

Publikationen 2016

Klinik und Poliklinik für Diagnostische und Interventionelle Radiologie
UKE

Originalien

Avanesov M, Weinrich JM, Kraus T, Derlin T, Adam G, Yamamura J, Karul M. MDCT of acute pancreatitis: Intraindividual comparison of single-phase versus dual-phase MDCT for initial assessment of acute pancreatitis using different CT scoring systems. Eur J Radiol. 2016 Nov;85(11):2014-2022.

Avanesov M, Derlin T. Multimodal imaging of breast cancer recurrence: Prospective intraindividual comparison of ¹⁸F-FDG PET/CT, contrast-enhanced CT, and bone scintigraphy. Radiologe. 2016 Oct 18. [Epub ahead of print]

Bannas P, Bookwalter CA, Ziemslewicki T, Motosugi U, Munoz Del Rio A, Potretzke TA, Nagle SK, Reeder SB. Combined gadoxetic acid and gadofosveset enhanced liver MRI for detection and characterization of liver metastases. Eur Radiol. 2017 Jan;27(1):32-40.

Behzadi C, Welsch GH, Laqmani A, Henes FO, Kaul MG, Schoen G, Adam G, Regier M. The immediate effect of long-distance running on T2 and T2* relaxation times of articular cartilage of the knee in young healthy adults at 3.0 T MR imaging. Br J Radiol. 2016 Aug;89(1064):20151075. doi: 10.1259/bjr.20151075.

Behzadi C, Welsch GH, Laqmani A, Henes FO, Kaul MG, Schoen G, Adam G, Regier M. Comparison of T2* relaxation times of articular cartilage of the knee in elite professional foorball players and age-matched amateur athletes. Eur J Radiol. Vol. 86, p. 105-111

Berliner C, Tienken M, Frenzel T, Kobayashi Y, Helberg A, Kirchner U, Klutmann S, Beyersdorff D, Budäus L, Wester HJ, Mester J, Bannas P. Detection rate of PET/CT in patients with biochemical relapse of prostate cancer using [(68)Ga]PSMA I&T and comparison with published data of [(68)Ga]PSMA HBED-CC. Eur J Nucl Med Mol Imaging. 2016 Nov 28 [Epub ahead of print] PMID: 27896369

Busch JD, Herrmann J, Adam G, Habermann CR. Radiologically inserted gastrostomy: differences of maintenance of balloon- vs. loop-retained devices. Scand J Gastroenterol. 2016 Dec;51(12):1423-1428.

Busch JD, Vens M, Herrmann J, Adam G, Ittrich H. Material Failure of Silicone Catheter Lines: A Retrospective Review of Partial and Complete Ruptures in 553 Patients. *AJR Am J Roentgenol.* 2016 Nov 8:1-6. [Epub ahead of print]

Guerreiro H., Burandt E., Mahner S., Regier M.; Recurrent breast lesion in a patient with systemic lupus erythematosus – A radiological review and case report; *Eurorad.* 2016 July; Case 13799. URL: <http://www.eurorad.org/case.php?id=13799> DOI: 10.1594/EURORAD/CASE.13799

Hammel A, Bannas P, Henes FO. Superinfection of a Pericardial Hydatid Cyst Leading to Sepsis and Multi-Organ Failure. *Rofo.* 2016 Oct;188(10):959-61.

Henes FO, Pickhardt PJ, Herzyk A, Lee SJ, Motosugi U, Derlin T, Lubner MG, Adam G, Schön G, Bannas P. CT angiography in the setting of suspected acute mesenteric ischemia: prevalence of ischemic and alternative diagnoses. *Abdom Radiol (NY).* 2016 Nov 24. [Epub ahead of print].

Herrmann J, Ittrich H, Kaul MG, Tozakidou M, Bohm M, Oh J, Adam G. Functional assessment of the kidneys in a 10 month-old child with renal artery stenosis by intravoxel incoherent motion. *Nephrology* 2016 (in Print): DOI:10.1111/nep.12896

Jung C, Salamon S., Hofmann M., Kaul MG, Adam G, Ittrich H, Knopp T., MPI as high temporal resolution imaging technique for in vivo bolus tracking of Ferucarbotran in mouse model. *Proc. SPIE* 9788, Medical Imaging 2016: Biomedical Applications in Molecular, Structural, and Functional Imaging, 97880V (29 March 2016); doi: 10.1117/12.2216660

Keller S, Ittrich H, Schramm C, Lohse AW, Amling M, Adam G, Yamamura J. Diffusion-weighted MRI for detection of hepatic osteodystrophy in primary sclerosing cholangitis: a comparison study with dual-energy X-ray absorptiometry. *Jpn J Radiol.* 2016 Oct;34(10):677-683.

Keller S, Inai R, Sato S, Tada A, Adam G, Yamamura J, Kanazawa S. Thallium-201 Uptake of Giant Cell Tumor: One Step Toward the Differential Diagnosis to Atypically Presenting Osteosarcoma. *AJR Am J Roentgenol.* 2016 Oct 11:1-9. [Epub ahead of print]

Kording F, Yamamura J, Lund G, Ueberle F, Jung C, Adam G, Schoennagel BP. Doppler Ultrasound Triggering for Cardiovascular MRI at 3T in a Healthy Volunteer Study. *Magnetic Resonance in Medical Sciences.* 2016; doi:10.2463/mrms.mp.2015-0104

Laqamani A, Avanesov M, Butscheidt S, Kurfürst M, Sehrn S, Schmidt-Holtz J, Derlin T, Behzadi C, Nagel HD, Adam G, Regier M. Comparison of image quality and visibility of normal and abnormal findings at submillisievert chest CT using filtered back projection, iterative model reconstruction (IMR) and iDose4TM. *Eur J Radiol.* 2016 Nov;85(11):1971-1979.

