DESCRIPTION

Published 24 times a year, The American Journal of Cardiology® is an independent journal designed for cardiovascular disease specialists and internists with a subspecialty in cardiology throughout the world. AJC is an independent, scientific, peer-reviewed journal of original articles that focus on the practical, clinical approach to the diagnosis and treatment of cardiovascular disease. AJC has one of the fastest acceptance to publication times in Cardiology. Features report on systemic hypertension, methodology, drugs, pacing, arrhythmia, preventive cardiology, congestive heart failure, valvular heart disease, congenital heart disease, and cardiomyopathy. Also included are editorials, readers' comments, and symposia.

Benefits to authors
We also provide many author benefits, such as free PDFs, a liberal copyright policy, special discounts on Elsevier publications and much more. Please click here for more information on our author services.

Please see our Guide for Authors for information on article submission. If you require any further information or help, please visit our Support Center

AUDIENCE

Cardiologists, Internists, Clinical Researchers.

IMPACT FACTOR

2018: 2.843 © Clarivate Analytics Journal Citation Reports 2019
ABSTRACTING AND INDEXING

PubMed/Medline
Embase
Abstracts on Hygiene and Communicable Diseases
Abstracts in Internal Medicine
Annals of Behavioral Medicine Abstracts
Biotechnology Research Abstracts
CIS
Cumulative Index for Nursing and Allied Health Literature
Current Advances in Ecological and Environmental Sciences
Current Contents
Indexed Dental Literature
Index to Scientific Reviews
Nutrition Research Newsletter
Risk Abstracts
Science Citation Index
Tropical Diseases Bulletin
BRS Database
Mead Data Central
Scopus

EDITORIAL BOARD

Editor-in-Chief
William C. Roberts, BAYLOR UNIVERSITY MEDICAL CENTER, Dallas, Texas, United States

Managing Editor
Jill Rutherford, BAYLOR UNIVERSITY MEDICAL CENTER, Dallas, Texas, United States

Section Editor, Supplements
R. T. Collins, STANFORD UNIVERSITY SCHOOL OF MEDICINE, California, United States

Senior Executive Editor
Peter A. McCullough, HeartPlace Baylor Heart and Vascular Hospital, Dallas, Texas, United States
Paul Grayburn, Baylor Jack and Jane Hamilton Heart and Vascular Hospital, Dallas, Texas, United States

Associate Editors
A. Cedars, Baylor Scott and White Health, Dallas, Texas, United States
G. Filardo, Baylor Scott and White Health, Dallas, Texas, United States
P.A. Grayburn, Baylor Jack and Jane Hamilton Heart and Vascular Hospital, Dallas, Texas, United States
S.A. Hall, Baylor Scott and White Health, Dallas, Texas, United States
J. M. Schussler, Baylor Jack and Jane Hamilton Heart and Vascular Hospital, Dallas, Texas, United States
R.C. Stoler, HeartPlace Baylor Heart and Vascular Hospital, Dallas, Texas, United States

