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DESCRIPTION

As the leader in its field, JACC publishes original peer-reviewed clinical and experimental reports on all aspects of cardiovascular disease. Topics covered include coronary artery and valve disease, congenital heart defects, vascular surgery, cardiomyopathy, drug treatment, new diagnostic techniques, findings from the laboratory, and large multicenter studies of new therapies. JACC also publishes abstracts of papers presented at the annual scientific sessions of the American College of Cardiology and the reports and recommendations of the Bethesda Conferences on current topics in cardiovascular disease.

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AUDIENCE

Specialists in Cardiovascular and Internal Medicine, Cardiovascular Surgery, Pediatric Cardiology, and General and Family Practitioners. For detailed, current information, browse the JACC Homepage http://www.cardiosource.com/jacc.html. Here you will find the current table of contents, complete with abstracts and full-text articles (for individual print subscribers), references, tables and figures. The JACC Homepage also features other important information on permissions, advertising contacts, and other related products. Come browse the leading web site for cardiologists at http://www.cardiosource.com/jacc.html.

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INTRODUCTION
The Journal of the American College of Cardiology (JACC) publishes peer-reviewed articles highlighting all aspects of cardiovascular disease, including original investigations, experimental investigations with clear clinical relevance, state-of-the-art papers, and viewpoints. All manuscripts must be submitted online at www.jaccsubmit.org. Manuscript submissions should conform to the guidelines set forth in the “Recommendations for the Conduct, Reporting, Editing and Publication of Scholarly Work in Medical Journals (ICMJE Recommendations),” available online at http://www.icmje.org and most recently updated in December 2016.

ARTICLE TYPES
JACC publishes the following manuscript types: State-of-the-Art Reviews, Review Topics of the Week, Original Investigations, Research Letters, Letters to the Editor, and Fellows-in-Training & Early Career pages. We also publish Editorial Comments for each Original Investigation, although these are specifically invited by the editorial board and should not be submitted as unsolicited articles. In general, case reports will not be considered for publication.

Proposals for both State-of-the-Art Reviews and Review Topics of the Week should first be emailed to the editorial office at jacc@acc.org to determine if the editor is interested in considering your review for publication. The majority of reviews are solicited by the editors, however, proposals may be considered.

State-of-the-Art Review
The Present and Future: State-of-the-Art Review: As with all submissions to JACC, State-of-the-Art Reviews should focus on the patient. From basic mechanisms to clinical manifestations and interventional approaches to global health implications, such manuscripts will focus on a contemporary, controversial, or translational topic with 4 to 5 major sections written by multiple authors or author groups.

Word count: no more than 10,000 words (text from the introduction to the conclusion, plus references and figure legends) Abstract: Unstructured and no more than 150 words Condensed Abstract: No more than 100 words, stressing clinical implications Figure Limit: None Table Limit: None Central Illustration: Required Clinical Perspectives: Not required

Please be sure you have obtained or will obtain permission for previously published tables, figures, or any material for which you cannot grant copyright.

Review Topic of the Week
The Present and Future: Review Topic of the Week: As with all submissions to JACC, Review Topics of the Week should focus on the patient. They provide a literature review on a contemporary topic of basic, translational, or clinical science. Such manuscripts may be written by a single author or an author group.

Word count: no more than 5,000 words (text from the introduction to the conclusion, plus references and figure legends) Abstract: Unstructured and no more than 150 words Condensed Abstract: No more than 100 words, stressing clinical implications Figure Limit: None Table Limit: None Central Illustration: Required Clinical Perspectives: Not required

Cardiovascular Medicine & Society
These submissions should focus on the impact that government policy (federal, state, and local) and social considerations have on cardiovascular care and its global delivery systems. Such manuscripts may be written by a single author or an author group.

Word count: No more than 2,000 words (text from the introduction to the conclusion, plus references and figure legends) Abstract: Not required Authors: No more than 10 References: No more than 10 Figures/Tables: 1 figure (in no more than 2 parts) or 1 simple table Central Illustration: Not required Clinical Perspectives: Not required

Original Investigations
JACC Original Investigations should relate to cardiovascular science and medicine that may include studies conducted in humans or analyses of human data, or novel preclinical studies with direct clinical relevance that significantly advance the field.

