancer Alliance Best Practice Prostate Pathway (LCABPPP)
H.K. Sokhi1, S. Patel1, A. Padhani1, A. Pope1; London/UK, Northwood/UK

B-1362 11:19
PI-RADS version 2-based assessment of prostate in patients with borderline-elevated prostate-specific antigen levels: a prospective study
A. Yadav, M. Bagarhatta, U. Jaipal; Jaipur/IN

B-1363 11:27
When does biopsy make sense in patients with an overall PI-RADS score of 3?
T. Ulrich1, L. Schimmöller1, M. Quentin1, N. Laqua1, D. Blondin1, C. Arsov1, R. Rabenalt1, P. Albers1, G. Antoch1; Düsseldorf/DE

B-1364 11:35
How to prevent patients with a false-positive overall score of PI-RADS 4
T. Ulrich1, L. Schimmöller1, M. Quentin1, N. Laqua1, F. Dietzel1, C. Arsov1, R. Rabenalt1, P. Albers1, G. Antoch1; Düsseldorf/DE

B-1365 11:43
Is it possible to reduce the number of false positive cases of PI-RADS v.2 classification? Role of quantitative analysis of DCE-MRI in prostate lesions' characterisation
G. Cristel1, A. Esposito1, A. Damascelli1, S. Antunes1, G. Brembilla1, A. Briganti1, Del Maschio1, De Cobelli1; Milano/IT

B-1366 11:51
Chronic prostatitis: distinction from prostate cancer and benign prostatic hyperplasia by means of PI-RADS version-2 descriptors
U.O. Mueller-Lisse1, M. Kuhn1, M. Scherr1, U.L. Mueller-Lisse1, S. Murer1, M.F. Reiser1, J. Scheidler1, Munich/DE, Murnau a. Staffelsee/DE

B-1367 10:30
Whole-body tumour staging of cervical cancer patients using 18F-FDG PET/MRI: does it change therapeutic decisions when compared to MRI alone?
J. Grueneisen1, T. Sarabhai1, B.M. Scharaaschmidt1, A. Wetter1, M. Forsting1, K. Herrmann1, L. Umutlu1, Essen/DE, Dusseldorf/DE

B-1368 10:38
The prognostic value of pre-treatment FDG-PET/CT metabolic parameters in cervical cancer patients
V. Bollini1, S. Ytre-Hauge1, A. Gulati1, M. Halle1, K. Woie1, Ø. Salvesen1, C. Krakstad1, J. Trovik1, I. Haldorsen2; Bergen/NO, Trondheim/NO

B-1369 10:46
Quantitative MRI analysis of cervical cancer parametrium invasion
M. Shorikov, E. Tarachkova, V. Panov1, I. Tuurin; Moscow/RU

B-1370 10:54
MRI findings of post-IGBT-treated cervical tumour
E. Wong1, T. Chang1, F. Cho1, M. Lai1, S. Soong1, L. Law1, M. Yeung1, K. Tang1, Chai Wan/HK, Pok Fu Lam/HK

B-1371 11:02
Simultaneous multiparametric PET/MRI for the assessment of therapeutic response to chemohemotherapy or concurrent radiochemotherapy of cervical cancer patients: preliminary results
T. Sarabhai, V. Stebner, A. Wetter, R. Kimmig, M. Lutmulu, J. Grueneisen; Essen/DE

B-1372 11:10
Predicting early response in cervical malignancies to concurrent chemoradiation using intravoxel incoherent motion (IVIM) MRI
R. Balaji; Chennai/IN

B-1373 11:18
Evaluating the MR scoring system ("ADNEX MR score") for characterisation of sonographically indeterminate adnexal masses
H. Rajani1, S.B. Grover1, P. Mittal1, G. Khanna; New Delhi/IN

B-1374 11:26
Adnexal masses: diagnostic value of DCE-MRI
S. Parviz; Tehran/IR

B-1375 11:34
MR-imaging of neoplastic and non-neoplastic lesions of the vagina
S. Aksenova1, N. Nudnov1, J. Kreynina; Moscow/RU

B-1376 11:42
Diagnostic value of Imaging for the detection of peritoneal metastases: a meta-analysis
I. van’t Sant-Jansen1, M. Engbersen1, D.M. Lambregts, A.G. Aalbers, W. van Driel, R.G.H. Beets-Tan, M.J. Lahaye; Amsterdam/NL

B-1377 11:50
Ovarian cancer staging: prospective comparison among ultrasound, CT and whole-body-MRI
V. Buscarino1, S. Rizzo1, A. Colarieti1, M. Femia1, E. Pagan1, V. Bagnardi1, M. Bellomi1; Milan/IT, Rome/IT

10:30 - 12:00
Studio 2018

SS 1816
Latest imaging of gynaecological cancers
Moderators:
M.-L. Ribak, Tallinn/EE
A.G. Rockall, London/UK

B-1367 10:30
Whole-body tumour staging of cervical cancer patients using 18F-FDG PET/MRI: does it change therapeutic decisions when compared to MRI alone?
J. Grueneisen1, T. Sarabhai1, B.M. Scharaaschmidt1, A. Wetter1, M. Forsting1, K. Herrmann1, L. Umutlu1; Essen/DE, Dusseldorf/DE

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M. Shorikov, E. Tarachkova, V. Panov1, I. Tuurin; Moscow/RU

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E. Wong1, T. Chang1, F. Cho1, M. Lai1, S. Soong1, L. Law1, M. Yeung1, K. Tang1; Chai Wan/HK, Pok Fu Lam/HK

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I. van’t Sant-Jansen1, M. Engbersen1, D.M. Lambregts, A.G. Aalbers, W. van Driel, R.G.H. Beets-Tan, M.J. Lahaye; Amsterdam/NL

B-1377 11:50
Ovarian cancer staging: prospective comparison among ultrasound, CT and whole-body-MRI
V. Buscarino1, S. Rizzo1, A. Colarieti1, M. Femia1, E. Pagan1, V. Bagnardi1, M. Bellomi1; Milan/IT, Rome/IT
SS 1805
Deep learning

B-1378 10:39
Identifying pulmonary consolidation in chest x rays using deep learning

B-1379 10:47
Efficacy of deep learning for screening pulmonary tuberculosis

B-1380 10:55
Automatic localisation and identification of vertebrae in spine CT scans by combining Deep Learning with morphological image processing techniques
A. Jiménez- Pastor, A. Alberich-Bayarri, B. Fos Guarinos, F. Garcia-Castro, L. Marti-Bonmati; Valencia/ES

B-1381 11:03
Fully automatically staging of lung cancer using deep neural networks
K.S. Mader, A.W. Sauter, G. Sommer, T. Weikert, F. Troelese, J. Hagger, B. Stieltjes; Zurich/CH, Basel/CH

B-1382 11:11
Discrimination between distal ureteral stones and pelvic phleboliths in CT using a deep neural network: more than local features needed
M. Lideño, J.K. Jendeberg, M. Längkvist, A. Loutfi, P. Thunberg; Örebro/SE

B-1383 11:19
Deep learning for liver segmentation and volumetry in late phase MRI
A. Schenk, G. Chiebus, H. Meine, S. Thoduka, N. Abolmaali; Bremen/DE, Dresden/DE

B-1384 11:27
Evaluation of a multparametric deep learning model for glioblastoma segmentation
M. Perkuhn, F. Thiele, G. Shakirin, D. Garrmpis, P. Stavrinou, J. Borggren, Cologne/DE, Aachen/DE

B-1385 11:35
Peering into the darkness: visualising what neural networks learn through generative deep learning
J.C.Y. Seab, J.S.N. Tang, F. Gaillard; Melbourne/AU

B-1386 11:43
Automated detection of intra- and extra-axial haemorrhages on CT brain images using deep neural networks
S. Chilamkurthy, R. Ghosh, P. Rao, M. Biviji; Mumbai/IN, Nagpur/IN

B-1387 11:51
Automatic detection of generalised cerebral atrophy using deep neural networks from head CT scans
S. Tanamala, R. Ghosh, S. Chilamkurthy, P. Rao, M. Biviji; Mumbai/IN, Nagpur/IN
Comparison between standard specimen mammography and intraoperative specimen mammography (Faxitron®) located in the surgical block: has anything changed?  
L.J. Pavan, M. Durando, G. Marisotti, S. Martinello, G. Cappello, A. Ala, I. Castellano, P. Fonio, G. Gandini; Turin/IT