Laqmani A, Kurfürst M, Butscheidt S, Sehnr S, Schmidt-Holtz J, Behzadi C, Nagel HD, Adam G, Regier M. CT Pulmonary Angiography at Reduced Radiation Exposure and Contrast Material Volume Using Iterative Model Reconstruction and iDose4 Technique in Comparison to FBP. PLoS One. 2016 Sep 9;11(9):e0162429.

Laqmani A, Klink T, Quitzke M, Credner DD, Adam G, Lund G. Accuracy of Coronary Plaque Detection and Assessment of Interobserver Agreement for Plaque Quantification Using Automatic Coronary Plaque Analysis Software on Coronary CT Angiography. Fortschr Röntgenstr. 2016 Oct;188(10):933-9.

Laqmani A, Veldhoen S, Dulz S, Derlin T, Behzadi C, Schmidt-Holtz J, Wassenberg F, Sehner S, Nagel HD, Adam G, Regier M. Reduced-dose abdominopelvic CT using hybrid iterative reconstruction in suspected left-sided colonic diverticulitis. Eur Radiol. 2016 Jan;26(1):216-24.

Regier M, Petersen JP, Hamurcu A, Vettorazzi E, Behzadi C, Hoffmann M, Großterlinden LG, Fensky F, Klatte TO, Weiser L, Rueger JM, Spiro AS. High incidence of osteochondral lesions after open reduction and internal fixation of displaced ankle fractures: medium-term follow-up of 100 cases. Injury. 2016 Mar;47(3):757-61.

Salamon J, Hofmann M, Jung C, Kaul MG, Werner F, Them K, Reimer R, Nielsen P, Vom Scheidt A, Adam G, Knopp T, Ittrich H. Magnetic Particle / Magnetic Resonance Imaging: In-Vitro MPI-Guided Real Time Catheter Tracking and 4D Angioplasty Using a Road Map and Blood Pool Tracer Approach. PLoS One. 2016 Jun;11(6):e0156899

Them K*, Salamon J*, Szwargulski P, Sequeira S, Kaul MG, Lange C, Ittrich H, Knopp T. Increasing the sensitivity for stem cell monitoring in system-function based magnetic particle imaging. Phys Med Biol. 2016 May;61(9):3279-90. (*both authors contributed equally)

Sauer M, Degen O, Beyersdorff D. BCG-assoziierte Urogenitaltuberkulose nach Harnblasenkarzinom. *Röfo*. 2016 (8):782 Aug;188-3.

Spink C, Avanesov M, Schmidt T, Grass M, Schoen G, Adam G, Bannas P, Koops A. Radiation dose reduction during transjugular intrahepatic portosystemic shunt implantation using a new imaging technology. European Journal of Radiology 2016 [Epub ahead of print]

Spink C, Berliner C, Bannas P. Mediale Schenkelhalsfraktur bei Klippel-Trenaunay-Syndrom: CT-Angiografie entscheidend für Therapie. Fortschr Röntgenstr 2016; 188(10): 961-963

Veldhoen S, Schöllchen M, Hanken H, Precht C, Henes FO, Schön G, Nagel HD, Schumacher U, Heiland M, Adam G, Regier M. Performance of cone-beam computed tomography and multidetector computed tomography in diagnostic imaging of the midface: A comparative study on Phantom and cadaver head scans. Eur Radiol. 2016 May 11

Wehbe MS, Yamamura J, Fischer R, Grosse R, Berliner C, Graessner J, Lund G, Adam G, Schoennagel BP. Left atrial active contractile function parameters assessed by cardiac MR are sensitive to myocardial iron. *J Magn Reson Imaging*. 2016 Jul 26 doi: 10.1002/jmri.25396. [Epub ahead of print]

Weinrich M.J, Avanesov M. Follow-up for subsolid pulmonary nodules with low-dose CT : Evidence-based scheme for participants of a bronchial carcinoma screening. *Der Radiologe*. 2016 Jun;56(7):577-578

Well L, Avanesov M. Ectopic ductus Bellini carcinoma of the adrenal gland: a rare differential malignant adrenal gland tumors diagnosis. *RöFo*. 2016 Feb; 188(2):206-8.

Orginalien in Kooperation mit anderen Kliniken

Abramowski P, Krasemann S, Ernst T, Lange C, Ittrich H, Schweizer M, Zander AR, Martin R, Fehse B. Mesenchymal Stromal/Stem Cells Do Not Ameliorate Experimental Autoimmune Encephalomyelitis and Are Not Detectable in the Central Nervous System of Transplanted Mice. *Stem Cells Dev* 2016; 25: 1134-1148

Ahlawat S, Fayad LM, Khan MS, Bredella MA, Harris GJ, Evans DG, Farschtschi S, Jacobs MA, Chhabra A, **Salamon J**, Wenzel R, Mautner VF, Dombi E, Cai W, Plotkin SR, Blakeley JO. Whole Body MRI Committee for the REiNS International Collaboration; REiNS International Collaboration Members 2016. *Neurology*. 2016 Aug 16;87(7 Suppl 1):S1-9.

Becker A, Hickmann D, Hansen J, Meyer C, Rink M, Schmid M, Eichelberg C, Strini K, Chromecki T, Jesche J, Regier M, Randazzo M, Tilki D, Ahyai S, Dahlem R, Fisch M, Zigeuner R, Chun FK. Critical analysis of a simplified Fuhrman grading scheme for prediction of cancer specific mortality in patients with clear cell renal cell carcinoma--Impact on prognosis. *Eur J Surg Oncol*. 2016 Mar;42(3):419-25.