Word count: No more than 5,000 words (text from the introduction to the conclusion, plus references and figure legends). If you are asked to revise your paper, the editors may specify an alternate word limit. Abstract: Structured with the following headings and no more than 250 words: Background,
Objectives, Methods, Results, Conclusions. The abstract should present essential data in 5 paragraphs. Use complete sentences. All data in the abstract also must appear in the manuscript text or tables. For general information on preparing structured abstracts, see “Haynes RB, Mulrow CD, Huth EJ, Altman DG, Gardner MJ. More informative abstracts revisited. Ann Intern Med 1990;113:69-76.” Condensed Abstract: No more than 100 words, stressing clinical implications Figure/Table Limit: None Central Illustration: Required Clinical Perspectives: Required

Research Letters
Both Research Letters and Letters to the Editor are published under the heading “Letters.” You may submit original investigations of a focused nature as a research letter. Word count: No more than 800 words, including references and figure legend References: No more than 5 Authors: No more than 10 Figures/Tables: 1 figure (in no more than 2 parts) or 1 simple table Online or Supplemental Material: Not permitted.

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Focus on a specific manuscript that has appeared in JACC. Letters must be submitted within 3 weeks of the print issue date of the article. We will seek a reply to your letter from the authors of the original paper and publish together, when possible. Letters may be submitted about original research articles only. JACC does not consider letters to the editors on review articles, editorials, or any correspondence, including research letters. Letters to the editor on guidelines are also no longer considered. Word count: No more than 400 words, including references References: No more than 5 Figures/Tables: No more than 1 figure (in no more than 2 parts) or table Please include the cited article as the first reference Authors: No more than 5 Title: Unique title of 15 words or less that does not include the title of the original research paper Title page: Required

Editorial Comments
The editors invite all Editorial Comments published in the Journal. If you are invited to write an editorial, specific requirements will be sent to you. Please do not submit unsolicited editorials.

Fellows-in-Training & Early Career Page
These articles are a maximum of 1,500 words and focus on topics that are of unique relevance to FITs and the younger cardiologist community. However, the submissions must be substantive, engaging in hard-hitting topics that impact their daily practice. In terms of style, they must be formal in their presentation, as these are not blogs, and include citations (if relevant). Also, we would encourage specificity when choosing a topic on which to write, as opposed to something that is too broad to have true impact. All authors must be within 10 years of medical school. Please note that these articles will be reviewed and may be rejected by the JACC Editors. These should NOT be submitted online but e-mailed to jacc@acc.org.

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The entire manuscript (including tables) should be uploaded as a Microsoft Word document, with 1-inch margins and use Times New Roman 12 pt as the font. The title and abstract pages, including keywords and abbreviations, should be single-spaced. All text from the introduction to the end (including tables) should be double-spaced. Page numbering should start with the title page. Page 1: Title page: See also Manuscript Content, below Page 2: Abstract, Condensed Abstract, Key Words, Abbreviations list Text Perspectives: Core Clinical Competencies and Translational Outlook implications (on a separate page after the conclusions, and only for Original Investigation submissions) References Figure titles and legends, including a title and caption for the Central Illustration (if necessary) Tables, each on a separate page Figures Supplemental material Page numbering should begin with the title page.

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Title (no more than 15 words) and brief title of no more than 7 words. Authors names (including full first name, middle initial, and degrees MD, PhD, etc.). Total word count. Departments and institutions with which the authors are affiliated. Indicate the specific affiliations if the work is generated from more than one institution (use superscript letters a, b, c, d, and so on). List only the departments and institutions for co-authors. The full address is required for the corresponding author. Funding: Information on grants, contracts, and other forms of financial support. List the cities and states of all foundations, funds, and institutions involved in the work. Disclosures: This must include the full disclosure of any relationship with industry. (See Relationship with Industry section.) If there are no relationships with industry, this should be stated. Corresponding author contact information: Under the heading, Address for correspondence, provide the full name and complete postal address of the author to whom communications should be sent. Also provide telephone and fax numbers, and an e-mail address, and a Twitter handle, if available. The corresponding author will be the sole contact for all submission queries. Acknowledgements: 100 words or less. Letters of permission from all individuals listed in the acknowledgments are the responsibility of the corresponding author.

Abstract
Provide a structured abstract of no more than 250 words for Original Investigations, presenting essential data in 5 paragraphs introduced by separate headings in the following order: Background, Objectives, Methods, Results, Conclusions. All data in the abstract also must appear in the manuscript text or tables. For general information on preparing structured abstracts, see “Haynes RB, Mulrow CD, Huth EJ, Altman DG, Gardner MJ. More informative abstracts revisited. Ann Intern Med 1990;113:6976.” An unstructured 150-word abstract should be provided for either type of review article.

Keywords
Immediately after the abstract, provide a maximum of 6 key words, using American spelling and avoiding general and plural terms and multiple concepts (avoid, for example, ‘and’, ‘of’). Be sparing with abbreviations. These key words will be used for indexing purposes, and therefore should be different than the terms/words already used in the title of the paper.