Utility of MRI brain epilepsy protocol in new onset seizures: how is it different in developing countries?  
J. Ponnatapura Satyanarayana; Bangalore/IN

Contrast-enhanced mammography and phase-contrast CT
Moderators:  
O. Abeyakoon; Cambridge/UK  
A. Vourtsis; Athens/GR

Comparison between BOLD-fMRI and Stereo-EEG in the pre-surgical evaluation of language dominance in children affected by pharmacoresistant epilepsy  
M. Rossi Espagnet, E. Bassanelli, N. Pietrafusa, L. Figà-Talamanca, L. De Palma, D. Longo, A. Napolitano; Rome/IT

Low-dose perfusion CT for quantification of tumour vascularity in breast cancer: correlation with prognostic biomarkers  
B.K. Seo1, E.K. Park1, M. Kwon1, C.S. Ko1, J. Cha1, K.R. Cho2, O.H. Woo2; 1Ansan/KR, 2Seoul/KR
B-1416 11:26
A visual grading analysis of propagation-based phase-contrast CT mammography
S. Tavakoli Taba1, P. Baran2, S. Lewis1, R. Heard1, S. Pacle1, Y.I. Nesterets2, S.C. Mayo1, C. Dullin1, D. Dreossi1, F. Arfelli1, D. Thompson2, M. McCormack2, M. Alakhr1, F. Brun1, M. Pinamonti1, C. Nickson1, C. Hall1, F. Zanconati1, D.J. Lockie1, H. Quiney2, T.E. Gureyev2, P.C. Brennan1, S.C. Mayo2, C. Dullin4, D. Dreossi3, F. Arfelli3, D. Thompson2, M. McCormack2, M. Alakhr1, F. Brun1, M. Pinamonti1, C. Nickson1, C. Hall1, F. Zanconati1, D.J. Lockie1, H. Quiney2, T.E. Gureyev2, P.C. Brennan1

B-1417 11:34
Exploring contrast agents in phase-contrast x-ray mammography: an ex vivo pilot study
K. Leng1, C. Arboleda1, S. Forte1, Z. Wang2, R. Kubik-Huch3, M. Stampansoni4, Zurich/CH, Villigen/CH, Baden/CH, Zurich/CH

B-1418 11:42
Effectiveness of superb microvascular imaging (SMI) in differentiating intradural breast lesions
S. Bakdik1, S. Arslan1, F. Öncü1, M.S. Durmak1, A. Altunkeser1, M.A. Eryilmaz1, C. Grippo2, M. Romani2, R. Manfredi2, Rome/IT, Verona/IT

B-1419 11:50
Usefulness of automated breast volume scanner to evaluate the early response to neoadjuvant therapy in breast cancer patients: a prospective study
A. D'angelo1, P. Rinaldi1, R. Rella1, M. Giuliani1, P. Belli1, G. Carlino1, M. Stampanoni4, Zurich/CH, Villigen/CH, Baden/CH, Zurich/CH

B-1420 10:30
3D printed model based on knee MRI as a new tool in surgical planning of anterior cruciate ligament reconstruction
L.J. Pavan1, R. Faletti1, L. Nicolet1, A. Cosentino1, A. Di Chi1o1, M. Gatti1, S. Fiore1, F. Bonino1, P. Fonio1, M. Shahabpour1

B-1421 10:38
Anterior inferior iliac spine morphology: quantitative and qualitative assessment in an asymptomatic population
F.P. Erger1, O. Topcuoglu2, S. Ardali1, T. Cankurtaran1, A. Doglun Barak1, U. Aydingoz1, Ankara/TR, Istanbul/IT

B-1422 10:46
Association between cam type femoroacetabular impingement and osteitis pubis on MR images
A.S. Akgun1, M. Agirman1, Istanbul/IT

B-1423 10:54
Gouty knee arthritis: ultrasound findings compared to dual-energy CT
M.M.H. Abd Ellah1,2, S. Strobil1, S. Rauch1, E.J. Halpern3, C. Kremser1, W. Jaschke1, A. Klauser1, Innsbruck/AT

B-1424 11:02
Influence of meniscus tears on cartilage T2 relaxation time in subjects with and without knee osteoarthritis
R. Kijowski1, K. Woo1, F. Liu1, Madison, WI/US

B-1425 11:10
Subchondral bone/cartilage: a functional unit? Bone density and cartilage thickness are correlated
P. Omoumi1, H. Babel1, B. Jolles1, J. Favre1, Lausanne/CH

B-1426 11:18
Increased perfusion in subchondral bone marrow lesions in knee osteoarthritis measured with quantitative DCE-MRI
B. De Vries1, J. Verschuuren1, D. Poot1, O. Eei1, P. Krestin1, Rotterdam/NL

B-1427 11:26
Who runs further? Intra-articular Platelet Rich Plasma (PRP) vs Viscosupplementation (HA) and PRP in the treatment of knee osteoarthritis: six-months follow-up study using T2 mapping
E. Canziggazzaro1, F. Bruno1, S. Quarchioni1, I. Capretti1, S. Mariani1, F. Arrigoni1, L. Zugaro1, A. Barile1, C. Macciocchi1, L'Aquila/IT

B-1428 11:34
The patella-shape: is it relevant to the analysis of patella malalignment?
A. Kolb1, C. Chiari1, R. Windhager1, Vienna/AT

B-1429 11:42
The association of patellar maltracking with infrapatellar fat pad oedema and chondromalacia patella: a quantitative morphologic MRI analysis
M. Gursoy1, B. Dirim Mete1, Y.K. Cetinoglu1, O. Oya1, N. Erdogan1, M. Uluc1, T. Bulut1, G. Safa1, Izmir/TR, Ankara/TR

B-1430 11:50
3D-printed models of the knee for evaluation of trochlear dysplasia in comparison to standard radiographs and computed tomography
B. Fritz1, S. Fucentese1, S. Zimmermann1, P.M. Tschiolli1, R. Sutter1, C.W. Pfirrmann1, Zurich/CH, Geneva/CH

B-1431 10:30
Task-based radiation dose assessment for paediatric dental CBCT imaging
A. Stratis1, G. Zhang1, R. Jacobs1, R. Bogaerts2, H. Bosmans2, Leuven/BE

B-1432 10:38
Sliding organ motion regularisation for motion-compensated cone-beam CT in image-guided radiation therapy (IGRT)
S. Sauppe1, J. Kuhm1, M. Brehm1, P. Pasyan1, D. Seghers2, M. Kachelrieß1, Heidelberg/DE, Baden-Dättwil/CH

B-1433 10:46
Material-guided scatter correction in cone-beam-computed tomography using spectroscopic information
C. Egan1, P. Scott1, N. Loxley1, Sedgefield/UK

B-1434 10:54
Moving metal artifact reduction (MMAR) for cone-beam CT (CBCT) in image-guided radiation therapy
A. Hahn1, S. Sauppe1, M. Knaup1, M. Kachelrieß1, Heidelberg/DE

B-1435 11:02
Focal spot blur correction for cone-beam CT (CBCT)
N.K. Waltrich1, S. Sawall1, M. Kachelrieß1, Heidelberg/DE

B-1436 11:10
Spectroscopic cone-beam-computed tomography using pixel-wise attenuation modulation
C. Egan1, P. Scott1, N. Loxley1, Sedgefield/UK

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Sunday
SS 1803
Deep learning in coronary and myocardium CT

Cardiac

10:30 - 12:00

SPEAKERS
C. Schabel1, K. Nikolaou2, L. Hurwitz3, 'Tubingen/DE, 'Durham, NC/US

B-1444 10:30
Computed tomography CT: derived fractional flow reserve improves reader confidence for coronary CT angiography
C. Schabel1, K. Nikolaou2, L. Hurwitz3, 'Tubingen/DE, 'Durham, NC/US

B-1454 10:38
Effect of coronary calcium on the diagnostic performance of machine learning-based coronary CT angiography-derived fractional flow reserve: results from the machine registry

B-1455 10:46
Artificial intelligence deep-learning-based coronary CT fractional flow reserve: the impact of iterative and filtered back projection reconstruction techniques

B-1456 10:54
Gender differences in machine learning-based coronary CT angiography-derived fractional flow reserve: results from the machine registry

B-1453 10:30
Computed tomography CT: derived fractional flow reserve improves reader confidence for coronary CT angiography
C. Schabel1, K. Nikolaou2, L. Hurwitz3, 'Tubingen/DE, 'Durham, NC/US