Editorial Board

Cardiovascular Medicine In Adults
A. Abbate, Catholic University of the Sacred Heart Institute of Cardiology, Rome, Italy
J.D. Abbott, Rhode Island Hospital, Providence, Rhode Island, United States
G.S. Abela, Michigan State University, East Lansing, Michigan, United States
J. Aboulhosn, University of California Los Angeles, Los Angeles, California, United States
T. Ahmad, YALE UNIVERSITY SCHOOL OF MEDICINE, New Haven, Connecticut, United States
J.S. Alpert, University of Arizona College of Medicine
M.A. Alpert, University of Missouri
E. Amsterdam, University of California Davis Health System
J.L. Anderson, Intermountain Medical Center
J.L. Anderson, Intermountain Medical Center, Murray, Utah, United States
H.V. Anderson, University of Texas Health Science Center at Houston
E. Arbustini, Foundation IRCCS Polyclinic San Matteo
P. Avanzas, Central University Hospital of Asturias Heart Area, Oviedo, Asturias, Spain
G.J. Balady, BOSTON MEDICAL CENTER, Boston, Massachusetts, United States
C. Basso, University of Padua, Padova, Italy
E. Bates, UNIVERSITY OF MICHIGAN HEALTH SYSTEM
<table>
<thead>
<tr>
<th>Author Name</th>
<th>Affiliation</th>
</tr>
</thead>
<tbody>
<tr>
<td>T.S. Kato</td>
<td>Juntendo University, Bunkyo-Ku, Japan</td>
</tr>
<tr>
<td>M. Kelm</td>
<td>Heinrich Heine University Düsseldorf, Dusseldorf, Germany</td>
</tr>
<tr>
<td>K.M. Kent</td>
<td>MEDSTAR HEALTH VNA INC, Washington, District of Columbia, United States</td>
</tr>
<tr>
<td>P. Kligfield</td>
<td>Weill Cornell Medicine Joan and Sanford I Weill Department of Medicine, New York, New York, United States</td>
</tr>
<tr>
<td>R. Kloner</td>
<td>Huntington Medical Research Institutes, Pasadena, California, United States</td>
</tr>
<tr>
<td>J.B Kostis</td>
<td>Rutgers Robert Wood Johnson Medical School New Brunswick, New Brunswick, New Jersey, United States</td>
</tr>
<tr>
<td>W.J. Kostis</td>
<td>MASSACHUSETTS GENERAL HOSPITAL, Boston, Massachusetts, United States</td>
</tr>
<tr>
<td>R.A. Lange</td>
<td>Texas Tech University Health Sciences Center El Paso Center of Emphasis in Infectious Diseases, El Paso, Texas, United States</td>
</tr>
<tr>
<td>G. Y. H. Lip</td>
<td>University of Liverpool</td>
</tr>
<tr>
<td>A. S. Luis</td>
<td>Mayo Clinic School of Health Sciences Echocardiography Program, Rochester, Minnesota, United States</td>
</tr>
<tr>
<td>F. E. Marchlinski</td>
<td>University of Pennsylvania Penn Lung Center, Philadelphia, Pennsylvania, United States</td>
</tr>
<tr>
<td>F.I. Marcus</td>
<td>University of Arizona, Tucson, Arizona, United States</td>
</tr>
<tr>
<td>B. Maron</td>
<td>Minneapolis Heart Institute Foundation, Minneapolis, Minnesota, United States</td>
</tr>
<tr>
<td>B. A. Maron</td>
<td>Harvard Medical School, Boston, Massachusetts, United States</td>
</tr>
<tr>
<td>M.S. Maron</td>
<td>Tufts Medical Center, Boston, Massachusetts, United States</td>
</tr>
<tr>
<td>R.P. Martin</td>
<td>PIEDMONT HEART INSTITUTE</td>
</tr>
<tr>
<td>C. Maynard</td>
<td>UNIVERSITY OF WASHINGTON</td>
</tr>
<tr>
<td>A. Mazur</td>
<td>University of Iowa, Iowa City, Iowa, United States</td>
</tr>
<tr>
<td>R.G. McKay</td>
<td>Hartford Hospital, Hartford, Connecticut, United States</td>
</tr>
<tr>
<td>J.L. Mehta</td>
<td>University of Arkansas for Medical Sciences, Arkansas Nanomedicine Center</td>
</tr>
<tr>
<td>F.H. Messerli</td>
<td>Icahn School of Medicine at Mount Sinai</td>
</tr>
<tr>
<td>R.V. Milani</td>
<td>Thomas Jefferson University, Philadelphia, Pennsylvania, United States</td>
</tr>
<tr>
<td>A.B. Miller</td>
<td>University of Florida College of Medicine - Jacksonville, Jacksonville, Florida, United States</td>
</tr>
<tr>
<td>W.L. Miller</td>
<td>Mayo Foundation for Medical Education and Research, Rochester, Minnesota, United States</td>
</tr>
<tr>
<td>R.M. Mills</td>
<td>Cardiovascular Research Foundation, New York, New York, United States</td>
