

Circulation

An American Heart
Association Journal

April 18, 2017
Volume 135
Number 16

FRAME OF REFERENCE

On My Mind

Time in the Therapeutic Range for Patients Taking Warfarin in Clinical Trials: Useful, but Also Misleading, Misused, and Overinterpreted 1475

James A. Reiffel, MD

Perspective

Engagement, Research, and Evidence: Leveraging the National Patient-Centered Clinical Research Network for Better Cardiovascular Health 1478

Adrian F. Hernandez, MD, MHS; Henry P. Cruz, BA

ORIGINAL RESEARCH ARTICLES

Medical Therapy for Secondary Prevention and Long-Term Outcome in Patients With Myocardial Infarction With Nonobstructive Coronary Artery Disease 1481

Bertil Lindahl, MD, PhD; Tomasz Baron, MD, PhD; David Erlinge, MD, PhD; Nermin Hadziosmanovic, MSc; Anna Nordenskjöld, MD, PhD; Anton Gard, MD; Tomas Jernberg, MD, PhD



Editorial

Myocardial Infarction With Nonobstructive Coronary Arteries (MINOCA): The Past, Present, and Future Management 1490

Sivabaskari Pasupathy, BSc(Hons), PhD; Rosanna Tavella, BSc(Hons), PhD; John F. Beltrame, BSc, BMBS, PhD

High-Sensitive Cardiac Troponin T as an Early Biochemical Signature for Clinical and Subclinical Heart Failure: MESA (Multi-Ethnic Study of Atherosclerosis) 1494

Stephen L. Seliger, MD, MS; Susie N. Hong, MD; Robert H. Christenson, PhD; Richard Kronmal, PhD; Lori B. Daniels, MD, MAS; Joao A.C. Lima, MD; James A. de Lemos, MD; Alain Bertoni, MD, MPH; Christopher R. deFilippi, MD

Editorial

High-Sensitive Cardiac Troponin for Prediction of Clinical Heart Failure: Are We Ready for Prime Time? 1506

Mauro Gori, MD; Michele Senni, MD; Marco Metra, MD

Impact of Practice-Based Management of Pulmonary Artery Pressures in 2000 Patients Implanted With the CardioMEMS Sensor 1509

J. Thomas Heywood, MD; Rita Jermyn, MD; David Shavelle, MD; William T. Abraham, MD; Arvind Bhimaraj, MD, MPH; Kunjan Bhatt, MD; Fareed Sheikh, MD; Eric Eichorn, MD; Sumant Lamba, MD; Rupinder Bharmi, MS; Rahul Agarwal, PhD; Charisma Kumar, MS; Lynne W. Stevenson, MD

Editorial

Measuring Pulmonary Artery Pressures in Heart Failure: A New Useful Diagnostic Tool? 1518

Thomas M. Gorter, MD; Michiel Rienstra, MD, PhD; Dirk J. van Veldhuisen, MD, PhD



PODCAST



CME



OPEN ACCESS

On the Cover: *Circulation* Doodle

This month's doodle is in honor of Earth month.

For more information about the doodle, go to <http://circ.ahajournals.org/content/circulation-cover-doodle>.

ORIGINAL RESEARCH ARTICLES

Range of Risk Factor Levels: Control, Mortality, and Cardiovascular Outcomes in Type 1 Diabetes Mellitus 1522

Aidin Rawshani, MD; Araz Rawshani, MD, PhD; Stefan Franzén, MSc, PhD; Björn Eliasson, MD, PhD; Ann-Marie Svensson, PhD; Mervete Miftaraj, MSc; Darren K. McGuire, MD, MHS; Naveed Sattar, MD, PhD; Annika Rosengren, MD, PhD; Soffia Gudbjörnsdóttir, MD, PhD



Nicotinamide Phosphoribosyltransferase Promotes Pulmonary Vascular Remodeling and Is a Therapeutic Target in Pulmonary Arterial Hypertension 1532

Jiawang Chen, PhD; Justin R. Sysol, BS; Sunit Singla, MD; Shuangping Zhao, MD, PhD; Aya Yamamura, PhD; Daniela Valdez-Jasso, PhD; Taimur Abbasi, MD; Krystyna M. Shioura, PhD; Sakshi Sahni, MD; Vamsi Reddy, BS; Arvind Sridhar, BS; Hui Gao, MD, PhD; Jaime Torres, MD; Sara M. Camp, BS; Haiyang Tang, PhD; Shui Qing Ye, MD, PhD; Suzy Comhair, PhD; Raed Dweik, MD; Paul Hassoun, MD; Jason X.-J. Yuan, MD, PhD; Joe G.N. Garcia, MD; Roberto F. Machado, MD

STATE OF THE ART

In Depth

Treatment of Patients With Atrial Fibrillation and Heart Failure With Reduced Ejection Fraction 1547