Breyer SR, Muschol N, Schmidt M, Rupprecht M, Babin K, Herrmann J, Stücker R. Hip Morphology in MPS-1H Patients: An MRI-based Study. *J Pediatr Orthop*. 2016 Sep 15. [Epub ahead of print] PMID: 27636911

Bohnen S, Radunski U.K., Lund GK, Tahir E, Avanesov M, Stehning C, Schnackenburg B, Adam G, Blankenberg S, Muellerleile K. T1 Mapping Cardiovascular Magnetic Resonance Imaging to Detect Myocarditis - Impact of Slice Orientation on the Diagnostic Performance. *European Journal of Radiology*. [Ahead of print]

Biermann D, Eder A, Arndt F, Seoudy H, Reichenspurner H, Mir T, Riso A, Kozlik-Feldmann R, Peldschus K, Kaul MG, Schuler T, Krasemann S, Hansen A, Eschenhagen T, Sachweh JS. Towards a Tissue-Engineered Contractile Fontan-Conduit: The Fate of Cardiac Myocytes in the Subpulmonary Circulation. *PLOS ONE* 2016; 11(11):e0166963

Danquah W, Meyer-Schwersinger C, Rissiek B, Pinto C, Serracant-Prat A, Amadi M, Iacenda D, Knop JH, Hammel A, Bergmann P, Schwarz N, Assunção J, Rotthier W, Haag F, Tolosa E, Bannas P, Boué-Grabot E, Magnus T, Laeremans T, Stortelers C, Koch-Nolte F. Nanobodies that block gating of the P2X7 ion channel ameliorate inflammation. *Sci Transl Med*. 2016 Nov 23;8(366):366ra162.

Denzer UW, Sioulas AD, Abdulkarim M, Groth S, Rosch T, Busch P, Izicki J, Ittrich H, Adam G, Schachschal G. Endoscopic ultrasound-guided drainage of abdominal fluid collections after pancreatic surgery: Efficacy and long-term follow-up. *Z Gastroenterol* 2016; 54: 1047-1053

Derlin T, Salamon J, Laqmani A. Value of (99m)Tc-Techneges SPECT/CT for Localization of Alveolar-pleural Fistulas. *Nucl Med Mol Imaging*. 2016 Jun;50(2):164-5.

Derlin T, Alchalby H, Bannas P, Laqmani A, Ayuk F, Trivai I, Kreipe H, Bengel F, Kröger N. Serial 18F-FDG PET for Monitoring Treatment Response After Allogeneic Stem Cell Transplantation for Myelofibrosis. *J Nucl Med* 2016 57:1556-1559

Fluschnik N, Lund G, Becher PM, Blankenberg S, Muellerleile K. Fulminant isolated cardiac sarcoidosis with pericardial effusion and acute heart failure: Challenging aspects of diagnosis and treatment. *World J Clin Cases*. 2016 Mar 16;4(3):76-80. doi: 10.12998/wjcc.v4.i3.76. PubMed PMID: 26989672; PubMed Central PMCID: PMC4792168

Frenzel T, Kaul MG, Ernst TM, Salamon J, Jäckel M, Schumacher U, Krüll A. Magnetic resonance imaging for precise radiotherapy of small laboratory animals. *Z Med Phys*. 2016 Jun:S0939-3889(16)30033-2

Heits N, Mueller L, Koops A, Koops S, Herrmann J, Hendricks A, Kabar I, Arlt A, Braun F, Becker T, Wilms C. Limits of and Complications after Embolization of the Hepatic Artery and Portal Vein to Induce Segmental Hypertrophy of the Liver: A Large Mini-Pig Study. *Eur Surg Res*. 2016;57(3-4):155-170.

Hess T, Böhmer R, Arndt F, Lorber G, Herrmann J, Püschen K, Kerner T. Case Report - Bilateral humeral intraosseous access for CPR in a 3-years-old child]. *Anasthesiol Intensivmed Notfallmed Schmerzther*. 2016 Jul;51(7-08):468-74. doi: 10.1055/s-0042-110237. PMID: 27479261

Klatt N, Scherschel K, Schad C, Lau D, Reitmeier A, Kuklik P, Muellerleile K, Yamamura J, Zeller T, Steven D, Baldus S, Schäffer B, Jungen C, Eickholz C, Wassilew K, Schwedhelm E, Willems S, Meyer C. Development of nonfibrotic left ventricular hypertrophy in an ANG II-induced chronic ovine hypertension model. *Physiol Rep*. 2016 Sep;4(17). pii: e12897. doi: 10.14814/phy2.12897.

Kjørstad Å, Regier M, Fiehler J, Sedlacik J. A decade of lung expansion: A review of ventilation-weighted ¹H lung MRI. Z Med Phys. 2016 Aug 10. pii: S0939-3889(16)30061-7.

Li J, Kandas A, Ittrich H, Koops A, Achilles EG, Fischer L, Nashan B. Avoid "All-Touch" by Hybrid ALPPS to Achieve Oncological Efficacy. Annals of surgery 2016; 263: e6-7

Noll J, Helk E, Fehling H, Bernin H, Marggraff C, Jacobs T, Huber S, Pelczar P, Ernst T, Ittrich H, Otto B, Mittrucker HW, Holscher C, Tacke F, Bruchhaus I, Tannich E, Lotter H. IL-23 promotes immunopathology and prevents IL-13-dependent tissue repair associated with Ly6C monocytes in Entamoeba histolytica-induced liver damage. J Hepatol 2016, DOI: 10.1016/j.jhep.2016.01.013

Meyer M, Fehling H, Matthiesen J, Lorenzen S, Schuldt K, Bernin H, Zaruba M, Lender C, Ernst T, Ittrich H, Roeder T, Tannich E, Lotter H, Bruchhaus I. Overexpression of Differentially Expressed Genes Identified in Non-pathogenic and Pathogenic Entamoeba histolytica Clones Allow Identification of New Pathogenicity Factors Involved in Amoebic Liver Abscess Formation. PLoS Pathog 2016; 12: e1005853

Münch J, Avanesov M, Bannas P, Säring D, Krämer E, Mearini G, Carrier L, Suling A, Lund G, Patten M. Serum Matrix Metalloproteinases as Quantitative Biomarkers for Myocardial Fibrosis and Sudden Cardiac Death Risk Stratification in Patients With Hypertrophic Cardiomyopathy. J Card Fail. 2016 Oct;22(10):845-50.