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B-1456 10:54
Gender differences in machine learning-based coronary CT angiography-derived fractional flow reserve: results from the machine registry
B-1457 11:02
Noninvasive CT-derived FFR based on structural and fluid analysis with low radiation dose using a full iterative reconstruction
H. Takagi, K. Kikuchi, R. Tanaka, K. Yoshioka; Morioka/JP

B-1458 11:10
Intermoder agreement of myocardial blood flow quantification in dynamic myocardial perfusion CT

B-1459 11:18
Additional diagnostic value of CT perfusion over coronary CT angiography in stented patients with stent restenosis or coronary artery disease progression: Advantage study
D. Andreini1, S. Mushtaq1, J. Sonck1, G. Pontone1, E. Conte1, M. Mancini1, A. Baggiano1, A.L. Bartorelli1, M. Pepi1; *Milan/IT, *Brussels/BE

B-1460 11:26
Accuracy of CCTA to detect obstructive CAD using stress vs rest dataset in patients referred to stress CTP
M. Guglielmo1, A. Guaricci1, A. Baggiano1, F. Fazzari1, D. Andreini1, F. Fabiocchi1, A. Lualdi1, A. Bartorelli1, G. Pontone1; *Milan/IT, *Bari/IT, *Palermo/IT

B-1461 11:34
The impact of a tiered cardiac CT protocol compared to functional testing on cardiovascular risk management in patients with suspected coronary artery disease
F. Nous1, M.M. Lubbers1, J. Akkerhuis1, T. Bruning1, K. Nieman1; *Rotterdam/NL, *Dordrecht/NL, *Maastricht/NL

B-1462 11:42
Deep learning-based analysis of the left ventricular myocardium in coronary CTA images improves specificity for detection of functionally significant coronary artery stenosis
R.W. van Hamersvelt1, M. Zeik1, M. Voskuil1, I. Isgum1, T. Leiner1; Utrecht/NL

B-1463 11:50
A meta-analysis on functional CT for diagnosing haemodynamically significant coronary artery disease: ready for prime time?

10:30 - 12:00 Room M 4
Genitourinary

SS 1807b
Contrast media, urography and stone disease
Moderators: C. Roy; Strasbourg/FR A.J. van der Molen; Leiden/NL

B-1464 10:30
Updated evidence-based European Society of Urogenital Radiology (ESUR) Contrast Media Safety Committee (CMSC) Guidelines for prevention of post-contrast acute kidney injury (PC-AKI)

B-1465 10:38
Intravenous contrast media administration: is there a risk of acute kidney injury?

B-1466 10:46
Survey of contrast-induced nephropathy after CT scan in patients who stayed in Sari Imam Khomeini Hospital from 2016 to 2017
H. Hajidi, F. Godazandeh, R. Abdí, F. Espahbodi, R. Ailimohammadpour, M. Tayebi; Sari/IR

B-1467 10:54
Multiphase urinary tract imaging with dual contrast using spectral photon-counting CT
S.A. Si-Mohamed1, M. Sigovan2, G. Normand2, P. Coulon3; D. Bar-Ness2, L. Boussef1, P. Douek1; *Bonn/FR, *Lyon/FR, *Suresnes/FR

B-1468 11:02
Split-bolus vs single-bolus MDCT urography: comparison of urinary tract opacification, radiation dose exposure and diagnostic capability
C. Valle1, P. Bonaffini2, F. Invernizzi1, A. Barletta1, A. Casiraghi1, A. Pappini1, S. Sironi1, Bergamo/IT, *Monza/IT, *Desio/IT

B-1469 11:10
Evaluation of parenchymal and vascular enhancement in split-bolus MDCT urography compared to standard single-bolus protocol: a feasibility study
M. Baby1, F. Invernizzi1, P.A. Bonaffini1, G.C. Preziosa1, D. Nicoletta2, C. Valle1, A. Pappini1, S. Sironi1; Bergamo/IT, *Desio/IT, *Monza/IT

B-1470 11:18
Diagnostic value of virtual monoenergetic urographic phase images in the assessment of urethelial carcinoma
D. Zopfs, S. Lennartz, D. Maintz, T. Persigehl; Cologne/DE

B-1471 11:26
CT urography: dependence of distal ureter opacification on excretory-phase timing and urinary-bladder volume

B-1472 11:34
Kinking of the upper ureter in CT urography: anatomical and clinical significance

B-1473 11:42
Characterisation of renal stones using spectral detector computed tomography using normal and low-dose protocols
N. Grosse Hokamp1, J. Salem1, J. Holz1, G. Dervishi1, M. Ritter1, A. Heidenreich1, D. Maintz1, S. Haneder1; *Cologne/DE, *Cleveland, OH/US, *Mannheim/DE

B-1474 11:50
Diagnostic performance of advanced modelled iterative reconstruction-applied images for detecting urinary stones on submillisievert low-dose computed tomography
J. Ahn, S. Kim, S. Kim, I. Nam, S.-J. Lee; Busan/KR
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<th>Authors</th>
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<tr>
<td>Neuro</td>
<td><strong>SS 1811b</strong> Paediatric and adult brain tumours</td>
<td>Moderators: K. Dolic; Split/HR M. Smits; Rotterdam/NL</td>
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<td></td>
<td><strong>B-1475</strong> The value of whole tumour volume-based T2 histogram analysis of differential diagnosis in paediatric posterior fossa tumours</td>
<td>K. Xu, Y. Zhang; Zhengzhou/CN</td>
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<td><strong>B-1476</strong> Predicting medulloblastoma genomic subtypes by exploiting MRI morphologic phenotypes</td>
<td>M.S. Alahmadi, M. Alharbi, N. Mobark, A.N. Alsaaad, A. Daghriri, A.B. Anver, M.S. J. Althagafi, S. Raja; Riyadh/SA</td>
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<td><strong>B-1477</strong> Application of MRI whole-tumour histogram analysis in assessment of medulloblastoma recurrence</td>
<td>Q. Lv; Zhengzhou/CN</td>
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<td><strong>B-1478</strong> Paediatric astrocytic tumour grading: comparison between ASL and DSC MRI perfusion</td>
<td>S. Staglianò, D. Tortora, M. Severino, C. Martinetti, M. Garrè, A. Rossi, G. Morana; Rome/IT, Genova/IT</td>
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<td></td>
<td><strong>B-1479</strong> Differentiation of medulloblastoma and astrocytoma in children using histogram analysis of enhancement MRI</td>
<td>W. Wang, Y. Zhang, J. Cheng, Z. Zhang; Zhengzhou/CN, Henan/CN</td>
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<td><strong>B-1480</strong> 3D fast spin-echo T1 black-blood imaging for the preoperative detection of venous sinus inversion of meningioma: comparison with contrast-enhanced MRV</td>
<td>D. Wang; Shanghai/CN</td>
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<td><strong>B-1482</strong> Quantitative T1rho-weighted magnetic resonance imaging in gliomas: a preliminary study of its biochemical mechanism</td>
<td>Y. Xu, Y. Ren, H. Pang, Z. Yao; Shanghai/CN</td>
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<td><strong>B-1484</strong> 3D MRSI biomarkers of glial tumour</td>
<td>T. Anastasia, I. Pronin, L. Fadeeva, V. Kornienko; Moscow/RU</td>
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<td><strong>B-1485</strong> Brain tumour-induced alterations in haemodynamic responses of BOLD MRI</td>
<td>L. Wang, Y. Zhang, Z. Liu, D. Chen, L. Liu, H. Mao; Shenzhen/CN, Atlanta, GA/US, Nanchang/CN, Suzhou/CN</td>
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**Paediatric**

