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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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GUIDE FOR AUTHORS

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](http://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](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

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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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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

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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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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**
**EXAMPLE 2:** For a Translational Science Study [Nat Med 2014;20:215-9]:

**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:

DOI-based citation for an article in press.


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.
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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.

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Graphics software, such as Photoshop and Illustrator, should be used to create the art, but not presentation software such as Powerpoint, CorelDraw, or Harvard Graphics. Line art (black and white or color) and combinations of gray scale images and line art should be at least 1200 DPI. Lettering should be of sufficient size to be legible after reduction for publication. The optimal size is 12 points. Symbols should be of a similar size. Figures should be no smaller than 13 cm x 18 cm (500 x 700). Decimals, lines, and other details must be strong enough for reproduction. Use only black and white gray in charts and graphs. Place crop marks on photomicrographs to show only the essential field. Designate special features with arrows. All symbols, arrows, and lettering on half-tone illustrations must contrast with the background. There is no fee for the publication of color figures. Our editors encourage authors to submit figures in color, as we feel it improves the clarity and visual impact of the images.

VIDEOS
Inclusion of videos in the published paper is at the discretion of the editors. Video submissions for viewing online should be one of the following formats: AudioVideo Interleave (.avi), MPEG (.mpg), or QuickTime (.qt, .mov). AVI files can be displayed via Windows Media Player. MPEG files can be displayed via Windows Media Player: http://www.microsoft.com/windows/windowsmedia/players.aspx. QuickTime files require QuickTime software (free) from Apple: http://www.apple.com/quicktime/download/index.html. Videos should be brief whenever possible (less than 5 minutes). Longer videos will require longer download times and may have difficulty playing online. Videos should be restricted to the most critical aspects of your research. A longer procedure can be restructured as several shorter videos and submitted in that form. It is advisable to compress files to use as little bandwidth as possible and to avoid overly long download times. Video files should be no larger than 5 megabytes. A video legends page giving a brief description of the video content should be provided for each video.

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