Pelczar P, Witkowski M, Perez LG, Kempski J, Hammel AG, Brockmann L, Kleinschmidt D, Wende S, Haueis C, Bedke T, Witkowski M, Krasemann S, Steurer S, Booth CJ, Busch P, König A, Rauch U, Benten D, Izicki JR, Rösch T, Lohse AW, Strowig T, Gagliani N, Flavell RA, Huber S. A pathogenic role for T cell-derived IL-22BP in inflammatory bowel disease. Science. 2016 Oct 21;354(6310):358-362.

Radunski UK, Lund GK, Säring D, Bohnen S, Stehning C, Schnackenburg B, Avanesov M, Tahir E, Adam G, Blankenberg S, Muellerleile K. T1 and T2 mapping cardiovascular magnetic resonance imaging techniques reveal unapparent myocardial injury in patients with myocarditis. Clin Res Cardiol. 2016 Jul 7. [Epub ahead of print]

Rolvien T, S. Butscheidt S, Herrmann J, Pueschel KM. Methodological approach for the histological comparison between rickets and child abuse. Rechtsmedizin 07/2016; 26(4). DOI:10.1007/s00194-016-0108-z

Schönenfeld MH, Schlotfeldt V, Forkert ND, Goebell E, Groth M, Vettorazzi E, Cho YD, Han MH, Kang HS, Fiehler J. Aneurysm Recurrence Volumetry Is More Sensitive than Visual Evaluation of Aneurysm Recurrences. Clin Neuroradiol (2016) 26(1):57-64.

Schirmer JH, Wright MN, Vonthein R, Herrmann K, Nölle B, Both M, Henes FO, Arlt A, Gross WL, Schinke S, Reinhold-Keller E, Moosig F, Holle JU. Clinical presentation and long-term outcome of 144 patients with microscopic polyangiitis in a monocentric German cohort. *Rheumatology (Oxford)*. 2016 Jan;55(1):71-9.

Schroeder M, Simon M, Katchanov J, Wijaya C, Rohde H, Christner M, Laqmani A, Wichmann D, Fuhrmann V, Kluge S. Does galactomannan testing increase diagnostic accuracy for IPA in the ICU? A prospective observational study. *Crit Care*. 2016 May 10;20(1):139.

Schubert T, Bannas P, Kinner S, Sharma S, Holmes JH, Rahimi MS, Korosec FR, Reeder SB. Thrombus-mimicking artifacts in two-point Dixon MRI: Prevalence, appearance, and severity. *J Magn Reson Imaging*. 2016 Jul 5. doi: 10.1002/jmri.25357. [Epub ahead of print]

Schulz A, Büttner R, Hagel C, Baader SL, Kluwe L, Salamon J, Mautner VF, Mindos T, Parkinson DB, Gehlhausen JR, Clapp DW, Morrison H. The importance of nerve microenvironment for schwannoma development. *Acta Neuropathol*. 2016 Aug;132(2):289-307.

Seiffert M, Fujita B, Avanesov M, Lunau C, Schön G, Conradi L, Prashovikj E, Scholtz S, Börgermann J, Scholtz W, Schäfer U, Lund G, Ensminger S, Treede H. Device landing zone calcification and its impact on residual regurgitation after transcatheter aortic valve implantation with different devices. *Eur Heart J Cardiovasc Imaging*. 2016 May;17(5):576-84. doi: 10.1093/eihci/jev174. PubMed PMID: 26160399.

Simon M, Braune S, Laqmani A, Metschke M, Berliner C, Kalsow M, Klose H, Kluge S. Value of Computed Tomography of the Chest in Subjects With ARDS: A Retrospective Observational Study. *Respir Care*. 2016 Mar;61(3):316-23

Simon M, Ittrich H, Harbaum L, Oqueka T, Kluge S, Klose H. Bleeding Complications After Endoscopic Lung Volume Reduction Coil Treatment: A Retrospective Observational Study. *Arch Bronconeumol* 2016, DOI: 10.1016/j.arbres.2016.04.012

Sharma SD, Fischer R, Schoennagel BP, Nielsen P, Kooijman H, Yamamura J, Adam G, Bannas P, Hernando D, Reeder SB. MRI-based quantitative susceptibility mapping (QSM) and R2* mapping of liver iron overload: Comparison with SQUID-based biomagnetic liver susceptometry. *Magn Reson Med* (2016). doi: 10.1002/mrm.26358 Vetterlein MW,

Jindal T, Becker A, Regier M, Kluth LA, Tilki D, Chun FK. Small renal masses in the elderly: Contemporary treatment approaches and comparative oncological outcomes of nonsurgical and surgical strategies. *Investig Clin Urol*. 2016 Jul;57(4):231-9.

