

Letter to the Editor

- 11 **Expanding the Impact of the ISMRM Young Investigator Awards: Introducing the Prince-Meaney Translational Science Award**
Scott B. Reeder, Derek K. Jones, and Pablo Irarrazaval

Reviews

- 12 **Evaluation of Hypoxia in Hepatocellular Carcinoma Using Quantitative MRI: Significances, Challenges, and Advances**
Meicheng Chen, Xiaoqi Zhou, Huasong Cai, Di Li, Chenyu Song, Huayu You, Ruixia Ma, Zhi Dong, Zhenpeng Peng, and Shi-Ting Feng
- 26 **Magnetic Resonance Imaging of Cardiovascular Manifestations Following COVID-19**
Felipe Sanchez Tijmes, Constantin Marschner, Paaladinesh Thavendiranathan, and Kate Hanneman
- 44 **Updates on Compositional MRI Mapping of the Cartilage: Emerging Techniques and Applications**
Marcelo V. W. Zibetti, Rajiv G. Menon, Hector L. de Moura, Xiaoxia Zhang, Richard Kijowski, and Ravinder R. Regatte

Research Articles

- Vascular
- 61 **Risk Factors for Cerebrovascular Events in Moyamoya Angiopathy Using 4D Flow MRI: A Pilot Study**
Maoxue Wang, Yongbo Yang, Wen Zhang, Fei Zhou, Xin Zhang, Jilei Zhang, and Bing Zhang
- 69 **High-Resolution Vessel Wall MRI in Assessing Postoperative Restenosis of Intracranial Atherosclerotic Disease Before Drug-Coated Balloon Treatment: An Outcome Prediction Study**
Shu Jiang, Qingwei Liu, Chao Zhang, Kunjian Chen, Weiqiang Dou, and Xinyi Wang
- Editorial
- 79 **Editorial for "High-Resolution Vessel Wall MRI in Assessing Postoperative Restenosis of Intracranial Atherosclerotic Disease Before Drug-Coated Balloon Treatment: An Outcome Prediction Study"**
Jin Li, Zhaoyang Fan, and Qi Yang
- Breast
- 81 **Model-Free and Model-based Parameters Derived From CAIPIRINHA-Dixon-TWIST-VIBE DCE-MRI: Associations With Prognostic Factors and Molecular Subtypes of Invasive Ductal Breast Cancer**
Tianwen Xie, Tingting Jiang, Qifeng Zhao, Caixia Fu, Marcel Dominik Nickel, Weijun Peng, and Yajia Gu
- 93 **Assessment of Prognostic Factors and Molecular Subtypes of Breast Cancer With a Continuous-Time Random-Walk MR Diffusion Model: Using Whole Tumor Histogram Analysis**
Yanjin Qin, Caili Tang, Qilan Hu, Jingru Yi, Ting Yin, and Tao Ai
- Editorial
- 106 **Editorial for "Assessment of Prognostic Factors and Molecular Subtypes of Breast Cancer With a Continuous-Time Random-Walk MR Diffusion Model: Using Whole Tumor Histogram Analysis"**
Weiguo Li, Andrew C. Gordon, and Samdeep K. Mouli
- Head and Neck
- 108 **Integrating Postradiotherapy MRI-Detected Lymph Node Necrosis and Pre- and Posttreatment Epstein-Barr Virus-DNA for Risk Stratification in Nasopharyngeal Carcinoma**
Di Cao, Shaolong Li, Haojiang Li, Lizhi Liu, Xiaoyi Wang, and Tingting Quan
- Editorial
- 120 **Editorial for "Integrating Postradiotherapy MRI-Detected Lymph Node Necrosis and Pre- and Posttreatment Epstein-Barr Virus-DNA for Risk Stratification in Nasopharyngeal Carcinoma"**
Hiroshi Watanabe
- 122 **Influence of Different Measurement Methods of Arterial Input Function on Quantitative Dynamic Contrast-Enhanced MRI Parameters in Head and Neck Cancer**
Wanxin Dong, Andreas Volk, Meriem Djedoum, Charly Girot, Corinne Balleyguier, Vincent Lebon, Gabriel Garcia, Samy Ammari, Stéphane Temam, Philippe Gorphe, Lecong Wei, Stéphanie Pitre-Champagnat, Nathalie Lassau, and François Bidault