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<td>MY 18</td>
<td><strong>B-1486</strong> Volumetric histogram-based analysis of SUV and ADC values for the assessment of paediatric sarcomas at staging: preliminary results of a PET/MR study</td>
<td>A. Varotto, G. Orsatti, F. Crimi, D. Cecchin, P. Zucchetta, M. Weber, R. Stramare, C. Giraudo; Padua/IT, Vienna/AT</td>
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<td><strong>B-1488</strong> Clinical equivalence assessment of T2 synthetic paediatric brain MRI</td>
<td>B. Kerieroux, T. Kober, T. Hilbert, D. Sirinelli, B. Morel; Tours/FR, Zurich/CH, Lausanne/CH</td>
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<td><strong>B-1489</strong> Effect of a child-adjusted method for brain volume quantification on group comparisons in dyslexia</td>
<td>T. Phan, D. Smeets, M. Vandermosten; Leuven/BE</td>
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<td><strong>B-1490</strong> Enhancement of MRI histogram in the identification of children with medulloblastoma and ependymoma</td>
<td>W. Wang, J. Cheng, Y. Zhang; Zhengzhou/CN</td>
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<td><strong>B-1491</strong> Prenatal imaging of anorectal malformations</td>
<td>L. Rohrer, Y. Vial, R. Meuli, L. Alamo-Maestre; Lausanne/CH</td>
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<td><strong>B-1492</strong> Prognostic value of radiological response assessment after induction therapy in paediatric soft tissue sarcomas</td>
<td>G. Orsatti, A. Varotto, F. Crimi, G. Bisogno, I. Zanetti, C. Giraudo, R. Stramare; Padua/IT, Vicenza/IT</td>
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<td><strong>B-1493</strong> Central nervous system (CNS) involvement in congenital heart diseases (CHD): value of foetal MRI</td>
<td>R. Petrillo, A. Antonelli, S. Bernardo, S. Satta, V. Vinci, L. Manganaro, C. Catalano; Rome/IT</td>
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<td><strong>B-1494</strong> Vermis-to-Pons ratio in the differential diagnosis of Vermian malformations: a foetal MRI study</td>
<td>A. Antonelli, S. Bernardo, R. Petrillo, S. Satta, C. Ciulla, V. Vinci, L. Manganaro, C. Catalano; Rome/IT</td>
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<td><strong>B-1495</strong> Radiation use in paediatric age: are paediatricians updates of the state of the art legislation?</td>
<td>S. Salerno, C. Tudisca, C. Granata, D. Origgi, L. Moro, M. Barbagallo, G. Corsello, A. Villani; Palermo/IT, Genoa/IT, Milan/IT, Pavia/IT, Catania/IT, Rome/IT</td>
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**B-1496** 11:10
Histogram analysis of apparent diffusion coefficients may predict molecular subgroups of medulloblastoma in children
W. Wang, J. Cheng, Y. Zhang; Zhengzhou/CN

**B-1497** 11:14
The role of prenatal diffusion weighted MRI in the evaluation of the fetal CNS condition in patients who received intrauterine blood hemotransfusion as the hemolytic disease treatment
A.A. Berman1, A. Ageev1, O. Chernova2, A. Vazhenin2; 1EKaterinburg/ RU, 2Chelyabinsk/ RU

**B-1498** 11:18
Hepatobiliary ultrasonographic abnormalities and clinical severity score of paediatric sickle cell anaemia patients in a resource-poor setting
D. Ibe; 1Kharkiv/UA

**B-1499** 11:22
Ultrasound diagnostics of the respiratory distress syndrome in premature infants
O. Sorochan; 1Kharkiv/UA

**B-1500** 11:26
Role of MR enterography in evaluation of disease activity and treatment response in paediatric Crohn's disease correlation between MRE and PCDAI scores
A. Chellathurai, A. Narasingam, S. Radhakrishnan, S. Sankaranarayanan, D. Arun; Chennai/IN

**B-1501** 11:30
Transverse comparisons between ultrasound and radionuclide parameters in children with pelviureteric junction obstruction
N.O. Shwaky; Cairo/EG

**B-1502** 11:34
A. de Vito1, D. Ippolito1, C.R. Talei Franzesi2, L. Riva2, S. Drago1, S. Sironi1; 1Milano/IT, 2Milano/IT, 3Bergamo/IT

**B-1503** 11:38
Role of MRI vs CT in staging and decision making in paediatric renal masses
E. Nasr, A. Youssef, W. Zekry, T. Raafat, A. Younis, H.A. Elkiki; Cairo/EG

**B-1504** 11:42
Closed spinal dysraphisms: how to improve prenatal diagnosis
T. Nguyen, V. Houfflin-Debarge, M. Vinchon, N. Boutry, F.E. Avni; Lille/FR

**B-1505** 11:46
Radiological appearance and follow up results of diaphragmatic mesothelial cysts during childhood
I. Akdulum1, M. Öztürk2, S. Karatoprak2, A. Sığırcı1; 1Ankara/TR, 2Konya/TR, 1Malatya/TR

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**14:00 - 15:30** Room B

### Abdominal Viscera

**SS 1901a**

**New development in CT of the liver**

Moderators:
H. Ringl; Vienna/AT
G. Tardaguila de la Fuente; Vigo/ES

**B-1506** 14:00
Meta-analysis of spectral CT image analysis tools and multi-phase CT enhancement in diagnostic accuracy of hepatic cell carcinoma
Y. Zhou; Zhengzhou/CN

**B-1507** 14:08
Perfusion CT vs triphasic CT in evaluation of hepatic masses
V. Laxmi; V. Chowdhury, R. Dixit, A. Agarwal; New Delhi/IN

**B-1508** 14:16
Iterative reconstruction in „virtual non-contrast“ with dual-energy CT: Is it an alternative to conventional unenhanced phase?
S. Jamali, C. Dragean, N. Michoux; Brussels/BE

**B-1509** 14:24
Segmental variation of CT liver attenuation index in living-related liver donors: correlation with histopathological findings
A. Rana1, A. Jang1, M. Jehangir1, M. Asghar1, R. Nazir1, S. Burki1, K. Shafee1; 1Islamabad/ PK, 2Rawalpindi/ PK

**B-1510** 14:32
Evaluation of tumour response in patients with neuroendocrine hepatocellular carcinoma treated using transarterial chemoembolisation (TACE) on MRI
M. Lapteva, M. Shorikov, D. Frantsev, O.N. Sergeeva, E. Virshke, B. Dolgushin; Moscow/RU

**B-1511** 14:40
Perfusion CT imaging: diagnostic biomarker tool for survival predictor of tumour response to antiangiogenic treatment in patients with advanced HCC lesions
D. Ippolito2, G. Guerques1, C.R. Talei Francesi2, S. Lombardi1, A. Pecorelli1, S. Sironi1; 1Monza/IT, 2Milan/IT, 3Milan/IT

**B-1512** 14:48
Diagnostic value and radiation dose reduction of model-based iterative reconstruction compared with hybrid iterative reconstruction in abdominal CT study
A. de Vita1; D. Ippolito1, C.R. Talei Francesi2, L. Riva2, S. Drago1, S. Sironi1; Monza/IT, 2Milan/IT

**B-1513** 14:56
Dual-energy CT in patients with abdominal malignant lymphoma: impact of noise-optimised virtual monoenergetic imaging on objective and subjective image quality

**B-1514** 15:04
Sarcopenic index as a predictor of post-transplant morbidity and mortality
S. Singhal1, B.K. Saranga2, D. Balakrishnan3; 1Bangalore/IN, 2Kochi/IN
B-1536 15:04
A simulated fast magnetic resonance enterography protocol in patients with Crohn's disease: a retrospective, randomised, double-blind study
G. Cicero, S. Mondello, A. Blandino, G. Ascenti, T. D’Angelo, S. Mazzotti; Messina/IT

B-1537 15:12
Established bowel damage detected on MR enterography in patients with Crohn's disease in complete endoscopic remission
J. Rimola, I. Alfaro, D. Vas, I. Ordas, E. Ricart, J. Panes; Barcelona/ES

B-1538 15:20
Dual-energy CT enterography in evaluation of Crohn’s disease: the role of virtual monochromatic image

14:00 - 15:30 Room Z

Interventional Radiology

SS 1909
Urogenital interventions
Moderators:
S. Bongiovanni; Cuneo/IT
J. Kettenbach; St. Pölten/AT

K-30 14:00
Keynote lecture
T.J. Kroenenke; Augsburg/DE

B-1539 14:09
Interventional radiology approach in the treatment of symptomatic uterine fibroids: from diagnosis to treatment: our experience

B-1540 14:17
A comparative study of quantitative T1 perfusion parameters in magnetic resonance-guided high-intensity focused ultrasound ablation of uterine fibroids
N.M. Duc1; B. Keserci1, H.Q. Huy1, P.N. Hoa1, P.M. Thong1; 1Ho Chi Minh/VN, 1Ha Noi/VN

B-1541 14:25
MR-guided focused ultrasound (MRgFUS) compared to the main current therapeutic approaches for the treatment of uterine fibroids S. Dababou, F. Andranì, A. Napoli, R. Scipione, C. Marrocchio, H.-P. Erasmus, C. Catalano; Rome/IT