Werner F, Jung C, Hofmann M, Werner R, Salamon J, Säring D, Kaul MG, Them K, Weber OM, Mummert T, Adam G, Ittrich H, Knopp T. Geometry planning and image registration in magnetic particle imaging using bimodal fiducial markers. *Med Phys*. 2016 Jun;43(6):2884. doi: 10.1118/1.4948998

Zhong J, Dieckhoff J, Schilling M, Ludwig F. Influence of static magnetic field strength on the temperature resolution of a magnetic nanoparticle thermometer. *Journal of Applied Physics*. 2016 Oct;120:143902

Vorträge/Poster mit zitierbarem Abstract

Avanesov M; Weinrich J; Münch J; Well L; Säring D; Müllerleile K; Tahir E; Patten M; Adam G; Lund G. Comparison of global extracellular volume (ECV) and late gadolinium enhancement (LGE) to predict the estimated 5 year risk of sudden cardiac death (SCD) in patients with hypertrophic cardiomyopathy (HCM). *Journal of Cardiovascular Magnetic Resonance* 2016, 18(Suppl 1): P127

Avanesov M, Münch J, Weinrich J, Well L, Säring D, Stehning C, Tahir E, Adam G, Lund G. Prediction of the estimated 5 year risk of sudden cardiac death (SCD) by quantitative CMR sequences in patients with hypertrophic cardiomyopathy (HCM). *ECR 2016 Book of Abstracts (2016): Insights Imaging 7 (Suppl 1) (B-0049)*

Avanesov M, Weinrich J, Münch J, Well L, Säring D, Stehning C, Müllerleile K, Patten M, Tahir E, Adam G, Lund G. Abschätzung des kalkulierten 5-Jahres-Risikos für plötzlichen Herztod durch quantitative LGE- und ECV-Bestimmung bei Patienten mit hypertropher Kardiomyopathie(HCM). *Fortschr Röntgenstr (Supplement 1) 2016; RK 115.8*

Avanesov M; Münch J; Weinrich JM; Well L; Säring D; Stehning C; Tahir EG; Radunski UK; Müllerleile K; Adam G; Patten M; Lund G. RSNA 2016 - SSC01-01

Bannas P, Bookwalter CA, Ziemlewicz T, Motosugi U, Bruce R, Potretzke TA, Reeder SB. MRT-Bildgebung der hepatischen Steatose: Ex vivo Validierung in humanen Lebern 2016 Deutscher Röntgenkongress, Leipzig, *Fortschr Röntgenstr 2016; 188 - WISS304_1*

Bannas P, Roldan A, Johnson KM, Woods MA, Motosugi U, Wieben O, Reeder SB, Kramer H. Visualisierung und Quantifizierung der Leberdurchblutung vor und nach TIPS mittels 4D-Fluss MRT. Kombinierte Leber-MRT mit Primovist und Ablavar zur Detektion und Charakterisierung von Lebermetastasen. 2016 Deutscher Röntgenkongress, Leipzig, *Fortschr Röntgenstr 2016; 188 - WISS102_5*

Bannas P, Kramer H, Hernando D, Cunningham AM, Mandal R, Agni R, Motosugi U, Sharma S, Munoz del Rio A, Fernandez L, Reeder SB Quantitative MRT-Bildgebung der hepatischen Steatose: Ex vivo Validierung in humanen Lebern 2016 Deutscher Röntgenkongress, Leipzig, Fortschr Röntgenstr 2016; 188 - RK301_7

Bannas P, Bell LC, Johnson KM, Schiebler ML, Francois CJ, Motosugi U, Consigny D, Reeder SB, Nagle SK. Lungenembolie Erkennung mit 3D UTE-MRT: Eine Tierexperimentelle Studie 2016 Deutscher Röntgenkongress, Leipzig, Fortschr Röntgenstr 2016; 188 - WISS314_3

Bannas P Optimale Abbildungen für Publikationen und Vorträge 2016 Deutscher Röntgenkongress, Leipzig, Fortschr Röntgenstr 2016; 188 - SP405_1

Behzadi C, Welsch GH, Henes FO, Quitzke A, Schoen G, Adam G, Regier M. Quantitative T2* analysis of articular cartilage of the tibiotalar joint in professional soccer players and healthy individuals at 3 T MRI. ECR 2016: Insights Imaging (2016), 7 Suppl 1 (B-0550)

Behzadi C, Welsch GH, Henes FO, Quitzke A, Schoen G, Adam G, Regier M. Comparison of T2* relaxation times of articular cartilage of the knee in elite professional soccer players and age-and BMI-matched volunteers. ECR 2016: Insights Imaging (2016), 7 Suppl 1 (B-0642)

Behzadi C, Welsch GH, Henes FO, Laqmani A, Schön G, Kaul MG, Adam G, Regier M. "Vergleich der T2*-Relaxationszeiten des Kniegelenksknorpels bei Profifußballern mit BMI- und altersadaptierten gesunden Probanden". Fortschr Röntgenstr 2016; 188 - WISS203_1

Behzadi C, Henes FO, Laqmani A, Maas KJ, Kaul MG, Adam G, Regier M. "T2* Messungen des Knorpels des tibiotalaren Gelenks bei Profifußballern und Probanden bei 3T". Fortschr Röntgenstr 2016; 188 - WISS203_2

Dieckhoff J, Kaul MG, Mummert T, Jung C, Knopp T, Adam G, Ittrich H. Combined Magnetic Particle and Magnetic Resonance Imaging of the Liver. Biomedizinische Technik (2016), P142

Groth M, Dammann E, Herrmann J. Vergleich von B-Mode und B-Flow Sonographie zur Evaluation der Femoralarterien bei Säuglingen. Radiologe (2016) 56: 754. doi:10.1007/s00117-016-0142-6

Herrmann J, Dammann E. B-Flow im Vergleich zur Color Doppler Sonographie zur Beurteilung der Vaskularisation von Nierentransplantaten bei Kindern. Radiologe 2016 (56) 767.