</tr>
<tr>
<td>G.V. Naccarelli</td>
<td>Penn State College of Medicine, Hershey, Pennsylvania, United States</td>
</tr>
<tr>
<td>R. Narin</td>
<td>University of Rochester Medical Center, Rochester, New York, United States</td>
</tr>
<tr>
<td>G. Ndrepepa</td>
<td></td>
</tr>
<tr>
<td>G. Niccoli</td>
<td></td>
</tr>
<tr>
<td>W.T. O'Neal</td>
<td>Wake Forest University School of Medicine, Winston-Salem, North Carolina, United States</td>
</tr>
<tr>
<td>E.M. Ohman</td>
<td>Duke Heart Center</td>
</tr>
<tr>
<td>A. Opotowsky</td>
<td></td>
</tr>
<tr>
<td>S.T. Palmeri</td>
<td>Robert Wood Johnson University Hospital, New Brunswick, New Jersey, United States</td>
</tr>
<tr>
<td>E. Passamani</td>
<td>Suburban Hospital Inc, Bethesda, Maryland, United States</td>
</tr>
<tr>
<td>P.J. Patel</td>
<td></td>
</tr>
<tr>
<td>C.J. Pepine</td>
<td>University of Florida College of Medicine, Gainesville, Florida, United States</td>
</tr>
<tr>
<td>B. Pitt</td>
<td>UNIVERSITY OF MICHIGAN HEALTH SYSTEM, Ann Arbor, Michigan, United States</td>
</tr>
<tr>
<td>A.A. Quyyumi</td>
<td>Emory University Hospital, Atlanta, Georgia, United States</td>
</tr>
<tr>
<td>C.V. Ram</td>
<td>UNIVERSITY OF TEXAS SOUTHWESTERN MEDICAL CENTER, Dallas, Texas, United States</td>
</tr>
<tr>
<td>N. Reichek</td>
<td>Saint Francis Hospital The Heart Center</td>
</tr>
<tr>
<td>R. Roberts</td>
<td></td>
</tr>
<tr>
<td>L.E. Rosenfeld</td>
<td>Yale University Department of Cardiovascular Medicine, New Haven, Connecticut, United States</td>
</tr>
<tr>
<td>F.N. Salloum</td>
<td></td>
</tr>
<tr>
<td>D.J. Schneider</td>
<td>University of Vermont College of Medicine, Burlington, Vermont, United States</td>
</tr>
<tr>
<td>J.S. Schroeder</td>
<td>STANFORD UNIVERSITY SCHOOL OF MEDICINE, Stanford, California, United States</td>
</tr>
<tr>
<td>P.W. Serruys</td>
<td>Erasmus Medical Center</td>
</tr>
<tr>
<td>P.M. Shah</td>
<td>Hoag Memorial Presbyterian Hospital, Newport Beach, California, United States</td>
</tr>
<tr>
<td>P.K. Shah</td>
<td>CEDARS-SIANI MEDICAL CENTER</td>
</tr>
<tr>
<td>J. Shirani</td>
<td>St Luke's University Health Network, Bethlehem, Pennsylvania, United States</td>
</tr>
<tr>
<td>R. Siegel</td>
<td>CEDARS-SIANI MEDICAL CENTER, Los Angeles, California, United States</td>
</tr>
<tr>
<td>M.A. Silver</td>
<td>Advocate Christ Medical Center, Oak Lawn, Illinois, United States</td>
</tr>
<tr>
<td>R.J. Simpson, Jr.,</td>
<td>University of North Carolina System, Chapel Hill, North Carolina, United States</td>
</tr>
<tr>
<td>S.N. Singh</td>
<td>Washington DC VA Medical Center, Washington, District of Columbia, United States</td>
</tr>
<tr>
<td>F. W. Smart</td>
<td>Louisiana State University Health Sciences Center Human Development Center, New Orleans, Louisiana, United States</td>
</tr>
<tr>
<td>J. Somberg</td>
<td>Rush University Medical Center, Chicago, Illinois, United States</td>
</tr>
<tr>
<td>L.W. Stevenson</td>
<td>BRIGHAM WOMENS HOSPITAL</td>
</tr>
<tr>
<td>R. Stouffer</td>
<td>University of North Carolina at Chapel Hill, Chapel Hill, North Carolina, United States</td>
</tr>
</tbody>
</table>
J.R. Stratton, University of Washington, Seattle, Washington, United States  
J.M. Tobis, University of California Los Angeles  
J.L. Vacek  
O.H. Ventura  
R. Verdiño, University of Pennsylvania Perelman School of Medicine, Philadelphia, Pennsylvania, United States  
G.W. Vetrovec, Virginia Commonwealth University, Richmond, Virginia, United States  
R. Waksman, MedStar Washington Hospital Center, MedStar Heart and Vascular Institute  
D.D. Waters, University of California San Francisco  
R.L. Wiensky, University of Pennsylvania Hillel, Philadelphia, Pennsylvania, United States  
J.T. Willerson, University of Texas Health Science Center at Houston, Houston, Texas, United States  
D. Zipes, Indiana University School of Medicine, Indianapolis, Indiana, United States  

