



ECR2019 the bigger picture

February 27 - March 3 | Vienna

Best Scientific Paper Presentations

Abdominal and Gastrointestinal (Abdominal Viscera)

Differentiating and segmenting isoattenuating gallstones from bile with dual-layer spectral CT: an ex vivo phantom study (B-0391)

T.C. Soesbe, M.A. Lewis, Y. Xi, T. Browning, L. Ananthakrishnan, R.E. Lenkinski, J.R. Leyendecker; *Dallas, TX/US*

Abdominal and Gastrointestinal (GI Tract)

Prognostic value of tumour regression grade on MR in rectal cancer: a large-scale, single-centre experience (B-1342)

H. Yoen, S.H. Kim, J.H. Yoon, B.Y. Hur, J.H. Kim, H.E. Park, H. Oh, J.K. Han; *Seoul/KR*

Breast

Longterm review of recurrence after breast cancer treatment: data from breast cancer/tumour type analysis (B-1803)

M. Lavens, H. Wildiers, P. Neven, I. Nevelsteen, A. Smeets, M. Keupers, R.M.A. Prevos, A. Laenen, C. Van Ongeval; *Leuven/BE*

Cardiac

Biological versus mechanical aortic valve prostheses: an in vitro 4D flow MRI comparison of haemodynamics (B-0202)

T.H. Oechtering, A. Panagiotopoulos, M. Sieren, M. Scharfschwerdt, B. Fujita, S. Ensminger, H.-H. Sievers, J. Barkhausen, A. Frydrychowicz; *Lübeck/DE*

Chest

Dual-energy CT (DECT) lung tumour perfusion: can we distinguish features that can reflect prognosis? (B-0778)

J. Dewaguet¹, M.-C. Copin¹, J.-B. Faivre¹, V. Deken¹, M. Sedlmair², J. Remy¹, M. Remy-Jardin¹; ¹Lille/FR, ²Forchheim/DE

Imaging Informatics

ePAD: A platform to enable machine learning and AI application development in medical imaging (B-0906)

D.L. Rubin, M.U. Akdogan, C. Altindag, E. Alkim; *Stanford, CA/US*

Artificial Intelligence and Machine Learning

Real-time patient-specific CT dose estimation for single- and dual-source CT using a deep convolutional neural network (B-0013)

J. Maier, S. Dorn, E. Eulig, S. Sawall, M. Kachelrieß; *Heidelberg/DE*

Hybrid, Molecular and Translational Imaging

In vivo tracking of tumour-derived exosomes correlates with premetastatic cell infiltration to target-sites of metastasis (B-1125)

M. Gerwing, V. Kocman, A. Helfen, M. Stölting, L. Greune, A. Schmidt, W. Heindel, M. Wildgruber, M. Eisenblaetter; *Münster/DE*

Genitourinary

A mathematical-descriptor of tumour mesoscopic structure from CT images annotates prognostic and molecular phenotypes of epithelial ovarian cancer (B-1387)

A.G. Rockall¹, P. Lee¹, H. Lu¹, M.A. Arshad¹, G. Avesani², E. Curry¹, A. Thornton¹, F. Kanavati¹, C. Fotopoulou¹, E.O. Aboagye¹; ¹London/UK, ²Mantova/IT

Head and Neck

Value of four stage vestibular hydrops grading and asymmetric perilymphatic enhancement in the diagnosis of Ménière's disease on MRI (B-0290)

A. Bernaerts¹, R. Vanspauwen¹, C. Blaivie¹, J. van Dinther¹, A. Zarowski¹, F. Wuyts¹, F.E. Offeciers¹, J.W. Casselman², B. de Foer¹; ¹Antwerp/BE, ²Bruges/BE

Interventional Radiology

Preoperative tibial artery run off score differences before endovascular or bypass surgery in patients with long popliteal artery lesions (B-0957)

A. Kratovska, S. Ponomarjova, P. Ivanova; *Riga/LV*

Musculoskeletal

Lumbar nerve root blocks using MR: the effectiveness and safety of ultrasound/MRI fusion image guidance (B-1290)

D.J. Wilson, G.M. Allen, S.A. Bullock, J. Denton; *Oxford/UK*

Neuro

Structural integrity impact of focused ultrasound thalamotomy and correlation to behavioural outcomes for tremor disorders (B-1557)

G. Zur, O. Lesman-Segev, I. Schlesinger, A. Eran, I. Kahn; *Haifa/IL*

Paediatric

What does perinatal autopsy add after antenatal ultrasound and post-mortem MRI investigations (B-0606)

S.C. Shelmerdine, O.J. Arthurs, A. Wade, R. Jones, W. Norman, A. Taylor, N.J. Sebire, L.S. Chitty; *London/UK*

Physics in Medical Imaging

Automated image quality assessment in CT using a 3D printed lung vessel phantom and structural similarity index analysis (B-0137)

I. Hernandez-Giron¹, R. Schippers², J.M. den Harder³, G.J. Streekstra³, W.J.H. Veldkamp¹; ¹Leiden/NL, ²The Hague/NL, ³Amsterdam/NL

Radiographers

Adaptive statistical iterative reconstruction for computed tomography of the spine (B-1489)

M. Tsuda; *Yonago/JP*

Vascular

Magnetic particle imaging: artefact-free imaging of the in-stent lumen of coronary stents (B-0498)

F. Wegner, T. Friedrich, A. von Gladiss, T. M. Buzug, J. Barkhausen, J. Haegele; *Lübeck/DE*

Oncologic Imaging

Does PET/MR improve lesion detection in oncology: a prospective unicentre study in 1003 examinations (B-1461)

B.M. Schaarschmidt¹, O. Martin², J. Kirchner², J. Grueneisen¹, P. Heusch², M. Forsting¹, G. Antoch², K. Herrmann¹, L. Umutlu¹; ¹Essen/DE, ²Düsseldorf/DE

Emergency Imaging

Comparing emergency department disposition of abdominal tomogram to abdominal x-ray (B-0277)

J.Y. Lee, S. Sabbah, P. Rogalla; *Toronto, ON/CA*