

---

## JMRI-ISMRM Recommendation

---

**1311 Recommendations for Imaging Patients With Cardiac Implantable Electronic Devices (CIEDs)**

Karl K. Vigen, Scott B. Reeder, Maureen N. Hood, Michael Steckner, Tim Leiner, David A. Dombroski, Vikas Gulani, and on behalf of the ISMRM Safety Committee

---

## Review Articles

---

**1318 MRI of the Neonatal Brain: A Review of Methodological Challenges and Neuroscientific Advances**

Jessica Dubois, Marianne Alison, Serena J. Counsell, Lucie Hertz-Pannier, Petra S. Hüppi, and Manon J.N.L. Benders

**1344 Proton MRI of the Lung: How to Tame Scarce Protons and Fast Signal Decay**

Andreas Voskrebenev and Jens Vogel-Claussen

---

## Original Research

---

**Neuro**

**1358 Lack of FKBP51 Shapes Brain Structure and Connectivity in Male Mice**

Clara Engelhardt, Benoit Boulat, Michael Czisch, and Mathias V. Schmidt

**1366 Detecting Task Functional MRI Activation Using the Multiband Multiecho (MBME) Echo-Planar Imaging (EPI) Sequence**

Alexander D. Cohen, Amritpal S. Jagra, Baolian Yang, Brice Fernandez, Suchandrima Banerjee, and Yang Wang

**1375 Desynchronized Functional Activities Between Brain White and Gray Matter in Major Depression Disorder**

Yuqun Zhang, Youyong Kong, Xiaoyun Liu, Heren Gao, Yingying Yin, Zhenghua Hou, Haisan Zhang, Hongxing Zhang, Chunming Xie, Zhijun Zhang, and Yonggui Yuan

**1387 Deficit of Cross-Frequency Integration in Mild Cognitive Impairment and Alzheimer's Disease: A Multilayer Network Approach**

Xiaoyue Wang, Xiaohong Cui, Congli Ding, Dandan Li, Chen Cheng, Bin Wang, and Jie Xiang

**1399 Predicting Isocitrate Dehydrogenase (IDH) Mutation Status in Gliomas Using Multiparameter MRI Radiomics Features**

Hong Peng, Jiaohua Huo, Bo Li, Yuanyuan Cui, Hao Zhang, Liang Zhang, and Lin Ma

**Editorial**

**1408 Editorial for "Predicting Isocitrate Dehydrogenase (IDH) Mutation Status in Gliomas Using Multiparameter MRI Radiomics Features"**

Harald Kugel

**Abdomen**

**1410 Quantification of the Hemodynamic Changes of Cirrhosis with Free-Breathing Self-Navigated MRI**

Ryan L. Brunsing, Dustin Brown, Hashem Almahoud, Yuko Kono, Rohit Loomba, Irene Vodkin, Claude B. Sirlin, Marcus T. Alley, Shreyas S. Vasanawala, and Albert Hsiao

**1422 MR Measures of Small Bowel Wall T2 Are Associated With Increased Permeability**

Robert A. Scott, Hannah G. Williams, Caroline L. Hoad, Ali Alyami, Catherine A. Ortori, Jane I. Grove, Luca Marciani, Gordon W. Moran, Robin C. Spiller, Alex Menys, Guruprasad P. Aithal, and Penny A. Gowland

**1432 Retrospective Distortion and Motion Correction for Free-Breathing DW-MRI of the Kidneys Using Dual-Echo EPI and Slice-to-Volume Registration**

Jaume Coll-Font, Onur Afacan, Scott Hoge, Harsha Garg, Kumar Shashi, Bahram Marami, Ali Gholipour, Jeanne Chow, Simon Warfield, and Sila Kurugol