In Infants and Children  
H.D. Allen, Texas Children's Hospital, Houston, Texas, United States  
B.S. Alpert, UNIVERSITY OF TENNESSEE MEDICAL CENTER  
R. T. Collins, STANFORD UNIVERSITY SCHOOL OF MEDICINE, United States  
J. Kugler, Children's Physicians Omaha, Omaha, Nebraska, United States  

Cardiovascular Surgery  
E.H. Blackstone, Cleveland Clinic  
L.I. Bonchek, Lancaster General Hospital, Lancaster, Pennsylvania, United States  
D. Chu, University of Pittsburgh Medical Center, Pittsburgh, Pennsylvania, United States  
J. Elefteriades, Yale University School of Medicine Yale Center for Thoracic Aortic Disease, New Haven, Connecticut, United States  
R. Lee, University of Oxford, Oxford, United Kingdom  
C. S. Roberts, Baylor University Medical Center Cardiac and Thoracic Surgery, Dallas, Texas, United States  
H.V. Schaff, Mayo Foundation for Medical Education and Research, Rochester, Minnesota, United States  
L. H Stein, Albany Medical College, Albany, New York, United States  

Related Specialists  
L. Berglund, University of California Davis Medical Center  
L. M. Buja, University of Texas Health Science Center at Houston, Houston, Texas, United States  
J-P. Després, Laval University, Quebec, Canada  
M. Emmett, Baylor University Medical Center at Dallas, Dallas, Texas, United States  
B. Franklin, William Beaumont Hospital - Royal Oak, Royal Oak, Michigan, United States  
C.B. Higgins, University of California San Francisco, San Francisco, California, United States  
M.D. Kertai, Duke University, Durham, North Carolina, United States  
J.E. Saffitz, BETH ISRAEL DEACONESS MEDICAL CENTER, Boston, Massachusetts, United States  
R. Virmani, CVPath Institute Inc
INTRODUCTION

Published 24 times a year, The American Journal of Cardiology® is an international journal designed for cardiovascular disease specialists and internists with a subspecialty in cardiology. AJC is an independent, scientific, peer-reviewed journal of original articles that focus on the practical, clinical approach to the diagnosis and treatment of cardiovascular disease. AJC has one of the fastest acceptance to publication times in cardiology. Articles report on systemic hypertension, methodology, drugs, pacing, arrhythmia, preventive cardiology, congestive heart failure, valvular heart disease, congenital heart disease, and cardiomyopathy. Also included are editorials, readers' comments, and symposia.

BEFORE YOU BEGIN

Ethics in publishing
Please see our information pages on Ethics in publishing and Ethical guidelines for journal publication.

Human rights
If the work reported involves the use of human subjects, the author should ensure that the work described has been carried out in accordance with The Code of Ethics of the World Medical Association (Declaration of Helsinki) for experiments involving humans http://www.wma.net/en/30publications/10policies/b3/index.html; Uniform Requirements for manuscripts submitted to Biomedical journals http://www.icmje.org. The author should include a statement in the manuscript that informed consent was obtained for experimentation with human subjects. The privacy rights of human subjects must always be observed.

Declaration of interest
All authors must disclose any financial and personal relationships with other people or organizations that could inappropriately influence (bias) their work. Examples of potential competing interests include employment, consultancies, stock ownership, honoraria, paid expert testimony, patent applications registrations, and grants or other funding. Authors must disclose any interests in two places: 1. A summary declaration of interest statement in the title page file (if double-blind) or the manuscript file (if single-blind). If there are no interests to declare then please state this: 'Declarations of interest: none'. This summary statement will be ultimately published if the article is accepted. 2. Detailed disclosures as part of a separate Declaration of Interest form, which forms part of the journal's official records. It is important for potential interests to be declared in both places and that the information matches. More information.