B-1542 14:33
Follow-up studies of uterine fibroids (UFs) treated with MRgFUS: who are the best candidates for treatment? I. Capretti, I. Siafrate, E. Cannizzaro, F. Arrigoni, M. Di Luzzio, A. Giordano, S. Mascaretti, G. Masciocchi, C. Masiocchi; L’Aquila/IT

B-1543 14:41
Tips and tricks to treat difficult cases of uterine fibroids (UFs): how to increase eligibility in MrgFUS (magnetic resonance-guided focused ultrasound surgery)
S. Siafrate, I. Capretti, E. Cannizzaro, F. Arrigoni, M. Di Luzzio, A. Giordano, S. Mascaretti, G. Masciocchi, C. Masiocchi; L’Aquila/IT

B-1544 14:49
Combined uterine artery embolisation with intra-arterial chemoinfusion as a sole management for scar and cervical ectopic pregnancy
A. Elmokadem; R. Abdel-Wahab, A.A. El-Zayadi, M. ElRakhawy; Mansoura/EG

B-1545 14:57
Transperineal ultrasound-guided laser ablation for the treatment of benign prostatic hyperplasia in interventional radiology: preliminary results
G. Patelli; A. Ranieri, G.A. Paganelli, A. D’Alessio, F. Besana, G. Mauro, C.M. Pacelìa, 1Seriate/IT, 1Osio Sotto-Zingonia/IT, 1Milan/IT, 1Albano Laziale/IT

B-1546 15:05
MRI-guided percutaneous transgluteal ablation of unilateral prostate carcinoma: initial experiences and results
J. Figiel, A. Koenig, A. Hegele, A. Mahnken; Marburg/DE

B-1547 15:13
MR-guided focused ultrasound treatment for management of organ-confined intermediate-risk prostate cancer: evaluation of safety and effectiveness
S. Bednarova; A. Napoli, R. Scipione, S. Dababou, C. Marrocchio, H.-P. Erasmus, V.Panebianco, C. Catalano, Rome/IT

B-1548 15:21
MR-guided in-bore prostate biopsy for clinically significant cancer detection in patients with negative TRUS biopsies and rising PSA level N. Matinyan2; V. Kuplevatsky1, I. Minasyan1, M. Cheraskhin1, N. Berezina1, D. Sahakyan1; 1Yerevan/AM, 2St. Petersburg/RU

14:00 - 15:30 Room O

Chest

SS 1904a
Pulmonary vessels
Moderators:
F. Pontana; Lille/FR
J. Vlahos; London/UK

B-1549 14:00
Automated volumetry of peripheral pulmonary vessels based on CT angiography in suspected pulmonary hypertension C. Heilig1, C. Effenberg1, B. Egeniaut1, M. Messerini1, E. Grünig1, H.-U. Kauczor1, C. Heussel1, F. Rengier1; Heidelberg/DE, 1Zurich/CH

B-1550 14:08
CT evaluation of small pulmonary vessel area in patients with bronchiolitis obliterans syndrome after lung transplantation Y. Sato, J. Tominaga, N. Mori, Y. Matsuda, Y. Okada, K. Takase; Sendai/JP

B-1551 14:16
High-resolution computerised tomography (HRCT) features of Group 1 pulmonary arterial hypertension (PAH): a case series of 21 lung transplant patients M.S. Juarez-Garcia1, E. Pallisa1, M. Lopez-Meseguer1, D. Varona Porres1, A.L. Sanchez Martinez1, E. Maciag1, L. Cabanzo Campos1, J. Andreu2, O. Persiva Morenza2, G. Mauri3, C.M. Pacella4; 1Albano Laziale/IT, 2L’Aquila/IT, 3Bologna/IT, 4Osio Sotto-Zingonia/IT

B-1552 14:24
Dual-energy CT (DECT) lung perfusion in chronic thromboembolic pulmonary hypertension (CTEPH): diagnostic accuracy and concordance with radionuclide scintigraphy M. Masy, J. Giordano, C. Hossein-Foucher, G. Petyt, J. Remy, M. Remy-Jardin; Lille/FR

B-1553 14:32
SS 1907a
Prostate biopsy and (post-)intervention
Moderators:
A. Baur; Berlin/DE
V. Panebianco; Rome/IT

B-1560 14:00
A prospective study to compare the outcomes of MRF-TB and 12-core SB in different PSA groups
J.-M. Xu, Y.Q. Chen; Shanghai/CN

B-1561 14:08
The accuracy of MRI/TRUS fusion biopsy in detection of high-risk prostate cancer vs random biopsies: advertisement or necessary innovation?
F. Kossoy, I.I. Abdulllin, B. Kamolov, B. Olimov, O. Orlov, V. Panov, I. Tyurin, E. Fedoreno, V. Kapustin; Moscow/RU, Moscow Oblast/RU

B-1562 14:16
MRI/US fusion prostate biopsy a single-centre experience
C. Cicero, E. Lieve, A. Casarin, B. De concilio, A. Celia, L. Genesio, A. Guariane, Bassano del Grappa/IT

B-1563 14:24
Transrectal ultrasound-guided targeted biopsy of transition zone prostate cancer: usefulness of across midline sign
S. Park, S. Won; Seoul/KR

B-1564 14:32
In-bore biopsies of the prostate assisted by a remote-controlled manipulator at 1.5 T
N.P. Linder, A. Schaudinn, T.-O. Petersen, R. Stange, M. Moche, P. Stumpf, T. Kahn, H. Busse, Leipzig/DE

B-1565 14:40
Experience with MRI guided prostate biopsies using the 3D Navigo system in an oncologic referral center
S. Heijmink, R. van den Bergh, E. Wit, H. van der Poel; Amsterdam/NL

B-1566 14:48
Typical MR imaging findings after HIFU-hemiablation of the prostate
N.P. Linder, J. Michaelis, J. Gawiltza, H. Busse, P. Ho-Thi, T. Kahn, P. Stumpf, R. Ganzer, A. Schaudinn; Leipzig/DE, Bad Tölz/DE

B-1567 14:56
Six months follow-up of periprostatic nerve plexus changes after robot-assisted radical prostatectomy using MRI tractography.
A. Cybulski, S. Brancato, V. Di Paola, R. Negrelli, E. Boninsegna, M. Catania, A. Tafuri, S. Siracusano, R. Pozzi Muccioli; Verona/IT

B-1568 15:04
Predicting and improving postprostatectomy urinary continence by pelvic floor measures on MR
S. Heijmink, N. Grivas, C. Tilleker, R. van der Roest, E. van Muliekem, H. van der Poel; Amsterdam/NL

B-1569 15:12
Correlation of short- and long-term urinary continence after radical prostatectomy with findings of preoperative multiparametric prostate MRI

B-1570 15:20
Additional value of early imaging of 68Ga-PSMA-11 PET/CT in the assessment of local recurrence in prostate cancer patients with biochemical relapse
C. Uprimny, A. Kroiss, C. Decristoforo, J. Fritz, B. Niüca, W. Horninger, I. Virgolini; Innsbruck/AT

SS 1904b
MRI in chest oncology
Moderators:
J. Broncano; Córdoba/ES
J. Ley-Zaporozhan; Munich/DE

B-1571 14:00
Lung cancer screening with MRI: application of Lung-RADS in the first two screening rounds
M. Meier-Schroers, R. Homsi, H. Schild, D. Thomas; Bonn/DE

B-1572 14:08
The value of diffusion-weighted imaging based on monoexponential and biexponential model in the diagnosis of benign and malignant lung nodules and masses
J. Jiang, L. Cui, X. Gu, Q. Hong, Y. Fu, G. Xu; Yancheng/CN, Nantong/China, Suzhou/China

B-1573 14:16
Computed diffusion-weighted image: utility for differentiation of malignant from benign pulmonary nodules as compared with actually obtained diffusion-weighted image
**B-1574 14:24**
Functional MRI evaluation of b-2000 images improve mediastinal lesion characterisation  

**B-1575 14:32**
Characterisation of mediastinal anterior masses with magnetic resonance imaging (MRI) using diffusion-weighted imaging  
M. Gavrel, E. Auclin, C.S. Balleyguier, C. Caramella; Villejuif/FR

**B-1576 14:40**
Quantitative analysis of diffusion weighted magnetic resonance imaging for characterization of mediastinal lymphadenopathy  
A. Sudarkina, A. Dergilev, N. Gorbunov; Nnovosibirsk/RU