Ittrich H, Salamon J. Keynote: Potential Clinical Applications of MPI. 6th International Workshop on Magnetic Particle Imaging (IWMPI) (2016)

Jung , Salamon J, Hofmann M, Kaul MG, Adam G, Ittrich H, Knopp T. MPI as high temporal resolution imaging technique for in vivo bolus tracking of Ferucarbotran in mouse model. Proceedings of SPIE Medical Imaging 2016. 9788-30

Jung C, Heine M, Mangels N, Adam G, Ittrich H, Heeren J. Multimodal imaging and activity measurements of brown adipose tissue using triglyceride-rich lipoproteins at 7T MRI and intravital microscopy (EMIM 2016), F 02, Best of ESR

Jung C, Salamon J, Szwargulski P, Gdaniec N, Hofmann M, Kaul MG, Adam G, Kemp SJ, Ferguson RM, Khandhar AP, Krishnan KM, Knopp T, Ittrich H. Multi-Patch MPI allows whole Body Imaging of Mice using a Long Circulating Blood Pool Tracer. IWMPI 2016. 150.

Jung C, Heine M, Mangels N, Adam G, Ittrich H, Heeren J. In vivo Bildgebung der insulinabhängigen Aufnahme von Triglyceridreichen Lipoproteinen ins braune Fettgewebe mittels 7T MRT und Intravitalmikroskopie. Fortschr Röntgenstr 2016; 188 - WI_SS309_2 DOI: 10.1055/s-0036-1581647

Jung C, Salamon J, Szwargulski P, Gdaniec N, Hofmann M, Kaul MG, Adam G, Kemp SJ, Ferguson RM, Khandhar AP, Krishnan KM, Knopp T, Ittrich H. Performing multi-patch MPI for whole body imaging of mice using a long circulating blood pool tracer. WMIC 2016. LBA 13, ID 2554171

Jung C, Heine M, Mangels N, Adam G, Ittrich H, Heeren J. Using 7T MRI and intravital microscopy for multimodal imaging of insulin-dependent triglyceride-rich lipoprotein uptake into brown adipose tissue. WMIC 2016. LBAP052, ID 2552902

Jung C, Salamon J, Szwargulski P, Gdaniec N, Hofmann M, Kaul MG, Adam G, Kemp SJ, Ferguson RM, Khandhar AP, Krishnan KM, Knopp T, Ittrich H. Using a long circulating blood pool tracer to perform multi-patch MPI for whole body imaging of mice. (abstr). Radiological Society of North America scientific assembly and annual meeting program. Oak Brook, Ill: Radiological Society of North America, 2016

Kaul MG, Jung C, Mummert T, Hoffmann M, Ittrich H, Knopp T, Adam G. Blutflussgeschwindigkeitsbestimmung mittels Magnetic Particle Imaging in vivo. Fortschr Röntgenstr 2016; 188 - WISS317_1

Kaul MG, Mummert T, Salamon J, Hofmann M, Ittrich H, Adam G, Knopp T, Jung C. In vivo velocity determination in the inferior vena cava in mice by Magnetic Particle Imaging and Magnetic Resonance Imaging. International Workshop on Magnetic Particle Imaging (IWMPI) 2016

Kaul MG, Jung C, Salamon J, Mummert T, Hofmann M, Kemp SJ, Ferguson RM, Khandhar AP, Krishnan KM, Ittrich H, Adam G, Knopp T. In vivo measurement and comparison of two Magnetic Particle Imaging tracer: LS-008 and Resovist. International Workshop on Magnetic Particle Imaging (IWMPI) 2016

Kaul MG, Mummert T, Salamon J, Ittrich H, Adam G, Knopp T, Jung C. Blood flow velocity measurements by Magnetic Particle Imaging. Dreiländertagung Swiss, Austrian and German Societies of Biomedical Engineering (BMT) 2016, O-PP-12

Kaul MG, Wei H, Bruns OW, Hansen E, Hine M, Adam G, Bawendi MG, Ittrich H. Positive contrast enhanced magnetic resonance imaging with exceedingly-small superparamagnetic iron oxide nanoparticles with renal clearance. Radiological Society of North America (RSNA) 102th Scientific Assembly and Annual Meeting 2016

Kaul MG, Adam G. Quantitative multi-parametric analysis with ImageJ: recent updates of qMaplt. Magn Reson Mater Phy 2016; 29:472

S. Keller, A. Golsari, M. Gelderblom, H. Kooijman-Kurfuerst, Z.J. Wang, G. Adam, J. Yamamura. Diffusion tensor imaging-based tractography of the myopathic and dystrophic skeletal muscle. ECR Book of Abstracts (2016) Insights Imaging (Suppl 1) (B-0634)

S. Keller, Z.J. Wang, A. Golsari, H. Kooijman, J. Chia, R. Inai, M. Gelderblom, G. Adam, J. Yamamura. Diffusion Tensor Imaging based Tractography of the myopathic and dystrophic skeletal muscle. RSNA 2016 (SSJ16-03)

Kording F, Ruprecht C, Schoennagel B, Kladeck M Kladeck, Yamamura J, Adam G, Goebel J, Nassenstein K, Maderwald S, Quick H, Kraff O. Doppler Ultrasound Triggering for Cardiac Magnetic Resonance Imaging at 7 Tesla. ISMRM 24th Annual Meeting #0494 ()2016

Kording F, Ruprecht C, Schoennagel B, Kladeck M Kladeck, Yamamura J, Adam G, Goebel J, Nassenstein K, Maderwald S, Quick H, Kraff O. Doppler-Ultraschall zur Triggerung der MRT-Herzbildgebung bei 7T: Erste Erfahrungen, Fortschr Röntgenstr. 188 (2016) WISS103_6. doi:10.1055/s-0036-1581373.

Kording F, Tavares M, Yamamura J., Kladeck M, Adam G, Ruprecht C, Schoennagel B. Funktionelle fetale kardiale MRT Bildgebung basierend auf Doppler-Ultraschall: Erste Erfahrungen, Fortschr Röntgenstr. 188 (2016) RK205_2. doi:10.1055/s-0036-1581387.