For a generic template of the 'Declaration of Interest/Author Agreement' form to upload with your submission please click on the following link: Template

Submission declaration and verification
Submission of an article implies that the work described has not been published previously (except in the form of an abstract, a published lecture or academic thesis, see 'Multiple, redundant or concurrent publication' for more information), that it is not under consideration for publication elsewhere, that its publication is approved by all authors and tacitly or explicitly by the responsible authorities where the work was carried out, and that, if accepted, it will not be published elsewhere in the same form, in English or in any other language, including electronically without the written consent of the copyright-holder. To verify originality, your article may be checked by the originality detection service Crossref Similarity Check.

Preprints
Please note that preprints can be shared anywhere at any time, in line with Elsevier's sharing policy. Sharing your preprints e.g. on a preprint server will not count as prior publication (see 'Multiple, redundant or concurrent publication' for more information).

Use of inclusive language
Inclusive language acknowledges diversity, conveys respect to all people, is sensitive to differences, and promotes equal opportunities. Articles should make no assumptions about the beliefs or commitments of any reader, should contain nothing which might imply that one individual is superior to another on the grounds of race, sex, culture or any other characteristic, and should use inclusive
language throughout. Authors should ensure that writing is free from bias, for instance by using 'he or she', 'his/her' instead of 'he' or 'his', and by making use of job titles that are free of stereotyping (e.g. 'chairperson' instead of 'chairman' and 'flight attendant' instead of 'stewardess').

**Author contributions**
For transparency, we encourage authors to submit an author statement file outlining their individual contributions to the paper using the relevant CRediT roles: Conceptualization; Data curation; Formal analysis; Funding acquisition; Investigation; Methodology; Project administration; Resources; Software; Supervision; Validation; Visualization; Roles/Writing - original draft; Writing - review & editing. Authorship statements should be formatted with the names of authors first and CRediT role(s) following. More details and an example

**Changes to authorship**
Authors are expected to consider carefully the list and order of authors before submitting their manuscript and provide the definitive list of authors at the time of the original submission. Any addition, deletion or rearrangement of author names in the authorship list should be made only before the manuscript has been accepted and only if approved by the journal Editor. To request such a change, the Editor must receive the following from the corresponding author: (a) the reason for the change in author list and (b) written confirmation (e-mail, letter) from all authors that they agree with the addition, removal or rearrangement. In the case of addition or removal of authors, this includes confirmation from the author being added or removed. Only in exceptional circumstances will the Editor consider the addition, deletion or rearrangement of authors after the manuscript has been accepted. While the Editor considers the request, publication of the manuscript will be suspended. If the manuscript has already been published in an online issue, any requests approved by the Editor will result in a corrigendum.

**Article transfer service**
This journal is part of our Article Transfer Service. This means that if the article is not accepted for publication in AJC, the Editor in Chief may suggest the possibility of transferring it to another journal for consideration for publication. You may accept or decline; if you accept, your article will be transferred automatically on your behalf with no need to reformat. More information about this can be found here: https://www.elsevier.com/authors/article-transfer-service.

**Copyright**
Upon acceptance of an article, authors will be asked to complete a 'Journal Publishing Agreement' (see more information on this). An e-mail will be sent to the corresponding author confirming receipt of the manuscript together with a 'Journal Publishing Agreement' form or a link to the online version of this agreement.

Subscribers may reproduce tables of contents or prepare lists of articles including abstracts for internal circulation within their institutions. Permission of the Publisher is required for resale or distribution outside the institution and for all other derivative works, including compilations and translations. If excerpts from other copyrighted works are included, the author(s) must obtain written permission from the copyright owners and credit the source(s) in the article. Elsevier has preprinted forms for use by authors in these cases.

For gold open access articles: Upon acceptance of an article, authors will be asked to complete an 'Exclusive License Agreement' (more information). Permitted third party reuse of gold open access articles is determined by the author's choice of user license.

**Author rights**
As an author you (or your employer or institution) have certain rights to reuse your work. More information.