**B-1577 14:48**
Value of computed tomography perfusion and diffusion-weighted imaging in predicting the efficacy of non-small cell lung cancer chemoradiotherapy  
L. Cui; Pisa/IT

**B-1578 14:56**
Multiparametric approach by dynamic contrast-enhanced perfusion MRI with FDG-PET/CT: capability for conservative therapeutic response prediction in NSCLC patients  
O. Weinheimer, C.J. Galban, T.E. Robinson, M. Wielpütz, C. Heussel; Linköping/SE

**B-1579 15:04**
Blood volume-based MR imaging with ultra-short TE: capability for prediction of postoperative lung function in NSCLC patients as compared with CT and perfusion SPECT  
O. Pianykh; Newton Highlands, MA/US

**B-1580 15:12**
A 3T MRI with radial TI-weighted 3D spoiled gradient echo sequence can clarify pleural invasion classification of primary lung cancer  
H. Lee, W. Kwon, Y. Zhang; Wonju/KR

**B-1581 15:20**
MRI with DWI vs FDG-PET/MRI vs FDG-PET/CT vs conventional radiological examination: capability for TNM staging in patients with malignant pleural mesothelioma  
M. Gavrel, E. Auclin, C.S. Balleyguier, C. Caramella; Villejuif/FR

**B-1582 14:00**
Structured reporting supports junior readers and improves PI-RADS conformity of multi-parametric MRI reports of the prostate-based on cross-lingual RADLEX annotations  
M.E. Maros, B. Kämpgen, A. Förster, C. Groden, W.H. Sommer, S.O. Schönberg, T. Henzler, H. Wenz, M. Mannheim, DE; Rimpar/DE, Munich/DE

**B-1583 14:08**
Opportunities in automatically annotating radiology reports with RadLex terms  

**B-1584 14:16**
Quality assurance in CT: using automated CT dose monitoring software to implement updated national diagnostic reference levels  

**B-1585 14:24**
Investigating potential gadolinium toxicity to gadoterate meglumine (Dotarem) in local renally insufficient adult and paediatric populations using bioinformatics data linkage  
L.K. Young, S. Matthew, G. Houston; Dundee/UK

**B-1586 14:32**
Machine learning in radiology operations management  
O. Planyk; New York, NY/US

**B-1587 14:40**
Automated assessment of Sarcopenia on CT studies  
J.E. Burns, J. Yao, J. Chen, R.M. Summers; Orange, CA/US, Bethesda, MD/US

**B-1588 14:48**
COPD phenotyping with parameter response maps based on paired inspiratory/expiratory low-dose computed tomography  

**B-1589 14:56**
Model for improved correlation of BMD values between abdominal routine dual-energy CT data and DXA scans  
M. Woisetschlager, A. Spångeus; Linköping/SE

**B-1590 15:04**
Computer-aided detection of sonographic features for thyroid nodules and its effects on readers’ performance  
A. Chen, C.-N. Chen, H.-C. Tai, M.-H. Wu, K.-Y. Chen, M.-C. Ho, K.-J. Chang; Taipei/TW

**B-1591 15:12**
Newly developed curvelet-based noise reduction algorithm for volume CT data  
M.S. Usanov, N.S. Kulberg, A.V. Petraikin, S.P. Morozov; Moscow/RU

**B-1592 15:20**
Multiparametric magnetic resonance imaging of the prostate with computer-aided detection: non-experienced observer performance study  
G. Cappello, V. Giannini, S. Mazzetti, F. Russo, L. Vassallo, V. Doronzio, D. Regge; Turin/IT
Risk-based strategies for supplemental breast cancer screening in community radiology practice: a national prospective study (NCT02997384)
C.S. Baileyguier⁴, E. Bayou³, B. Boyer², S. Canale⁴, I. Ewenczyk-Biton¹, R. Gilles¹, L. Rotenberg¹, J. Via³, S. Delaloge⁵, Villejuif/FR, ¹Paris/FR, ²Bordeaux/FR, ³Neuilly-Sur-Seine/FR, ⁴Antony/FR

Mammographic density, age and family history: a minimally sufficient set of parameters to risk stratify average-risk women for follow-up screening

Mammographic breast density analysis with automated volumetric breast density in a single centre of Taiwan women
H.-K. Wu, W.-P. Wu; Changhua/TW

Assessing the diagnostic accuracy of a 3D functional infrared imaging as adjunct screening for women at high risk for breast cancer
M. Sklar-Levy¹, E. Friedman¹, O. Halshotk Neiman¹, A. Shalmon¹, M. Gotlieb¹, R. Faermann¹, J. Oaknin¹, D. Izhaky¹, ¹Ramat Gan/IL, ²Airport City/IL

Correlation of breast MRI screening with 3D functional infrared imaging
U. Fischer¹, J. Baum¹, J. Oaknin¹, D. Izhaky¹, ¹Göttingen/DE, ²Air Port City/IL

How early can MRI diagnosis of breast cancer be in BRCA mutated women?
A. Pecchi, G. Musacchia, M. Verrusio, R. Battista, B. Canossi, L. Cortesi, P. Torricelli, Modena/IT

Assessment of background parenchymal enhancement on breast MRI: which sequence shows the best agreement?
F. Amato¹, A. Orlando¹, M. Di Vittorio¹, M. Safina¹, T.V. Bartolotta¹, L. Bignotti¹, M. Calabrese¹, S. Tosto¹, F. Valdora¹, M. Durando¹, A. Tagliafico¹, G. Mariscotti²; ¹Ramat Gan/IL, ²Airport City/IL

Breast invasive lobular carcinoma
J. Sanchez, C. de Bazelaire, Paris/FR

How early can MRI diagnosis of breast cancer be in BRCA mutated women?
A. Pecchi, G. Musacchia, M. Verrusio, R. Battista, B. Canossi, L. Cortesi, P. Torricelli, Modena/IT

Background parenchymal enhancement in MRI, mammographic density and risk of breast cancer
F. Amato¹, A. Orlando¹, M. Di Vittorio¹, M. Safina¹, T.V. Bartolotta¹, R. Ienzi¹; ¹Palermo/IT, ²Castelianmare del Golfo/IT
**SS 1910**  
Chronic inflammatory diseases

**Moderators:**  
E. Inarejos; Esplugues de Llobregat/ES  
I. Sudor-Szopierska; Warsaw/PL

**B-1615** 14:00  
Detection of osteitis at the sacroiliac joint in patients with chronic low back pain by STIR and T2-weighted fat-suppressed turbo spin echo sequences: results from the SIMACT study  

**B-1616** 14:08  
T2-mapping of the sacroiliac joints at 1.5T: a reproducibility study  
D. Albano1, V. Chianca2, M. Galia1, R. Cuocolo2, R. Bignone1, C. Messina3, L.M. Sconfienza3, A. Brunetti2, R. Lagalla1; 1Palermo/IT, 2Naples/IT, 3Milan/IT

**B-1617** 14:16  
MRI findings of sacroiliac joint disorders in SAPHO syndrome  
X. Shao, W. Xu, C. Li, X. Zhao, W. Zhang; Beijing/CN

**B-1618** 14:24  
Sacroiliitis due to early ankylosing spondylitis, inflammatory bowel disease and Behcet's disease: could sacroiliac MRI play a role in differentiation?  
Z. Akanpour, E. Peker, F.S. Ozalp Ates, G. Sahin; Ankara/TR

**B-1619** 14:32  
Osteitis distribution on MRI of the sacroiliac joints in patients with osteitis condensans compared to axial spondyloarthritis  
K.-G. Hermann1, S. Mercan1, K. Ziegeler1, T. Diekhoff1, J. Greese1, B. Hamm1, M. Bollow1; 1Berlin/DE, 2Bochum/DE

**B-1620** 14:40  
Relative maximum apparent diffusion coefficient: a potential biomarker of disease activity in axial spondyloarthritis  
K. Lee, W. Lau, H. Tsang, C. Lau, H. Chung; Hong Kong/HK

**B-1621** 14:48  
Examination of association of inflammatory activity in psoriatic arthritis and vascular calcification metabolism based on integrated 18F PET/MRI  
N. Guobering, A. Körber, M. Forsting, L. Umutlu, A. Bockisch, K. Herrmann, T.D. Poeppel; Essen/DE

**B-1622** 14:56  
Subclinical psoriatic arthritis detection in patients with psoriatic onychopathy  
V. Linovs, M. Radzina, T. Linova, A. Rubins, S. Rubins; Riga/LV