Kording F, Ruprecht C, Schoennagel B, Kladeck M Kladeck, Yamamura J, Adam G, Goebel J, Nassenstein K, Maderwald S, Quick H, Kraff O. Doppler-Ultraschall zur Triggerung der MRT-Herzbildgebung bei 7T: Erste Erfahrungen, Fortschr Röntgenstr. 188 (2016) WISS103_6. doi:10.1055/s-0036-1581373.

Kording F, Tavares M, Yamamura J., Kladeck M, Adam G, Ruprecht C, Schoennagel B. Funktionelle fetale kardiale MRT Bildgebung basierend auf Doppler-Ultraschall: Erste Erfahrungen, Fortschr Röntgenstr. S,

Kording F, Kooijman H, Schramm K, Fischer R, Adam G, Lohse A, Ittrich H, Yamamura J. Feasibility of vertebral bone Diffusion Weighted MR Imaging (DWI) for early diagnosis of hepatic osteodystrophy in Primary Sclerosing Cholangitis. ISMRM 24th Annual Meeting #3458 (2016)

Kording F, Kooijman H, Yamamura J, Tavares M, Kladeck M, Hecher K, Adam G, Schoennagel B. In Vitro and in Vivo MR measurement of fetal blood oxygen saturation. ISMRM 4th Annual Meeting #3893 (2016)

Kording F, Kooijman H, Yamamura J, Tavares M, Kladeck M, Hecher K, Adam G, Schoennagel B. In Vitro and in Vivo MR Measurement of Fetal Blood Oxygen Saturation: Initial Results. Radiological Society of North America (RSNA) 102th Scientific Assembly and Annual Meeting (2016); RC113-02

Kording F, Ruprecht C, Schoennagel B, Kladeck M Kladeck, Yamamura J, Adam G, Goebel J, Nassenstein K, Maderwald S, Quick H, Kraff O. Doppler Ultrasound Triggering for Cardiac Magnetic Resonance Imaging at 7 Tesla: Initial Results. Radiological Society of North America (RSNA) 102th Scientific Assembly and Annual Meeting (2016); RC303-10

Regier M, Stoffels M, Behzadi C, Kaul M, Klutmann S, Adam G, Herrmann J. Diffusion weighted chest MRI and FDG-PET/CT in pediatric patients suffering from primary lymphoma: Does the apparent diffusion coefficient (ADC) correlate with tracer uptake (SUV)? Radiology Supplements 2016 SST07-03

Regier M, Schmitt C, Seiwerts C, Behzadi C, Henes FO, Remus CC, Kaul MG, Adam G, Budaeus L. Intravoxel incoherent motion (IVIM) MRI for the interpretation of pelvic lymph nodes in prostate cancer: Can we discriminate benign from malignant nodes? Radiology Supplements 2016 SSK09-09

Salamon J, Hofmann M, Jung C, Kaul M, Reimer R, vom Scheidt A, Adam G, Ittrich H. Echtzeit 3D MPI-gesteuerte Ballonangioplastie unter Verwendung eines MRT Road Map- und eines Blood-Pool-Kontrastmittel-Ansatzes. Fortschr Röntgenstr 2016; 188 - WISS317_2

Salamon J, Hofmann M, Jung C, Kaul MG, Reimer R, vom Scheidt A, Adam G, Knopp T, Ittrich H. Real-time 3D MPI-guided angioplasty using an MRI road map and blood pool agent approach: next steps towards interventional MPI. Insights Imaging (2016) 7: 162.

Spink C, Schmidt T, Grass M, Avanesov M, Adam G, Bannas P, Koops A. Radiation dose reduction during transjugular intrahepatic portosystemic shunt (TIPS) implantation using a novel image-processing platform. ECR 2016 Book of Abstracts (B-0622)

Spink C, John B, Krautschneider W, Schroder D, Fischbach R, Braunschweig M, Buhk J, Adam G, Koops A. Nicht-invasives Druckmonitoring nach TIPS-Anlage: Konzeptdesign und erste in vitro Ergebnisse eines neuen Stentgrafts im Gefäßmodell. RöFo - Fortschritte auf dem Gebiet der Röntgenstrahlen und der bildgebenden Verfahren. Vol 188. Mai 2016 (RK301_5)

Spink C, John B, Krautschneider W, Schroder D, Fischbach R, Braunschweig M, Buhk J, Adam G, Koops A. Integrated stent graft for non-invasive pressure monitoring after transjugular intrahepatic portosystemic shunt (TIPS) implantation. CIRSE 2016 Book of Abstracts (FP1509.1)

Tahir E, Sinn M, Avanesov M, Wien J, Saering D, Stehning C, Radunski U.K., Muellerleile K, Adam G, Lund G.K. Reproducibility of native and contrast-enhanced CMR techniques to measure lesion size following acute myocardial infarction. 19th Annual SCMR Scientific Sessions Los Angeles, USA. Journal of Cardiovascular Magnetic Resonance 2016, 18 (Suppl 1):P92.

Tahir E, Well L, Avanesov M, Brunner F, Sydow K, Lund G.K., Adam G, Koops A. Effects on blood pressure, cardiac mass and function after renal denervation in patients with resistant hypertension. 19th Annual SCMR Scientific Sessions Los Angeles, USA. Journal of Cardiovascular Magnetic Resonance 2016, 18 (Suppl 1):P106.

Tahir E, Kido T, Tanabe Y, Fukuyama N, Kido T, Yamamura J, Lund G.K., Adam G, Mochizuki T. Adenosine triphosphate stress dynamic perfusion CT imaging to identify myocardial ischemia: correlation with coronary CTA and invasive coronary angiography. ECR 2016. Insights Imaging 2016 Mar; 7 (Suppl 1):S162–S465.

Tahir E, Sinn M, Avanesov M, Wien J, Saering D, Radunski U.K., Muellerleile K, Adam G, Lund G.K. Reproducibility of native and contrast-enhanced CMR techniques to measure lesion size following acute myocardial infarction. ECR 2016. Insights Imaging 2016 Mar; 7 (Suppl 1):S162–S465.