**Copyright**
This journal offers you the option of making your article freely available via the ScienceDirect platform. To prevent any conflict of interest, you can make this choice only after receiving notification that your article has been accepted for publication. The fee of $3,000 excludes taxes and other potential author fees such as color charges. In some cases, institutions and funding bodies have entered into agreement with Elsevier to meet these fees on behalf of their authors. Details of these
agreements are available at https://www.elsevier.com/fundingbodies. Authors of accepted articles who wish to take advantage of this option should complete and submit the order form (available at https://www.elsevier.com/locate/openaccessform.pdf).

**Retained author rights**
As an author you (or your employer or institution) retain many rights, including the right to post a revised personal version of your article on your own website. For more information on author rights see https://www.elsevier.com/journal-authors/author-rights-and-responsibilities. For open access articles please see https://www.elsevier.com/OAauthoragreement.

*Elsevier supports responsible sharing*
Find out how you can share your research published in Elsevier journals.

**Role of the Funding Source**
Please identify who provided financial support for the research and/or preparation of the article and briefly describe the role of the sponsor(s), if any, in study design; in the collection, analysis, and interpretation of data; in writing the report; and in the decision to submit the article for publication. If the funding source(s) had no such involvement then this should be stated. Please see https://www.elsevier.com/funding.

**Funding Body Agreements and Policies**
Elsevier has established agreements and developed policies to allow authors whose articles appear in journals published by Elsevier to comply with potential manuscript archiving requirements as specified as conditions of their grant awards. To learn more about existing agreements and policies please visit https://www.elsevier.com/fundingbodies.

*Funding body agreements and policies*
Elsevier has established a number of agreements with funding bodies which allow authors to comply with their funder's open access policies. Some funding bodies will reimburse the author for the gold open access publication fee. Details of existing agreements are available online. After acceptance, open access papers will be published under a noncommercial license. For authors requiring a commercial CC BY license, you can apply after your manuscript is accepted for publication.

**Open access**
This journal offers authors a choice in publishing their research:

*Subscription*
- Articles are made available to subscribers as well as developing countries and patient groups through our universal access programs.
- No open access publication fee payable by authors.
- The Author is entitled to post the accepted manuscript in their institution's repository and make this public after an embargo period (known as green Open Access). The published journal article cannot be shared publicly, for example on ResearchGate or Academia.edu, to ensure the sustainability of peer-reviewed research in journal publications. The embargo period for this journal can be found below.

*Gold open access*
- Articles are freely available to both subscribers and the wider public with permitted reuse.
- A gold open access publication fee is payable by authors or on their behalf, e.g. by their research funder or institution.

Regardless of how you choose to publish your article, the journal will apply the same peer review criteria and acceptance standards.

For gold open access articles, permitted third party (re)use is defined by the following Creative Commons user licenses:

**Creative Commons Attribution-NonCommercial-NoDerivs (CC BY-NC-ND)**
For non-commercial purposes, lets others distribute and copy the article, and to include in a collective work (such as an anthology), as long as they credit the author(s) and provided they do not alter or modify the article.

The gold open access publication fee for this journal is **USD 3200**, excluding taxes. Learn more about Elsevier's pricing policy: https://www.elsevier.com/openaccesspricing.
Green open access
Authors can share their research in a variety of different ways and Elsevier has a number of green open access options available. We recommend authors see our open access page for further information. Authors can also self-archive their manuscripts immediately and enable public access from their institution's repository after an embargo period. This is the version that has been accepted for publication and which typically includes author-incorporated changes suggested during submission, peer review and in editor-author communications. Embargo period: For subscription articles, an appropriate amount of time is needed for journals to deliver value to subscribing customers before an article becomes freely available to the public. This is the embargo period and it begins from the date the article is formally published online in its final and fully citable form. Find out more.

This journal has an embargo period of 12 months.

Language services
Authors who feel their English language manuscript may require editing to eliminate possible grammatical or spelling errors and to conform to correct scientific English may wish to use the English language editing service available from Elsevier's WebShop. See http://webshop.elsevier.com/languageediting/ or visit our customer support site https://service.elsevier.com for more information.