Abbreviations
Up to 10 abbreviations of common terms (e.g., ECG, PTCA, CABG) or acronyms (GUSTO, SOLVD, TIMI) may be used throughout the manuscript. On a separate page following the abstract, list the selected abbreviations and their definitions (e.g., TEE = transesophageal echocardiography). The editors will determine which lesser-known terms should not be abbreviated. Consult “Recommendations for the Conduct, Reporting, Editing and Publication of Scholarly Work in Medical Journals (ICMJE Recommendations),” available at http://www.icmje.org, for appropriate use of units of measure.

Text
Use Times New Roman 12-pt font. The text should be structured as: Introduction, Methods, Results, Discussion, and Conclusions. Use headings and subheadings in the Methods, Results, and, particularly in the Discussion sections. Every reference, figure, and table should be cited in the text in numerical order according to order of mention.

Clinical Perspectives
The authors should delineate clinical competencies and translational outlook recommendations for their manuscripts. These competencies should not restate the questions underlying the work but describe the implications of the study and how the new information can be integrated into current practice based on the 6 domains delineated by the Accreditation Council on Graduate Medical Education (ACGME) and adopted by the American College of Cardiology Foundation (ACCF). These should be listed in the manuscript after the text and before the references. Please review the examples provided below. The competencies describe the implications of the study for current practice. The translational outlook places the work in a futuristic context, emphasizing directions for additional research.

Competency-based learning in cardiovascular medicine addresses the 6 domains promulgated by the ACGME and endorsed by the American Board of Internal Medicine (Medical Knowledge, Patient Care and Procedural Skills, Interpersonal and Communication Skills, Systems-Based Practice, Practice-Based Learning, and Professionalism) (http://www.acgme.org/acgmeweb). The ACCF has adopted this format for its competency and training statements, career milestones, lifelong learning, and educational programs. The ACCF also has developed
tools to assist physicians in assessing, enhancing, and documenting these competencies (http://www.acc.org/education-and-meetings/products-and-resources/competencies). Authors are asked to consider the clinical implications of their report and identify applications in one or more these competency domains that could be used by clinician-readers to enhance their competency as professional caregivers. This applies not only to physicians-in-training, but to the sustained commitment to education and continuous improvement across the span of their professional careers.

**Translational Outlook**
Translating biomedical research from the laboratory bench, clinical trials, or global observations to the care of individual patients can expedite discovery of new diagnostic tools and treatments through multidisciplinary collaboration. Effective translational medicine facilitates implementation of evolving strategies for prevention and treatment of disease in the community. The Institute of Medicine identified 2 areas needing improvement: testing basic research findings in properly designed clinical trials and, once the safety and efficacy of an intervention has been confirmed, more efficiently promulgating its adoption into standard practice (Sung NS, Crowley WF, Genel M. The meaning of translational research and why it matters. JAMA 2008;299:3140-8). The National Institutes of Health (NIH) has recognized the importance of translational biomedical research, emphasizing multifunctional collaborations between researchers and clinicians to leverage new technology and accelerate the delivery of new therapies to patients (http://www.ncats.nih.gov/about/about.html). Authors are asked to place their work in the context of the scientific continuum, by identifying impediments and challenges requiring further investigation and anticipating next steps and directions for future research.

**Clinical Trials**
EXAMPLE 1: For a Clinical Trial [N Engl J Med 2012;367:2375-84]:

**PERSPECTIVES**
Competency in Medical Knowledge: CABG surgery is the preferred method of revascularization for patients with diabetes and multivessel coronary artery disease.
Competency in Patient Care: The diabetic patient with coronary symptomatology, prior to the diagnostic catheterization, should be made aware that if multivessel disease is identified and intervention is indicated, surgical consultation should be entertained.
Translational Outlook 1: Although this is a relatively short-term study (median of 3.8 years), longer-term follow up of FREEDOM will lead to better understanding of the comparative benefit by CABG, specifically on mortality.
Translational Outlook 2: Compliance to medication is nonsatisfactory in patients with coronary artery disease. Comparing the compliance of FREEDOM patients taking a "polypill" approach (including aspirin, statin, and an angiotensin-converting enzyme inhibitor) with the compliance of patients treated conventionally with individual agents should be undertaken.

**Translational Science Studies**

**PERSPECTIVES**
Competency in Medical Knowledge: Inflammation is one of the major determinants of atherosclerotic plaque instability. Positron emission tomography with F18-labeled FDG has been employed for the identification of the macrophages in high-risk patients. Imaging with mannose, the isomer of glucose, may have an advantage because a subset of macrophages in high-risk plaques develop mannose receptors.
Translational Outlook 1: Although circulating biomarkers of inflammation, such as hs-CRP, provide reliable information of systemic inflammation, detection of inflammation at the plaque level may allow identification of the high-risk plaques.
Translational Outlook 2: Plaque imaging with sugars, although feasible, must in a randomized fashion investigate whether treatment of individual high-risk plaques would favorably influence major adverse outcomes in atherosclerotic disease.