**B-1623** 15:04  
Hypodermal adipose tissue sonoelastography for monitoring different treatment responses in patients with plaque psoriasis  
M. Guazzaroni, S. Altobelli, S. Marsico; 1Bologna/IT, 2Bologna/IT, 3Valencia/ES, 4Andria/IT

**B-1625** 15:12  
Correlation between central adiposity distribution measured by DXA and inflammatory markers in the Italian cohort of the NU-AGE project  
D. Mercatelli1, A. Santoro1, G. Guidarelli2, M. Aparisi Gomez2, G. Guglielmi2, C. Franceschi2, G. Battista1, A. Bazzocchi1; 1Bologna/IT, 2Bologna/IT, 3Valencia/ES, 4Andria/IT
### Professional issues in radiography

**B-1637 14:00**
The impact of shift work on life, psychological and physical health of radiographers: a comparison between fixed and rotating shifts


**B-1638 14:08**
Patient perceptions of radiographer communication skills in general radiology


**B-1639 14:16**
An account of silences in diagnostic radiography: a cultural quilt stitched together with the threads of social defences


**B-1640 14:24**
Job satisfaction of radiographers


**B-1641 14:32**
Evaluation of burnout syndrome in radiographers


**B-1642 14:40**
A survey on the attitude towards research among radiographers


**B-1643 14:48**
A comparative study about motivations, expectations and professional development in four European radiography programmes


**B-1644 14:56**
Where is the radiography profession heading? Plausible scenarios for the profession in Sweden in 2025

B. Bjorkman, K. Fridell, P. Tavakol Olofsson, Uppsala/SE, Hudiksvall/SE, Stockholm/SE

**B-1645 15:04**
Radiographers and non-accidental injury in children


**B-1646 15:12**
Evaluating the use of detector dose indicators in digital x-ray imaging systems

S. Lewis, T. Pieterse, L.A. Rainford, H. Lawrence, Johannesburg/ZA, Doornfontein, Johannesburg/ZA, Dublin/IE

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### Cardiac imaging: from diagnosis to prognosis

**B-1647 15:20**
Evaluation of radiation protection knowledge among hospital employees

T.O. Holter, S. Torp, J. Martinsen, Oslo/NO, Kongsberg/NO

**B-1648 14:00**
Performance of native T1 and T2 mapping cardiovascular magnetic resonance to detect myocardial oedema in patients with dilated cardiomyopathy

W. Peng, Z.-L. Li, C. Xia, Chengdu/CN

**B-1649 14:08**
The multidisciplinary “endocarditis team”: results on imaging utilisation and diagnostic and therapeutic changes in the first 100 patients


**B-1650 14:16**
Six months follow-up after triple rule-out using second-generation dual-source CT in patients with acute chest pain

M. Fusaro, G. Balestriero, A. Dorigo, G. Battistella, C. Bortolanza, G. Tressini, L. Doni, A. De Leo, G. Morana, Treviso/IT, Santa Maria di Sala/IT

**B-1651 14:24**
The prognostic value of late gadolinium enhancement in non-ischaemic dilated cardiomyopathy


**B-1652 14:32**
The feasibility of dual-energy-computed tomography in cardiac contusion imaging for mildest blunt cardiac injury

M. Kantarci, A. Levent, S. Eren, Erzurum/TR

**B-1653 14:40**
Morbus Fabry: new insights from CMR strain imaging

M.C. Halfmann, S. Benz, J. Eichstädt, A. Lollert, C. Düber, K.-F. Kreitner, T. Emrich, Mainz/DE

**B-1654 14:48**
Late gadolinium enhancement patterns in patients with hyperesinosinophilia: can CMR help identifying the aetiology?


**B-1655 14:56**
The effect of myocardial bridge on the presence and extent of coronary artery disease: case-control study

S. Papp, J. Karady, M. Kolossvary, Z. Drohni, B. Szilveszter, G. Barczi, B. Merkely, P. Mauricg-Horvat, Budapest/HU

**B-1656 15:04**
Atrial dysfunction in arrhythmogenic right ventricular cardiomyopathy: value of quantitative MR analysis in predicting atrial arrhythmias

**B-1657** 15:12
The role of cardiac magnetic resonance imaging (MRI) in the diagnostic work-up after aborted sudden cardiac death

**B-1658** 15:20
Cardiac MRI for a better identification of structural heart disease in patients with ventricular arrhythmia
D. Andreoni, S. Musthaq, G. Pontone, A.D. Annoni, A. Formenti, M.E. Mancini, E. Conte, M. Guglielmo, M. Pepi; Milan/IT

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**B-1663** 14:32
High-resolution MR imaging with small surface coil in diagnosis of slight penile lesions after penile injury
J. Guan, Y. Peng, H. Wang, Y. Guo; Guangzhou/CN

**B-1664** 14:40
Neoclitoris size and location: a preliminary pelvic MRI study
E. Serena, F. Vedovo, S. Bucci, C. Trombetta, M. Bertolotto, M.A. Cova; Trieste/IT

**B-1665** 14:48
US-guided sclerotisation of the cavernosal stumps following male-to-female sex reassignment surgery
M. Muca, M. Bertolotto, I. Zorzenon, M. Iannelli, C. Sachs, M.A. Cova; Trieste/IT

**B-1666** 14:56
Role of diffusion MR imaging and 3D/4D ultrasound in the assessment of placental insufficiency in gestational hypertension
S.A. Mansour, S.T. Hamed, S. Hosny, S.B. Elsayed; Cairo/EG

**B-1667** 15:04
Placenta accreta index: what a radiologist should know about an imaging update in detection of morbidly adherent placenta
A. Agarwal, S. Agarwal, S. Sharma, S. Chandak; Moradabad/IN

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**B-1668** 15:12
Implementing strategies for a better quality fetal MRI by technologist training and the effect on radiologist satisfaction
S. Sefidbakht, L. Mina, R. Ravanfar Haghighi, B. Zeinali, M. Saeedi-Moghadam, F. Zarei, S. Haseli; Shiraz/IR

**B-1669** 15:20
Added value of foetal MRI in evaluation of lung anomalies
S. Sefidbakht, S. Bagheri, Z. Etemadi, B. Zeinali, M. Saeedi-Moghadam, N. Asadi, H. Vafaee; Shiraz/IR

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**SS 1907b**
Genital and obstetric imaging

Moderators:
B. Ahuja; Agra/IN
F. Giganti; London/UK

**B-1660** 14:08
A comparison of testicular tissue stiffness using shear wave elastography
M.R.V. Pedersen1, H. Møller2, P. Osther1, P. Vedsted3, R. Holst4; Vejle/DK

**B-1661** 14:16
Diffusion-weighted imaging combined with ADC in the diagnosis of testicular lesions
M. Huang; Zhengzhou/CN

**B-1662** 14:24
Diffusion tensor imaging parameters in the identification of spermatogenesis in men with non-obstructive azoospermia
A. Tsili1, A. Ntorkou1,2, L.G. Astrakas1, A. Goussia1, E. Panopoulou1, J. Boban1,2, S. Brkic1, D. Lendak1, J. Ostojic1, M. Bjelan2, D. Kozic2; Novi Sad/RS, 2Sremska Kamenica/RS

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**B-1671** 14:08
Fully automated meningioma detection and segmentation using deep learning on routine multiparametric MRI

**B-1672** 14:16
23Na-MRI demonstrates a sodium gradient within gliomas as a biomarker of tumour heterogeneity
F. Zaccagna1, F. Riemer1, M.A. McLean1, J.T. Grist1, R. Schulte2, C. Watts1, S.J. Price1, M.J. Graves1, F.A. Gallagher1; Cambridge/UK, 2Munich/DE

**B-1673** 14:24
Brain aging in chronic HIV infection: a comparative multivoxel MR spectroscopy study
J. Boban1,2, S. Brkic1, D. Lendak1, J. Ostojic1, M. Bjelan1, D. Kozic2; Novi Sad/RS, 2Sremska Kamenica/RS

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**B-1674** 14:32
Empty sella and inferior sella impression are frequently associated and characteristic in patients with growth hormone-secreting pituitary adenomas
G. Bier, J.-M. Hempel, U. Ernemann, B. Bender, J. Honegger; Tübingen/DE