Submission
Submission to this journal for full length reports, case reports, review articles, editorials, historical studies, proceeds totally online and you will be guided stepwise through the creation and uploading of your files. The system automatically converts source files to a single PDF file of the article, which is used in the peer-review process. Please note that even though manuscript source files are converted to PDF files at submission for the review process, these source files are needed for further processing after acceptance. All correspondence, including notification of the Editor's decision and requests for revision, takes place by e-mail, eliminating the need for a paper trail.

Submit your article
Please submit your article via http://ees.elsevier.com/ajc.

PREPARATION

Peer review
This journal operates a single blind review process. All contributions will be initially assessed by the editor for suitability for the journal. Papers deemed suitable are then typically sent to a minimum of two independent expert reviewers to assess the scientific quality of the paper. The Editor is responsible for the final decision regarding acceptance or rejection of articles. The Editor's decision is final. More information on types of peer review.

MANUSCRIPTS are received with the understanding that they are submitted solely to The American Journal of Cardiology and, that upon submission they become the property of the Publisher, that the work has not been previously published, and that the data in the manuscripts have been reviewed by all authors, who agree with the analyses of the data and the conclusions reached in the manuscript. The publisher reserves copyright and renewal on all published material, and such material may not be reproduced without the written permission of the Publisher. Statements in articles are the responsibility of the authors. The Journal does not accept original articles involving animal research.

As of May 1, 2005, all new manuscripts, including Readers' Comments and Errata, must be submitted through The American Journal of Cardiology online (http://ees.elsevier.com/AJC) or (http://www.ajconline.org). Authors are requested to submit the text, tables, and figures in electronic form to this address. The Publisher and Editors regret that they are not able to consider submissions that do not follow these procedures. Please include the corresponding author's phone and email address. The cover letter should state precisely and concisely the significance and uniqueness of the work in the authors' view. The authors may state the extent of any concessions they are prepared to make (for example, the elimination of 1 or more figures or tables or a portion of the text) to increase the likelihood of publication of their work in the Journal. If possible, names and email addresses should be provided of non-local experts who, in the view of the author(s), could provide objective and informed reviews of their work. The names of investigators considered unlikely to give nonbiased reviews of their work also may be submitted. This request is honored.

Please note that an editable file is needed for production purposes after acceptance, and we ask that you submit source files in the event your manuscript is accepted.
Study recent past issues of the Journal for format. Arrange the paper as follows: (1) title page, which should include the title, the full names and academic degrees of the authors, and current affiliations of all authors; (2) abstract; (3) text; (4) acknowledgement; (5) references; (6) figure legends; (7) tables; and (8) figures. Number the title page as 1, abstract page as 2 with the introduction beginning on page #3 and so forth. Type double-spaced (including references) with at least 25-mm (1-inch) margins, sized for 8.5 x 11 inch paper. Files should be labeled with appropriate and descriptive file names. Upload text, tables and graphics as separate files. Do not import figures or tables into the text document. Complete instructions for electronic artwork submission can be found on the Author Gateway, accessible through the journal home page.

**Title Page and Abstract**

For the complete title page, include the full first or middle and last names of all authors. List the current affiliations of all authors and link author names and affiliations by “a,” “b,” “c,” etc., after the author names and before the affiliation. Provide information about grant support if necessary, including the location (City/state/country). If work described is supported by a grant from a pharmaceutical company, that fact should be stated on the title page. Add at the bottom the phrase "Corresponding author" followed a telephone number, email address, and mailing address. Add a 2-to 6-word running head. Limit the abstract to 250 words or a single page. List 2 to 4 key words for subject indexing at the end of the abstract.

**Highlights**

Highlights are optional yet highly encouraged for this journal, as they increase the discoverability of your article via search engines. They consist of a short collection of bullet points that capture the novel results of your research as well as new methods that were used during the study (if any). Please have a look at the examples here: example Highlights.

Highlights should be submitted in a separate editable file in the online submission system. Please use 'Highlights' in the file name and include 3 to 5 bullet points (maximum 85 characters, including spaces, per bullet point).