Editorial	133	Editorial for "Influence of Different Measurement Methods of Arterial Input Function on Quantitative Dynamic Contrast-Enhanced MRI Parameters in Head and Neck Cancer" Yoshimi Anzai
Cardiac	135	Cardiac MRI Left Atrial Strain Associated With New-Onset Atrial Fibrillation in Patients With ST-Segment Elevation Myocardial Infarction Lei Chen, Min Zhang, Wensu Chen, Zhi Li, Yiwen Wang, Dongchen Liu, Yang Duan, Chaoqun Zhang, Zhirong Wang, and Yuan Lu
Editorial	145	Editorial for "Cardiac MRI Left Atrial Strain Associated With New-Onset Atrial Fibrillation in Patients With ST-Segment Elevation Myocardial Infarction" Houchun Harry Hu
	147	Assessment of Splenic Switch-Off With Arterial Spin Labeling in Adenosine Perfusion Cardiac MRI Verónica Aramendia-Vidaurreta, Sergio M. Solis-Barquero, Ana Ezponda, Marta Vidorreta, Rebeca Echeverría-Chasco, Marina Pascual, Gorka Bastarrika, and María A. Fernández-Seara
Editorial	157	Editorial for "Assessment of Splenic Switch-Off With Arterial Spin Labeling in Adenosine Perfusion Cardiac MRI" Satoshi Higuchi and Hideki Ota
	159	The Impact of Hypertension on Left Ventricular Function and Remodeling in Non-Ischemic Dilated Cardiomyopathy Patients: A 3.0 T MRI Study Meng-Ting Shen, Yuan Li, Ying-Kun Guo, Yue Gao, Li Jiang, Rui Shi, and Zhi-Gang Yang
Editorial	172	Editorial for "The Impact of Hypertension on Left Ventricular Function and Remodeling in Non-Ischemic Dilated Cardiomyopathy Patients: A 3.0 T MRI Study" Zhaoxia Yang and Lu Huang
Chest	174	Chemical Exchange Saturation Transfer MRI: Capability for Predicting Therapeutic Effect of Chemoradiotherapy on Non-Small Cell Lung Cancer Patients Yoshiharu Ohno, Masao Yui, Kaori Yamamoto, Daisuke Takenaka, Hisanobu Koyama, Hiroyuki Nagata, Takahiro Ueda, Hirotaka Ikeda, Yoshiyuki Ozawa, Hiroshi Toyama, and Takeshi Yoshikawa
Editorial	187	Editorial for "Predictive Value of ¹⁸F-FDG PET/MRI for Pleural Invasion in Solid and Subsolid Lung Adenocarcinomas Smaller Than 3 cm" Adem Karaman and Hasan Abbasguliyev
Musculoskeletal	189	Spatial Gradients of Quantitative MRI as Biomarkers for Early Detection of Osteoarthritis: Data From Human Explants and the Osteoarthritis Initiative Robert L. Wilson, Nancy C. Emery, David M. Pierce, and Corey P. Neu
	198	Age-Related Changes in the Spatial Variation of Magnetic Susceptibility of Human Articular Cartilage Ming Zhang, Chenglei Liu, Huimin Lin, Hanqi Wang, Le Qin, Zhiyong Zhang, Chunlei Liu, Yong Lu, Fuhua Yan, Yuyao Zhang, and Hongjiang Wei
Editorial	208	Editorial for "Age-Related Changes in the Spatial Variation of Magnetic Susceptibility of Human Articular Cartilage" Michael A. Samaan and Kate N. Jochimsen
Abdomen	210	Cardiac Phase and Flow Compensation Effects on REnal Flow and Microstructure Anisotropy MRI in Healthy Human Kidney Eric E. Sigmund, Artem Mikheev, Inge M. Brinkmann, Nima Gilani, James S. Babb, Dibash Basukala, Thomas Benkert, Jelle Veraart, and Hersh Chandarana
Editorial	221	Editorial for "Cardiac Phase and Flow Compensation Effects on REnal Flow and Microstructure Anisotropy MRI in Healthy Human Kidney" Thierry Metens and Julie Absil
	223	Diffusion-Weighted Imaging of the Abdomen: Correction for Gradient Nonlinearity Bias in Apparent Diffusion Coefficient Jian Wang, Chao Ma, Panpan Yang, Zhen Wang, Yufei Chen, Yun Bian, Chengwei Shao, and Jianping Lu
Editorial	232	Editorial for "Diffusion-Weighted Imaging of the Abdomen: Correction for Gradient Nonlinearity Bias in Apparent Diffusion Coefficient" Weiguo Li and Samdeep K. Mouli
Editorial	234	Editorial for "Multiparametric Magnetic Resonance Imaging of the Kidneys: Effects of Regional, Side, and Hydration Variations on Functional Quantifications" Yue Zhang