<i>Editorial</i>	<b>1444 Editorial for "Retrospective Distortion and Motion Correction for Free-Breathing DW-MRI of the Kidneys Using Dual Echo EPI and Slice-to-Volume Registration"</b> Valdair F. Muglia and Carlos Ernesto Garrido Salmon
<i>Interventional</i>	<b>1446 MRI for Guided Right and Left Heart Cardiac Catheterization: A Prospective Study in Congenital Heart Disease</b> Mari Nieves Velasco Forte, Sébastien Roujol, Bram Ruijsink, Israel Valverde, Phuoc Duong, Nick Byrne, Sascha Krueger, Steffen Weiss, Yousef Arar, Surendranath R. Veeram Reddy, Tobias Schaeffter, Tarique Hussain, Reza Razavi, and Kuberan Pushparajah
<i>Cardiac</i>	<b>1458 Reference Ranges, Diagnostic and Prognostic Utility of Native T1 Mapping and Extracellular Volume for Cardiac Amyloidosis: A Meta-Analysis</b> Tom Kai Ming Wang, Maria Vega Brizneda, Deborah H. Kwon, Zoran B. Popovic, Scott D. Flamm, Mazen Hanna, Brian P. Griffin, and Bo Xu
<i>Editorial</i>	<b>1469 Editorial for "Reference Ranges, Diagnostic and Prognostic Utility of Native T1 Mapping and Extracellular Volume for Cardiac Amyloidosis: A Meta-analysis"</b> Thanh D. Nguyen, Mathew Maurer, and Jonathan W. Weinsaft
	<b>1471 Quantitative magnetic resonance imaging measures of three-dimensional aortic morphology in healthy aging and hypertension</b> Thomas Dietenbeck, Sophia Houriez-Gombaud-Saintonge, Etienne Charpentier, Umit Gencer, Alain Giron, Antonio Gallo, Samia Boussouar, Nicoletta Pasi, Gilles Soulat, Elie Mousseaux, Alban Redheuil, and Nadja Kachenoura
<i>Editorial</i>	<b>1484 Editorial for "Quantitative measures of 3D aortic morphology from cardiac MRI in healthy aging and hypertension"</b> Ganesh Adluru
<i>Pediatrics</i>	<b>1486 Comparison Between Diffusion-Weighted MRI and <math>^{123}\text{I}</math>-mIBG Uptake in Primary High-Risk Neuroblastoma</b> Laura Privitera, Patrick W. Hales, Layla Musleh, Elizabeth Morris, Natalie Sizer, Giuseppe Barone, Paul Humphries, Kate Cross, Lorenzo Biassoni, and Stefano Giuliani
<i>Editorial</i>	<b>1498 Editorial for "Comparison between diffusion weighted MRI and <math>^{123}\text{I}</math>-MIBG uptake in primary high risk neuroblastoma"</b> Nishard Abdeen
<i>Chest</i>	<b>1500 Quantification of MRI T2 Interstitial Lung Disease Signal-Intensity Volume in Idiopathic Pulmonary Fibrosis: A Pilot Study</b> Illyes Benlala, Agnes Albat, Elodie Blanchard, Julie Macey, Chantal Raherison, Thomas Benkert, Patrick Berger, François Laurent, and Gaël Dournes
<i>Editorial</i>	<b>1508 Editorial for "Quantification of magnetic resonance imaging T2 interstitial lung disease signal intensity volume in idiopathic pulmonary fibrosis: A pilot study"</b> Wagner D. de Paula
<i>Head and Neck</i>	<b>1510 Robustness of MR Elastography in the Healthy Brain: Repeatability, Reliability, and Effect of Different Reconstruction Methods</b> Siri F. Svensson, José De Arcos, Omar Isam Darwish, Jorunn Fraser-Green, Tryggve H. Storås, Sverre Holm, Einar O. Vik-Mo, Ralph Sinkus, and Kyrre E. Emblem
	<b>1522 Dynamic Contrast-Enhanced MRI Can Quantitatively Discriminate the Original Site From Peripheral Portion of Sinonasal Inverted Papillomas</b> Zheng Li, Mu Xian, Jian Guo, Xiaoxia Qu, Chengshuo Wang, Luo Zhang, and Junfang Xian
<i>Editorial</i>	<b>1528 Editorial for "Dynamic contrast-enhanced MRI can quantitatively discriminate the original site from peripheral portion of sinonasal inverted papillomas"</b> Mehtap Beker-Acay