Tahir E, Kido T, Tanabe Y, Fukuyama N, Kido T, Yamamura J, Lund G.K., Adam G, Mochizuki T. Adenosine triphosphate stress dynamic perfusion CT imaging to identify myocardial ischemia: correlation with coronary CTA and invasive coronary angiography. 75th Annual Meeting of the Japan Radiological Society. Nippon. Act. Radiol. 48: 428.

Tahir E, Kido T, Tanabe Y, Fukuyama N, Kido T, Yamamura J, Lund G.K., Adam G, Mochizuki T. Dynamische myokardiale CT-Perfusion unter Adenosin-Belastung zur Identifikation von Ischämie: Korrelation mit koronarer CT-Angiografie und invasiver Angiografie. Fortschr Röntgenstr 2016; 188.

Tahir E, Sinn M, Avanesov M, Wien J, Säring D, Stehning C, Radunski U.K., Müllerleile K, Adam G, Lund G.K. Reproduzierbarkeit der Größenbestimmung von Läsionen nach akutem Myokardinfarkt mittels nativen und kontrastmittelgestützten Kardio-MRT. Fortschr Röntgenstr 2016; 188.

Tahir E, Kido T, Tanabe Y, Fukuyama N, Kido T, Yamamura J, Lund G.K., Adam G, Mochizuki T. Adenosine triphosphate stress dynamic perfusion CT imaging to identify myocardial ischemia: correlation with coronary CTA and invasive coronary angiography. 18th Bi-Annual Meeting der Japanese German Radiological Association 2016. Klinikum rechts der Isar, München.

Tahir E, Sinn M, Avanesov M, Bohnen S, Muellerleile K, Stehning C, Radunski U.K., Schnackenburg B, Adam G, Lund G.K. T1 and T2 Mapping Cardiovascular Magnetic Resonance to Differentiate Acute from Chronic Myocardial Infarction. Radiology – RSNA 201 - RC303-08.

Tahir E, Schmidt-Holz J, Lund G.K., Muellerleile K, Adam G, Starekova J, Yamamura J, Säring D, Behzadi C, Regier M. Characterization of Left Ventricular Remodeling in Professional Soccer Players: Can we prevent sudden cardiac death using CMR? Radiology - RSNA 2016 - SSC01-04 (Scientific Paper).

Tahir E, Schmidt-Holz J, Lund G.K., Muellerleile K, Adam G, Starekova J, Yamamura J, Säring D, Behzadi C, Regier M. Characterization of Left Ventricular Remodeling in Professional Soccer Players: Can we prevent sudden cardiac death using CMR? Radiology - RSNA 2016 – CA214-SD-MOA5 (Poster).

Tahir E, Well L, Neumann J, Brunner F, Uhlmann P, von Rohden E, Sydow K, Lund G.K., Adam G, Koops A. Cardiac remodeling and changes in blood pressure following renal denervation in patients with treatment-resistant hypertension. Radiology - RSNA 2016 - SSC02-06.

Tahir E, Sinn M, Avanesov M, Wien J, Saering D, Stehning C, Radunski U.K., Muellerleile K, Adam G, Lund G.K. Reproducibility of Native and Contrast-enhanced CMR Techniques to Measure Lesion Size Following Acute Myocardial Infarction. Radiology - RSNA 2016 – CA213-SD-MOB4.

Yamamura J, Tahir E, Keller S, Grosse R, Berliner Ch, Adam G, Nielsen P, Schönnagel B, Fischer R. Adrenal gland iron measurement using MRI-R2* in patients with iron overload: a feasibility Study. ISMRM16 (2016) 0713

Yamamura J, Fischer R, Grosse R, Berliner Ch, Wehbe M, Kurio G, Lund G, Graessner J, Adam G, NielsenP , Schönnage B. Left Ventricular Peak Filling Rates – Early Indicators of Diastolic Dysfunction from Myocardial Iron Toxicity. ISMRM16 (2016) 3128

Yamamura J, Schoennagel B, Tavares M, Kladeck M, Adam G, Ruprecht C, Kording F. Fetal cardiac MRI and Flow-measurement using Optimized Doppler-Ultrasound Sensor (DUS) gating. ISMRM16 (2016) 0974

Yamamura J, Keller S, Schmidt TM, Wang J., Fischer R, Heinemann A, Adam G,. MRI in forensic Medicine – a unique approach using 31P magnetic resonance spectroscopy of the skeletal muscle. RSNA 2016

Yamamura J, Keller S, Kooijman H, Kording F, Schramm C, Schuler T, Adam G. Multimodal MRI of the liver - for detecting acute inflammation in patients with primary sclerotic cholangitis. ECR16 (2016) B 0007

Stipendien

Avanesov M. Student Travel Award. Radiological Society of North America 2016.

Spink C. Rolf W. Günther Foundation Travel Grant, CIRSE 2016

Tahir E. Stipendium Rajewsky Stiftung 2016

Tahir E. Japan Radiological Society Fellowship. 75th Annual Meeting of Japan Radiological Society.

Tahir E. RSNA Travel Award 2016.

Auszeichnungen und Preise

Bannas P. Conrad Wilhelm Röntgenpreis der Deutschen Röntgengesellschaft 2016

Jung C. Horst-Seils-Preis 2016 der Norddeutschen Röntgengesellschaft

Keller S. : RSNA 2017 Trainee Research Prize

Lenz A. Egon Bücheler Promotionspreis 2016

Well L. Promotionspreis der Deutschen Röntgengesellschaft 2016

Drittmittel

Forschungszentrum Medizintechnik Hamburg

In Kooperation mit: Institut für Medizintechnische Systeme, TU Harburg

Titel: „Kardio-vaskuläre Magnetresonanztomographie am bewegten Fetus“