Pediatrics	236	MRI Radiomics Signature of Pediatric Medulloblastoma Improves Risk Stratification Beyond Clinical and Conventional MR Imaging Features Hui Zheng, Jinning Li, Huanhuan Liu, Gui Ting, Qiu Feng Yin, Rui Li, Ming Liu, Yuzhen Zhang, Shaofeng Duan, Yuhua Li, and Dengbin Wang
Pelvis	247	Preoperative Assessment of MRI-Invisible Early-Stage Endometrial Cancer With MRI-Based Radiomics Analysis Xiaoting Jiang, Jiacheng Song, Aining Zhang, Wenjun Cheng, Shaofeng Duan, Xisheng Liu, and Ting Chen
Editorial	256	Editorial for "Preoperative Assessment of MRI-Invisible Early-Stage Endometrial Cancer With MRI-Based Radiomics Analysis" Michael A. Ohlinger
	258	Multi-Sequence and Multi-Regional MRI-Based Radiomics Nomogram for the Preoperative Assessment of Muscle Invasion in Bladder Cancer Lu Zhang, Xiaoyang Li, Li Yang, Ying Tang, Junting Guo, Ding Li, Shuo Li, Yan Li, Le Wang, Ying Lei, Hong Qiao, Guoqiang Yang, and Xiaochun Wang
Editorial	270	Editorial for "Multi-Sequence and Multi-Regional MRI-Based Radiomics Nomogram for the Preoperative Assessment of Muscle Invasion in Bladder Cancer" Benito de Celis Alonso
Neuro	272	Detection of Cerebral Microbleeds in MR Images Using a Single-Stage Triplanar Ensemble Detection Network (TPE-Det) Haejoon Lee, Jun-Ho Kim, Seul Lee, Kyu-Jin Jung, Woo-Ram Kim, Young Noh, Eung Yeop Kim, Koung Mi Kang, Chul-Ho Sohn, Dong Young Lee, Mohammed A. Al-masni, and Dong-Hyun Kim
	284	Evidence of An Association Between Cerebral Blood Flow and Microstructural Integrity in Normative Aging Using a Holistic MRI Approach Matthew Kiely, Curtis Triebwetter, Zhaoyuan Gong, John P. Laporte, Mary E. Faulkner, Mohammad A. B. S. Akhonda, Maryam H. Alsameen, Richard G. Spencer, and Mustapha Bouhrara
	294	Normative Values of Neuromelanin-Sensitive MRI Signal in Older Adults Obtained Using a Turbo Spin Echo Sequence Rami Al Haddad, Mira Chamoun, Christine L. Tardif, Synthia Guimond, Guillermo Horga, Pedro Rosa-Neto, and Clifford M. Cassidy
	301	Radiomic Features of the Edema Region May Contribute to Grading Meningiomas With Peritumoral Edema Zhige Guo, Zhongyu Tian, Feina Shi, Penglei Xu, Jianmin Zhang, Chenhan Ling, and Qiang Zeng
Editorial	311	Editorial for "Radiomic Features of the Edema Region May Contribute to Grading Meningiomas With Peritumoral Edema" Scott N. Hwang
	313	T₁ Mapping From MPRAGE Acquisitions: Application to the Measurement of the Concentration of Nanoparticles in Tumors for Theranostic Use Audrey Lavielle, Fabien Boux, Justine Deborne, Noël Pinaud, Sandrine Dufort, Camille Verry, Sylvie Grand, Irène Troprès, Clément Vecco-Garda, Géraldine Le Duc, Stéphane Mornet, and Yannick Crémillieux
Editorial	324	Editorial for "T₁ Mapping From MPRAGE Acquisitions: Application to the Measurement of the Concentration of Nanoparticles in Tumors for Theranostic Use" Erkan Gökc��

Letters to the Editor

326	Response to "Neuromelanin? MRI of Noradrenergic and Dopaminergic Neurons" Naying He, Yongsheng Chen, Peter A. LeWitt, Fuhua Yan, and Ewart Mark Haacke
328	Neuromelanin? MRI of Noradrenergic and Dopaminergic Neurons Takashi Watanabe