

CME Article

- Cardiac** 1287 **State of the Art: Quantitative Cardiac MRI in Cardiac Amyloidosis**
Yubo Guo, Xiao Li, and Yining Wang

Research Articles

- Head and Neck** 1302 **Internal Jugular Vein Geometry Under Multiple Inclination Angles with 3D Low-Field MRI in Healthy Volunteers**
Jordy K. van Zandwijk, Koen M. Kuijjer, Chrit M. Stassen, Bernard ten Haken, and Frank F.J. Simonis
- Editorial** 1309 **Editorial for "Internal Jugular Vein Geometry Under Multiple Inclination Angles with 3D Low-Field MRI in Healthy Volunteers"**
Danielle Nobre Lopes, Leticia Cogo Marques, and Karin Soares Cunha
- 1311 **Amide Proton Transfer Could Provide More Accurate Lesion Characterization in the Transition Zone of the Prostate**
Zixuan Guo, Xiaoyan Qin, Ronghua Mu, Jian Lv, Zhuoni Meng, Wei Zheng, Zeyu Zhuang, and Xiqi Zhu
- Editorial** 1320 **Editorial for "Amide Proton Transfer-Weighted Imaging Could Complement Apparent Diffusion Coefficient for More Lesion Characterization in Transition Zone of the Prostate"**
Jinyuan Zhou and Guang Jia
- Interventional** 1322 **Current State of MRI-Guided Endovascular Arterial Interventions: A Systematic Review of Preclinical and Clinical Studies**
Han Nijssink, Christiaan G. Overduin, Loes H. Willems, Michiel C. Warlé, and Jurgen J. Fütterer
- Breast** 1343 **Differentiating Benign and Malignant Breast Lesions in Diffusion Kurtosis MRI: Does the Averaging Procedure Matter?**
Mona Pistel, Frederik Bernd Laun, Sebastian Bickelhaupt, Anes Dada, Elisabeth Weiland, Torsten Niederdränk, Michael Uder, Rolf Janka, Evelyn Wenkel, and Sabine Ohlmeyer
- Editorial** 1353 **Editorial for "Differentiating benign and malignant breast lesions in diffusion kurtosis MRI: Does the averaging procedure matter?"**
Belgin Karan
- 1355 **Breast Tissue Chemistry Measured In Vivo In Healthy Women Correlate with Breast Density and Breast Cancer Risk**
Gorane Santamaría, Natali Naude, Julia Watson, John Irvine, Thomas Lloyd, Ian Bennett, Graham Galloway, Peter Malycha, and Carolyn Mountford
- Editorial** 1370 **Editorial for "Breast Tissue Chemistry Measured In Vivo in Healthy Women Correlate With Breast Density and Breast Cancer Risk"**
Pinker Katja and Thakur Sunitha
- Vascular** 1372 **Optimization of the Contrast Agent Injection Protocol for Carotid Artery Dynamic Contrast-Enhanced Magnetic Resonance Imaging**
Yajie Wang, Xiaoming Liu, Yishi Wang, Haikun Qi, Xian Liu, Xiangchuang Kong, Qiang Zhang, Jiaqi Dou, Jing Wang, and Huijun Chen
- Cardiac** 1382 **Myocardial Deformation in the Pediatric Age Group: Normal Values for Strain and Strain Rate Using 2D Magnetic Resonance Feature Tracking**
Inga Voges, Inken Negwer, Amke Caliebe, Simona Boroni Grazioli, Piers E.F. Daubeney, Anselm Uebing, Dudley J. Pennell, and Sylvia Krupickova
- 1393 **Simultaneous Assessment of Left Atrial Fibrosis and Epicardial Adipose Tissue Using 3D Late Gadolinium Enhanced Dixon MRI**
Iulia Skoda, Markus Henningsson, Sofia Stenberg, Jonathan Sundin, and Carl-Johan Carlhäll
- 1404 **Impact of Type 2 Diabetes Mellitus on Epicardial Adipose Tissue and Myocardial Microcirculation by MRI in Postmenopausal Women**
Shan Huang, Yuan Li, Li Jiang, Yan Ren, Jin Wang, Ke Shi, Wei-Feng Yan, Wen-Lei Qian, and Zhi-Gang Yang
- Editorial** 1414 **Editorial for "Impact of Type 2 Diabetes Mellitus on Epicardial Adipose Tissue and Myocardial Microcirculation by Cardiovascular Magnetic Resonance in Postmenopausal Women"**
Eleanor E. Rye and Sara L. Hungerford