**Meta-Analysis or Review Article**
EXAMPLE 3: For a Meta-Analysis or a Review Article [Lancet 2014;383:955-62]:

**PERSPECTIVES**
Competency in Medical Knowledge 1: Selection of antithrombotic therapy for prevention of thromboembolism in patients with atrial fibrillation must consider several clinical factors, including the patient's values and preferences.
Competency in Medical Knowledge 2: The oral direct thrombin inhibitor, dabigatran, and factor Xa inhibitors, rivaroxaban, apixaban, and edoxaban (so-called novel oral anticoagulants or NOACs) avoid the dietary restrictions and need for routine coagulation monitoring that are cumbersome aspects of anticoagulation with vitamin K antagonists such as warfarin.

Competency in Patient Care: All 3 NOACs currently approved for clinical use in the United States represent advances over warfarin because of their more predictable pharmacological profiles, fewer drug interactions, and considerably lower risk of intracranial bleeding than warfarin, but these advantages come at greater monetary cost, and there is presently no approved antidote or validated strategy rapid reversal of anticoagulation induced by any of the NOACs.

Competency in Interpersonal & Communication Skills: It is important to discuss the available options with patients who are candidates for the newer agents.

Translational Outlook 1: The mechanism by which each of the NOACs evaluated to date cause less intracerebral hemorrhage than well-managed warfarin anticoagulation requires further investigation.

Translational Outlook 2: Additional research is needed to understand the safety and efficacy of the NOACs, alone or in combination in patients with mechanical prosthetic heart valves to overcome the toxicity of this type of anticoagulation in the limited studies undertaken to date that contraindicate their use in patients who have undergone heart valve replacement with mechanical prostheses.

REFERENCES

Identify references in the text by numerals in parentheses on the line. The reference list should be typed double-spaced on pages separate from the text; references must be numbered consecutively in the order in which they are mentioned in the text. List all authors if 6 or fewer, otherwise list the first 3 and add “et al.” Do not use periods after author initials. Do not cite personal communications, manuscripts in preparation, or other unpublished data in the references; these may be cited in the text in parentheses. Do not cite abstracts that are older than 2 years. Identify abstracts by the abbreviation “abstr” in parentheses. If letters to the editor are cited, identify them with the word “letter” in parentheses.

Use Index Medicus (National Library of Medicine) abbreviations for journal titles. It is important to note that when citing an article from the *Journal of the American College of Cardiology*, the correct citation format is J Am Coll Cardiol.

Use the following style and punctuation for references:
Periodical. Do not use periods after the authors’ initials. Please provide inclusive page numbers:


FIGURE LEGENDS

All figures must have a number, title, and caption. Figures should be cited in numerical order in the text. Supplemental figures should be cited as “Online Figure 1, Online Figure 2,” etc. Figure titles should be short and followed by a 2 to 3 sentence caption. Your Central Illustration, if not an existing figure, should be listed first. If the figure has been previously published, cite the figure source in the legend. All abbreviations used in the figure should be identified in alphabetical order at the end of each legend (see also Figures).
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Each table should be on a separate page, with the table number and title centered above the table and explanatory notes below the table. Use Arabic numbers. Table numbers must correspond with the order cited in the text. Tables should be self-explanatory, and the data presented in them should not be duplicated in the text or figures.
All tables must have a title. Abbreviations should be listed in a footnote under the table in alphabetical order. Footnote symbols should appear in the following order: *, †, ‡, §, ||, #, **, ††, etc. If previously published tables are used, written permission from the original publisher/author is required. Cite the source of the table in the footnote.

CENTRAL ILLUSTRATION
All Original Investigations, State-of-the-Art Reviews, and Review Topics of the Week should develop at least 1 Central Illustration (that may be a hand-drawn figure), which summarizes the entire manuscript or at least a major section of the manuscript. Our in-house medical illustrators will create the final printable versions of these figures in consultation with the authors and the editors. The purpose of these illustrations is to provide a snapshot of your paper in a single visual, conceptual manner. This illustration must be accompanied by a legend (title and caption). The Central Illustration legend should be listed first in your list of figure legends, unless it is an existing figure.

FIGURES
Figures and graphs should be provided in EPS or TIF format. Color images must be at least 300 DPI. Gray scale images should be at least 300 DPI. All abbreviations used in the figure should be identified in an alphabetical order at the end of each legend. All symbols used (arrows, circles, etc.) must be explained. Figure legends should be typed double-spaced on pages separate from the text. Figure numbers must correspond with the order in which they are mentioned in the text. If previously published figures are used, written permission from the original publisher is required. See STM Guidelines for details: http://www.stmassoc.org/permissions-guidelines. If the figure has been previously published, cite the figure source in the legend.

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