Musculoskeletal	1529 Quantitative Skeletal Muscle Imaging Using 3D MR Fingerprinting With Water and Fat Separation Benjamin Marty, Alfredo L. Lopez Kolkovsky, Erick C.A. Araujo, and Harmen Reyngoudt
	1539 Automation of Quantifying Axonal Loss in Patients with Peripheral Neuropathies through Deep Learning Derived Muscle Fat Fraction Yongsheng Chen, Daniel Moiseev, Wan Yee Kong, Alexandar Bezanovski, and Jun Li
Pelvis	1550 Diagnostic nomogram based on intralesional and perilesional radiomics features and clinical factors of clinically significant prostate cancer Han Zhang, Xianglin Li, Yongxia Zhang, Cheng Huang, Yongqiang Wang, Ping Yang, Shaofeng Duan, Ning Mao, and Haizhu Xie
	1559 Accurate Estimation of the Duration of Testicular Ischemia Using Creatine Chemical Exchange Saturation Transfer (CrCEST) Imaging Yusuke Takahashi, Hidetaka Kioka, Shigeyoshi Saito, Shinichiro Fukuhara, Yoshihiro Asano, Seiji Takashima, Yoshichika Yoshioka, and Yasushi Sakata
Editorial	1568 Editorial for "Accurate Estimation of the Duration of Testicular Ischemia Using Creatine Chemical Exchange Saturation Transfer (CrCEST) Imaging" Xianfeng Wang
Thoracic	1570 Longitudinal Assessment of Patients With Cystic Fibrosis Lung Disease With Multivolume Noncontrast MRI and Spirometry Francesca Pennati, Irene Borzani, Laura Moroni, Maria Chiara Russo, Nadia Faelli, Andrea Aliverti, and Carla Colombo
Breast	1581 Correction of Artifacts Induced by $B_0$ Inhomogeneities in Breast MRI Using Reduced-Field-of-View Echo-Planar Imaging and Enhanced Reversed Polarity Gradient Method Ana E. Rodríguez-Soto, Lauren K. Fang, Dominic Holland, Jingjing Zou, Helen H. Park, Kathryn E. Keenan, Hauke Bartsch, Joshua Kuperman, Anne M. Wallace, Michael Hahn, Haydee Ojeda-Fournier, Anders M. Dale, and Rebecca Rakow-Penner
Editorial	1592 Editorial for "Correction of Artifacts Induced by $B_0$ Inhomogeneities in Breast MRI Using Reduced-Field-of-View Echo-Planar Imaging and Enhanced Reverse Polarity Gradient Method" Xiangyu Yang
	1594 Diffusion-weighted double-echo steady-state with a three-dimensional cones trajectory for non-contrast-enhanced breast MRI Catherine J. Moran, Joseph Y. Cheng, Christopher M. Sandino, Michael Carl, Marcus T. Alley, Jarrett Rosenberg, Bruce L. Daniel, Sarah M. Pittman, Eric L. Rosen, and Brian A. Hargreaves
Editorial	1606 Editorial on "Diffusion-Weighted Double-Echo Steady-State with a 3D Cones Trajectory for Non-Contrast-Enhanced Breast MRI" Habib Rahbar and Savannah C. Partridge
Commentary	1608 Resonate: Reaching Excellence Through Equity, Diversity, and Inclusion in ISMRM Esther A.H. Warnert, Lars Kasper, Carolyn C Meltzer, Johnson B Lightfoote, Matthew D Bucknor, Hamied Haroon, Gavin Duggan, Penny Gowland, Larry Wald, Karla L. Miller, Elizabeth A. Morris, and Uduanna C Anazodo