- 1416 Diastolic Function Assessment of Left and Right Ventricles by MRI in Systemic Sclerosis Patients**
Elie Mousseaux, Lucia Agoston-Coldea, Zora Marjanovic, Mathilde Baudet, Guillaume Reverdito, Emilie Bollache, Nadja Kachenoura, Emmanuel Messas, Gilles Soulat, and Dominique Farge
- 1427 Editorial for "Diastolic Function Assessment of Left and Right Ventricles by MRI in Systemic Sclerosis Patients"**
Maria Carolina Oliveira, Marcel Koenigkam-Santos, and André Schmidt
- 1429 Water Specific MRI T1 Mapping for Evaluating Liver Inflammation Activity Grades in Rats With Methionine-Choline-Deficient Diet-Induced Nonalcoholic Fatty Liver Disease**
Qian Wan, Hao Peng, Jianxun Lyu, Feng Liu, Chuanli Cheng, Yangzi Qiao, Jie Deng, Hairong Zheng, Yi Wang, Chao Zou, and Xin Liu
- 1437 Comparison of Multiparametric and Fast MRI Protocols in Detecting Clinically Significant Prostate Cancer and a Detailed Cost Analysis**
Kadir Han Alver, Ahmet Baki Yagci, Ayse Ruksan Utebey, Nilay Sen Turk, and Furkan Ufuk
- 1448 Prospective Evaluation of Virtual MR Elastography With Diffusion-Weighted Imaging in Subjects With Nonalcoholic Fatty Liver Disease**
Elysha Hanniman, Andreu F. Costa, Chris V. Bowen, Mohamed Abdoell, Ashley Stueck, Magnus McLeod, Kevork Peltekian, James Rioux, and Sharon E. Clarke
- 1457 Editorial for "Prospective Evaluation of Virtual MR Elastography With Diffusion Weighted Imaging in Subjects With Nonalcoholic Fatty Liver Disease"**
Monique Bernard
- 1459 Preoperative Evaluation of Gd-EOB-DTPA-Enhanced MRI Radiomics-Based Nomogram in Small Solitary Hepatocellular Carcinoma (≤ 3 cm) With Microvascular Invasion: A Two-Center Study**
Yaqi Tian, Hui Hua, Qiqi Peng, Zaixian Zhang, Xiaolin Wang, Junqi Han, Wenjuan Ma, and Jingjing Chen
- 1473 Editorial for "Preoperative Evaluation of Gd-EOB-DTPA-Enhanced MRI Radiomics-Based Nomogram in Small Solitary Hepatocellular Carcinoma (≤ 3 cm) With Microvascular Invasion: A Two-Center Study"**
Akira Yamada
- 1475 Pulmonary MRI and Cluster Analysis Help Identify Novel Asthma Phenotypes**
Rachel L. Eddy, Marrison J. McIntosh, Alexander M. Matheson, David G. McCormack, Christopher Liciskai, and Grace Parraga
- 1487 Multiparametric Magnetic Resonance Imaging for Assessing Thymic Epithelial Tumors: Correlation With Pathological Subtypes and Clinical Stages**
Jie Shen, Wei Zhang, Jia-Jia Zhu, Lei Xue, Mei Yuan, Hai Xu, Xiao-quan Xu, Tong-Fu Yu, and Fei-Yun Wu
- 1497 Editorial for "Multiparametric MRI for Assessing Thymic Epithelial Tumors: Correlation With Pathological Subtypes and Clinical Stages"**
Tetsuro Araki, Sharyn I. Katz, and Harold I. Litt
- 1499 Optimization of Detection of Gadodiamide Brain Retention in Rats Using Quantitative T₂ Mapping and Intraperitoneal Administration**
Serguei M. Liachenko, Natalya V. Sadovova, Arnold Tripp, Suman Ghorai, Anil K. Patri, Joseph P. Hanig, Jonathan E. Cohen, and Ira Krefting
- 1505 Preliminary Study on Quantitative Assessment of the Fetal Brain Using MOLLI T1 Mapping Sequence**
Fenglin Jia, Yi Liao, Xuesheng Li, Zhijun Ye, Pei Li, Xiaoyue Zhou, Qing Li, Shaoyu Wang, Gang Ning, and Haibo Qu
- 1513 Synthetic Time of Flight Magnetic Resonance Angiography Generation Model Based on Cycle-Consistent Generative Adversarial Network Using PETRA-MRA in the Patients With Treated Intracranial Aneurysm**
Sung-Hye You, Yongwon Cho, Byungjun Kim, Kyung-Sook Yang, Bo Kyu Kim, and Sang Eun Park
- 1529 Segmented 3D Echo Planar Acquisition for Rapid Susceptibility-Weighted Imaging: Application to Microhemorrhage Detection in Traumatic Brain Injury**
Wen-Tung Wang, Ningzhi Li, Ioannis Papageorgiou, Leighton Chan, Dzung L. Pham, and John A. Butman