**B-1675** 14:40
Role of phase contrast MR CSF flowmetry study in the evaluation of normal pressure hydrocephalus
S. Kumari1, M. Mohammad Zakir1, Y. Kirubha1, K. Sudhakari1, P. Chatterjee1, R. Ranjani1, J. Kumari1, S. Kumari1, S. Khan1; Chennai/IN, 2Nagpur/IN, 3Rohtak/IN, 4New Delhi/IN, 5Patna/IN

**B-1676** 14:48
Cognitive decline in ageing and cerebrovascular reactivity assessed by ASL fMRI of perfusion
N. Boudiaf, A. Krainik, J. Warnking, J. Pietras, O. Moreaud, O. Godeau, J. Godefroy; Grenoble/FR

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**B-1677** 15:04
Comparative study of activation during color-word Stroop test and new suggested counting test performance
S. Morozova, E.I. Kremneva, Z. Gadzhieva, A.N. Sergeeva, B. Akhmetzianov, M. Zabtova, E. Kashina, M. Krotkova, L. Dobrynina; Moscow/RU
B-1678 15:04
Comparing normative subcortical volume distributions across cohorts
E.J. Vinke¹, W. Huizinga¹, M. Bergtholdt², M.A. Ikram³, W.J. Niessen⁴, F. Wenzel⁵, M.W. Vernooij²; ¹Rotterdam/NL, ²Hamburg/DE

B-1679 15:12
Are cerebral DTI changes correlated with degree of disability and cognitive dysfunction in patients with multiple sclerosis?
J. Bladowska, A. Pokryszko-Dragan, A. Banaszek, A. Zacharzewksa-Gondek, M. Nowakowska-Kotas, E. Gruszka, M. Sasiadek; Wroclaw/PL

B-1680 15:20
Optimising pre-surgical fMRI language mapping using knowledge derived from intrinsic connectivity brain networks for personalised therapy planning
L.R. Kozák¹, G. Gyebnár¹, A.G. Szabo¹, A.L. van Graan²,³, P. Barsi¹, L. Lemieux²,³, G. Rudas¹; ¹Budapest/HU, ²London/UK, ³Chalfont St. Peter/UK
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<tr>
<td>10:30</td>
<td>Clinical Trials in Radiology 1</td>
<td>A two-center phase III, randomised, controlled study of MRgFUS vs EBRT in patients with metastatic non-spinal bone disease: palliative strategy for cancer-induced bone pain</td>
<td>A. Napoli, R. Scipione, A. Leonardi, H.-P. Erasmus, S. Dababou, C. Marrocchio, C. Catalano</td>
<td>Rome/IT</td>
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<td>10:40</td>
<td>Discussant</td>
<td>M. Szczerbo-Trojanowska, Lublin/PL</td>
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<td>10:45</td>
<td>Clinical Trials in Radiology 1</td>
<td>Percutaneous microwave thermal ablation (MWA) for patients with malignant lung tumors: mid-term results of a prospective multicenter study (MALT study)</td>
<td>A. Posa, R. lezzi, F. Carchesio, A. Veltri, R. Cioni, R. Manfredi, L. Bonomo, Rome/IT, Orbassano/IT, Pisa/IT</td>
<td>Rome/IT, Orbassano/IT, Pisa/IT</td>
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<td>10:55</td>
<td>Discussant</td>
<td>F. Gleeson, Oxford/UK</td>
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<td>11:00</td>
<td>Clinical Trials in Radiology 1</td>
<td>Use of electromagnetic navigation improves performances in CT-guided interventions: a multicentric, prospective and randomised clinical trial</td>
<td>A. Mounier, R.-C. Rouchy, M. Medici, E. Chipon, A. Moreau-Gaudry, I. Bricault, Grenoble/FR</td>
<td>Grenoble/FR</td>
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<td>11:10</td>
<td>Discussant</td>
<td>T. Penzkofer, Berlin/DE</td>
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<td>11:25</td>
<td>Discussant</td>
<td>K.A. Hausegger, Klagenfurt/AT</td>
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<td>11:40</td>
<td>Discussant</td>
<td>H. Portugaller, Graz/AT</td>
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10:30 - 12:00  Sky High Stage

Cardiac

CT 6

Clinical Trials in Radiology 2

Moderators:
M. Dewey; Berlin/DE
R.L. Ehman; Rochester, MN/US

B-0595 10:30
MEDIRAD EARLY-HEART study: early clinical and biological predictors of radiotherapy-induced cardiac toxicity in breast cancer
M.-O. Bernier1, S. Jacob1, A.P.G. Crijns2, J.A. Langendijk2, R. Vliegenhart2, S.E. Combs3, M. Mayinger3, A. Eraso4, M. Fiuza5, S. Constantino Rosa Santos5, E. Moussieux1, E. Cardis6, G. Frija6;
1Fontenay-aux-Roses/FR, 2Groningen/NL, 3Munich/DE, 4Girona/ES, 5L’Hospitalet del Llobregat/ES, 6Lisbon/PT, 7Paris/FR, 8Barcelona/ES

10:40
Discussant
V.E. Sinitsyn; Moscow/RU

B-0596 10:45
Low-dose chest CT vs conventional chest x-ray prior to cardiac surgery: the CRICKET study
R.P.J. Budde1, A.M. den Harder2, T. Leiner2, P.A. de Jong3, J. Karady1, C. Chun1, A. Bogers1, P. Horvat-Maurovich1, L. de Heer1; 1Rotterdam/NL, 2Utrecht/NL, 3Budapest/HU

10:55
Discussant
J. Bremerich; Basle/CH

B-0597 11:00
Computed tomography (CTA) vs invasive coronary angiography (ICA) in patients with atypical chest pain and suspected coronary artery disease (CAD): gender analysis of a randomised study
M. Bosserdt1, S. Feger1, M. Rief1, D. Preuß1, P. Ibes2, P. Martus2, K. Kofoed3, M. Laule1; 1Berlin/DE, 2Tübingen/DE, 3Copenhagen/DK

11:10
Discussant
R. Marang; Rome/IT

B-0598 11:15
Effect of coronary computed tomography vs invasive coronary angiography on statin adherence and serum lipid levels in patients with atypical chest pain: a randomised controlled trial
L. Elzenbeck1, S. Feger1, P. Martus2, N. Rieckmann3, K. Stangl1, A. Marek1, H. Dregger1, M. Beling1, E. Zimmermann1, M. Rief1, B. Chow4, P. Maurovich-Horvat1, M. Laule1; 1Berlin/DE, 2Tübingen/DE, 3Copenhagen/DK, 4Ottawa, ON/CA, 5Budapest/HU

11:25
Discussant
R. Vliegenthart; Groningen/NL

B-0599 11:30
The role of intraprostatic antibiotic injection for reducing infectious complications of transrectal ultrasound-guided biopsy
F. Shobeirian, M. Darabi, S.M. Bagheri, M. Zare Mehrjardi, A. Rezayi; Tehran/IR

11:39
Discussant
R.H. Oyen; Leuven/BE
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<tr>
<td>10:30 - 12:00</td>
<td>Sky High Stage</td>
<td>Clinical Trials in Radiology 3</td>
<td>Moderators: M. Dewey; R.L. Ehman; M. Boers; H. Marquering; A. Majoie; W. Van Zwaan</td>
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<td>B-1007 Digital breast tomosynthesis vs digital mammography: recalibrate by mammographic density, interim analyses</td>
<td>H. Aase, Å.S. Holen, B. Hanestad, S. Hofvind</td>
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<td>B-1010 An international randomised controlled trial of two interventions for reducing doses for computed tomography through audit feedback and sharing best practices</td>
<td>R. Smith-Bindman, P. Chu, Y. Wang, R. Chung, A. Einstein, D. Miglioretti, D. Santoro, Y. Wang, D. Miglioretti</td>
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<td>B-1011 Prophylactic hydration to prevent contrast-induced nephropathy (AMACING): long-term results of a prospective, randomised, controlled, non-inferiority trial</td>
<td>E.C. Nijssen</td>
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LIST OF AUTHORS & CO-AUTHORS (F)
Dessouky R.A.K.: B–0071, B–1126
Destito A.: B–0940
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Di Leo G.: B–0503, B–1189
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Di Luzio M.: B–0829, B–1539, B–1542, B–1543
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Di Martino M.: B–0429, B–0608, B–0611, B–0843
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Di Vittorio M.L.: B–1292, B–1614, B–1630
Diaccon T.: B–0343
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Dierckx D.: B–0362
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Dijkstra H.: B–1109
Dijkstra S.: B–0748
Dillenseger J.-P.: A–424
Dill A.: B–0305
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