Atul Verma, MD; Jonathan M. Kalman, MBBS, PhD; David J. Callans, MD

CLINICAL STATEMENTS AND GUIDELINES

AHA Scientific Statement

Prioritizing Functional Capacity as a Principal End Point for Therapies Oriented to Older Adults With Cardiovascular Disease: A Scientific Statement for Healthcare Professionals From the American Heart Association e894

Daniel E. Forman, MD, FAHA, Chair; Ross Arena, PhD, PT, FAHA, Co-Chair; Rebecca Boxer, MD, MS; Mary A. Dolansky, RN, PhD; Janice J. Eng, PhD, MSc, BSR; Jerome L. Fleg, MD, FAHA; Mark Haykowsky, PhD; Arshad Jahangir, MD, FAHA; Leonard A. Kaminsky, PhD, FAHA; Dalane W. Kitzman, MD; Eldrin F. Lewis, MD, MPH; Jonathan Myers, PhD, FAHA; Gordon R. Reeves, MD, MPT; Win-Kuang Shen, MD, FAHA; On behalf of the American Heart Association Council on Clinical Cardiology; Council on Cardiovascular and Stroke Nursing; Council on Quality of Care and Outcomes Research; and Stroke Council

THE PULSE

Cardiology News

Some Common Ground Emerges in Debate Over ECGs for Athletes 1564

Bridget M. Kuehn

CORRESPONDENCE

Research Letter

Physical Activity Guided by Pulse Pressure in Patients With Continuous Flow Left Ventricular Assist Devices: A Pilot Study 1567

Sven Haufe, MSc; Christoph Bara, MD; Julian Eigendorf, MSc; Kristine Chobanyan-Jürgens, MD; Sebastian V. Rojas, MD; Jan Schmitto, MD; Uwe Tegtbur, MD; Jens Jordan, MD; Jens Tank, MD

Correspondence

Letter by Irfan Regarding Article, "Assessment of the European Society of Cardiology 0-Hour/1-Hour Algorithm to Rule-Out and Rule-In Acute Myocardial Infarction" e919

Affan Irfan, MD

Letter by Mueller and Roffi Regarding Article, "Assessment of the European Society of Cardiology 0-Hour/1-Hour Algorithm to Rule-Out and Rule-In Acute Myocardial Infarction" e921

Christian Mueller, MD; Marco Roffi, MD; On behalf of the Task Force of the ESC 2015 Guidelines for the Management of Acute Coronary Syndromes in Patients Presenting Without Persistent ST-Segment Elevation



PODCAST



CME



OPEN ACCESS

CORRESPONDENCE

Response by Than et al to Letter Regarding Article, “Assessment of the European Society of Cardiology 0-Hour/1-Hour Algorithm to Rule-Out and Rule-In Acute Myocardial Infarction” e923

Martin P. Than, MBBS; John W. Pickering, BSc(Hons), PhD, BA(Hons); Louise Cullen, MBBS(Hons), PhD; Peter A. Kavsak, PhD

Letter by Hermida et al Regarding Article, “The Heart’s Circadian Rhythms Point to Potential Treatment Strategies” e925

Ramón C. Hermida, PhD; Michael H. Smolensky, PhD; Francesco Portaluppi, MD, PhD



PODCAST



CME



OPEN ACCESS

CIRCULATION (ISSN 0009-7322) is published weekly except June and December by Wolters Kluwer Health, Inc. at 14700 Citicorp Drive, Bldg 3, Hagerstown, MD 21742. Business offices are located at Two Commerce Square, 2001 Market Street, Philadelphia, PA 19103. Production offices are located at 351 West Camden Street, Baltimore, MD 21201-2436. Individuals may subscribe for their personal use at the following rates for print subscriptions: \$225 for AHA/ASA Domestic and International Members (excluding General Membership level), or \$657 for domestic non-members and \$1,006 for international non-members. AHA membership information can be found online at professional.heart.org. Periodicals postage paid at Hagerstown, MD, and additional mailing offices. POSTMASTER: Send address changes to CIRCULATION, American Heart Association, Wolters Kluwer Health, Inc., PO Box 1610, Hagerstown, MD 21740.

135 (16)

Circulation. 2017;135:e925-1569

Circulation is published by the American Heart Association, 7272 Greenville Avenue, Dallas, TX 75231
Copyright © 2017 American Heart Association, Inc. All rights reserved.
Print ISSN: 0009-7322. Online ISSN: 1524-4539

The online version of this article, along with updated information and services, is located on the
World Wide Web at:

<http://circ.ahajournals.org/content/135/16.citation>

Permissions: Requests for permissions to reproduce figures, tables, or portions of articles originally published in *Circulation* can be obtained via RightsLink, a service of the Copyright Clearance Center, not the Editorial Office. Once the online version of the published article for which permission is being requested is located, click Request Permissions in the middle column of the Web page under Services. Further information about this process is available in the [Permissions and Rights Question and Answer](#) document.

Reprints: Information about reprints can be found online at:
<http://www.lww.com/reprints>

Subscriptions: Information about subscribing to *Circulation* is online at:
<http://circ.ahajournals.org/subscriptions/>