- Editorial** 1536 **Editorial for “Segmented 3D Echo Planar Acquisition for Rapid Susceptibility Weighted Imaging: Application to Microhemorrhage Detection in Traumatic Brain Injury”**
Erkan Gökçe
- 1538 **Longitudinal Changes in Global Cerebral Blood Flow in Cognitively Normal Older Adults: A Phase-Contrast MRI Study**
Hualu Han, Zixuan Lin, Anja Soldan, Corinne Pettigrew, Joshua F. Betz, Kumiko Oishi, Yang Li, Peiying Liu, Marilyn Albert, and Hanzhang Lu
- Editorial** 1546 **Editorial for “Longitudinal Changes in Global Cerebral Blood Flow in Cognitively Normal Older Adults: A Phase-Contrast MRI Study”**
Chih-Feng Chen and Shin-Lei Peng
- 1548 **Myelin Water Imaging of Nerve Recovery in Rehabilitating Stroke Patients**
Muyul Park, Yejin Cho, Dae Hyun Kim, Hyun Seok Choi, Dong-Hyun Kim, and Deog Young Kim
- Editorial** 1557 **Editorial for “Myelin Water Imaging of Nerve Recovery in Rehabilitating Stroke Patients”**
Sheelakumari Raghavan and Robert I. Reid
- Technical** 1559 **Investigation of the Inter- and Intrascanner Reproducibility and Repeatability of Radiomics Features in T1-Weighted Brain MRI**
Rosalind Nina Mitchell-Hay, Trevor S. Ahearn, Alison D. Murray, and Gordon D. Waite
- Editorial** 1569 **Editorial for “Investigation of the Inter- and Intra-Scanner Reproducibility and Repeatability of Radiomics Features in Magnetic Resonance Imaging”**
Jan Brabec and Finn Lennartsson
- Musculoskeletal** 1571 **Diffusion-Weighted Imaging Distinguishes Between Osteomyelitis, Bone Marrow Edema, and Healthy Bone on Forefoot Magnetic Resonance Imaging**
Konrad A. Kruk, Tobias J. Dietrich, Simon Wildermuth, Sebastian Leschka, Andreas Toepfer, Stephan Waelti, Chan-Hi Olaf Kim, Sabine Güsewell, and Tim Fischer
- 1580 **Can Bone Erosion in Axial Spondyloarthritis be Detected by Ultrashort Echo Time Imaging? A Comparison With Computed Tomography in the Sacroiliac Joint**
Seok Hahn, Ji Soo Song, Eun Jung Choi, Jang Gyu Cha, Yunjung Choi, Young Ju Song, InSeong Kim, and Eun Hae Park
- 1591 **Time-Resolved Noncontrast Magnetic Resonance Perfusion Imaging of Paraspinal Muscles**
Mitsue Miyazaki, Asako Yamamoto, Vadim Malis, Sheronda Statum, Christine B. Chung, Jesse Sozanski, and Won C. Bae
- 1600 **Paraspinal Muscle in Chronic Low Back Pain: Comparison Between Standard Parameters and Chemical Shift Encoding-Based Water–Fat MRI**
Nico Sollmann, Noah B. Bonnheim, Gabby B. Joseph, Ravi Chachad, Jiamin Zhou, Zehra Akkaya, Amir M. Pirmoazen, Jeannie F. Bailey, Xiaojie Guo, Ann A. Lazar, Thomas M. Link, Aaron J. Fields, and Roland Krug
- Editorial** 1609 **Editorial for “Paraspinal Muscle in Chronic Low Back Pain: Comparison Between Standard Parameters and Chemical Shift Encoding-Based Water–Fat MRI”**
Dejan Jakimovski and Niels Bergsland