Original Articles

Atrial Structure and Function

Late Systolic Myocardial Loading Is Associated With Left Atrial Dysfunction in Hypertension
Julio A. Chirinos, MD, PhD; Timothy S. Phan, BSBME, BSECE; Amer A. Syed, MD; Zeba Hashmath, MBBS; Harry G. Oldland, MD; Maheswara R. Koppula, MD; Ali Tariq, MD; Khuzaima Javaid, MBBS; Rachana Miller, MBBS; Swapna Varakantan, MD; Anjaneyulu Dunde, MD; Vadde Neetha, MD; Scott R. Akers, MD, PhD ............................................................... e006023

■ Editorial Arterial Loading and the Prevention of Atrial Dysfunction
Thomas H. Marwick, MBBS, PhD, MPH; James E. Sharman, PhD ............................................................... e006546

Myocardial Infarction

Identification of High-Risk Patients After ST-Segment—Elevation Myocardial Infarction: Comparison Between Angiographic and Magnetic Resonance Parameters
Alessandro Durante, MD; Alessandra Laricchia, MD; Giulia Benedetti, MD; Antonio Esposito, MD; Alberto Margonato, MD; Ornella Riolandi, MD; Francesco De Cobelli, MD; Antonio Colombo, MD; Paolo G. Camici, MD ............................................................... e005841

■ Editorial Coronary Microvascular Obstruction: Key Factor in the Prognosis of ST-Segment—Elevation Myocardial Infarction
Thomas Stiermaier, MD; Holger Thiele, MD; Ingo Eitel, MD ............................................................... e006568

Pulmonary Arterial Hypertension

Right Heart End-Systolic Remodeling Index Strongly Predicts Outcomes in Pulmonary Arterial Hypertension: Comparison With Validated Models
Myriam Amsallem, MD, MS; Andrew J. Sweatt, MD; Marie C. Aymami, MD; Tatiana Kaznetsova, MD, PhD; Mona Selej, MD; HongQuan Lu, MD; Olaf Merxier, MD; Elie Fadel, MD; Ingela Schnitigter, MD; Michael V. McConnell, MD, MSEE; Marlene Rabinovitch, MD; Roham T. Zamanian, MD; Francois Haddad, MD ............................................................... e005771

■ Editorial Respite for 2-Dimensional Right Ventricular Imaging?
Rohan Samson, MD; Thierry H. Le Jemtel, MD ............................................................... e006564

Valvular Heart Disease

Aortic Cross-Sectional Area/Height Ratio and Outcomes in Patients With Bicuspid Aortic Valve and a Dilated Ascending Aorta
Ahmad Masri, MD; Vidyasagar Kalahasti, MD; Lars G. Svensson, MD, PhD; Alaa Alashi, MD; Paul Schoenhagen, MD; Eric E. Roselli, MD; Douglas R. Johnston, MD; L. Leonardo Rodriguez, MD; Brian F. Griffin, MD; Milind Y. Desai, MD ............................................................... e006249

■ Editorial Indexed Aortic Area in Bicuspid Valve Disease: An Important Step Toward a More Personalized Approach to Risk Prediction and Clinical Decision Making
Stephanie L. Sellers, MSc; Darra T. Murphy, MB BCh BAO; Jonathon A. Leipsic, MD ............................................................... e006593
Turbulent Kinetic Energy Assessed by Multipoint 4-Dimensional Flow Magnetic Resonance Imaging Provides Additional Information Relative to Echocardiography for the Determination of Aortic Stenosis Severity
Christian Binter, PhD; Alexander Gotschy, MD, MSc; Simon H. Sündermann, MD; Michelle Frank, MD; Felix C. Tanner, MD; Thomas F. Lüscher, MD; Robert Manka, MD; Sebastian Kozerke, PhD

Editorial Advanced Assessment of Aortic Stenosis Reflecting the Complex Interplay of Valve, Ventricle, Vessel, and Flow
Florian von Knobelsdorff-Brenkenhoff, MD

Incremental Prognostic Use of Left Ventricular Global Longitudinal Strain in Asymptomatic/Minimally Symptomatic Patients With Severe Bioprosthetic Aortic Stenosis Undergoing Redo Aortic Valve Replacement
Peyman Naji, MD; Shailee Shah, MD; Lars G. Svensson, MD, PhD; A. Marc Gillinov, MD; Douglas R. Johnston, MD; L. Leonardo Rodriguez, MD; Richard A. Grimm, DO; Brian P. Griffin, MD; Milind Y. Desai, MD

Editorial Challenge of Timing Redo Aortic Valve Replacement: Is There a Potential Role for Left Ventricular Global Longitudinal Strain?
Helmut Baumgartner, MD

Advances in Cardiovascular Imaging
Recent Advances in Cardiovascular Magnetic Resonance: Techniques and Applications
Michael Salerno, MD, PhD; Behzad Sharif, PhD; Håkan Arheden, MD, PhD; Andreas Kumar, MD, MSc; Leon Axel, MD, PhD; Debiao Li, PhD; Stefan Neubauer, MD

Employing Extracellular Volume Cardiovascular Magnetic Resonance Measures of Myocardial Fibrosis to Foster Novel Therapeutics
Erik B. Schelbert, MD, MS; Hani N. Sabbah, PhD; Javed Butler, MD; Mihai Gheorghiade, MD

Controversies in Imaging
High Field Cardiac Magnetic Resonance Imaging: Case for Ultrahigh Field Cardiac Magnetic Resonance
Thoralf Niendorf, PhD; Jeanette Schulz-Menger, MD; Katharina Paul, PhD; Till Huelnhagen, Dipl Ing; Victor A. Ferrari, MD, PhD; Russell Hodge, MA

Low-Field Cardiac Magnetic Resonance Imaging: A Compelling Case for Cardiac Magnetic Resonance’s Future
Orlando P. Simonetti, PhD; Rizwan Ahmad, PhD

Cardiovascular Images
Use of Multimodality Imaging in Diagnosing Invasive Fungal Diseases of the Heart
Ersilia M. DeFilippis, MD; Sarah Cuddy, MD; Carolyn Glass, MD, PhD; Sarv Priya, MD; Ayaz Aghayev, MD; Richard N. Mitchell, MD, PhD; Francisco M. Marty, MD; Marcelo F. DiCarli, MD; Ron Blankstein, MD

Correspondence
Letter by Giani and Rossi Regarding Article, “Factors Associated With Left Atrial Remodeling in the General Population”
Anna Giani; Andrea Rossi, MD

Response by de Lemos et al to Letter Regarding Article “Factors Associated With Left Atrial Remodeling in the General Population”
James A. de Lemos, MD; Walter Oliver, BS; Gwendolyn Matthews, BS; Colby R. Ayers, MS; Sonia Garg, MD; Sachin Gupta, MD; Ian J. Neelard, MD; Mark H. Drazner, MD, MSc; Jarett D. Berry, MD, MS; Susan Matulevicius, MD, MSc