**Style**

Use the required 3 major headings throughout the body of the text, such as Methods, Results, and Discussion. Do not use subheadings under these headings. Tables, figures, and references must be cited in numerical order throughout the manuscript. Abbreviations are permitted, but usually no more than 5 or 6 per manuscript (at the Editor’s discretion), and then they must be used on every page of the manuscript after they are initially spelled out (followed by the abbreviation) in both abstract and introduction. Use generic names of drugs. Do not spell out any number, including those less than 10, except when used for opening a sentence, but try not to begin sentences with a number. Use symbols for less than (<), greater than (>) and percent (%). Indent all paragraphs after the abstract and introduction. Both the abstract and introduction should be a single paragraph. Consult the Uniform Requirements for Manuscripts Submitted to Biomedical Journals, published in *The Annals of Internal Medicine* June 1982;96:766-771, and also the *Stylebook/Editorial Manual of the AMA*.

**Figures**

Number figures in order in which they are mentioned in the text. Type figure legends on a separate page, double-spaced, after the references within the text document. Clearly mark figures with a, b, c, top, bottom, right and left.

Download each figure as a separate file (.tif .eps, .jpeg formats are preferred, although .ppt, .xls, .pdf, and .doc files are accepted.). Do not import figures into the text document. Complete instructions for electronic artwork submission can be found on the Author Gateway, accessible through the journal home page. Submit written permission from the publisher and author to reproduce any previously published figures. Limit figures to the number necessary to present the message clearly. Figure resolution must be a minimum of 300 dpi. Type figure legends on a separate page, double-spaced after the references. Identify at the end of each legend and in alphabetical order all abbreviations in the figure. The cost of color reproduction must be paid by the author.
Tables
Number each table in Arabic numerals (Table 1, 2, etc.) and title each table. Download each table as a separate Word file. Identify in alphabetical order at the bottom of the table all abbreviations used. When tabulating numbers of patients, use no more than 2 lines preferably only 1 line across per patient. Use a plus sign (+) to indicate “positive” or “present” a zero (0) for “negative’ or “absent” and a dash (–) for “no information available” or “not done.” Do not use “yes”, “no’ or “none.”

Readers’ Comments
The author who submits a ‘letter’ should provide a cover letter to the Editor in Chief explaining why the letter should be published. The letter (as well as references) should be double-spaced, and limited, with few exceptions, to 2 pages. A title for the letter should be provided at the top of the page. A title page is not required. At the end of the letter, the writer's full name, highest degree, and city and state (or country if outside the US) should be provided followed by the date of submission. The author’s institution should not be included. A letter concerning a particular article in the Journal must be received (from authors within the US) within 2 months of the article’s publication.

Data references
This journal encourages you to cite underlying or relevant datasets in your manuscript by citing them in your text and including a data reference in your Reference List. Data references should include the following elements: author name(s), dataset title, data repository, version (where available), year, and global persistent identifier. Add [dataset] immediately before the reference so we can properly identify it as a data reference. The [dataset] identifier will not appear in your published article.

Reference management software
Most Elsevier journals have their reference template available in many of the most popular reference management software products. These include all products that support Citation Style Language styles, such as Mendeley. Using citation plug-ins from these products, authors only need to select the appropriate journal template when preparing their article, after which citations and bibliographies will be automatically formatted in the journal's style. If no template is yet available for this journal, please follow the format of the sample references and citations as shown in this Guide. If you use reference management software, please ensure that you remove all field codes before submitting the electronic manuscript. More information on how to remove field codes from different reference management software.

Users of Mendeley Desktop can easily install the reference style for this journal by clicking the following link:
http://open.mendeley.com/use-citation-style/the-american-journal-of-cardiology
When preparing your manuscript, you will then be able to select this style using the Mendeley plug-ins for Microsoft Word or LibreOffice.

Reference style

Video data
Elsevier accepts video material and animation sequences to support and enhance your scientific research. Authors who have video or animation files that they wish to submit with their article are encouraged to include links to these within the body of the article. This can be done in the same way as for an illustration or table by referring to the video or animation content and noting in the body text where it should be placed. All submitted files should be properly labeled so that they directly relate...
to the video file's content. To ensure that your video or animation material is usable, please provide the files in one of our recommended file formats with a maximum size of 50 MB. Video and animation files supplied will be published online in the electronic version of your article in Elsevier Web products, including ScienceDirect: http://www.sciencedirect.com. Please supply still photos with your files: you can choose any frame from the video or animation or make a separate image. These will be used instead of standard icons and will personalize the link to your video data. For more detailed instructions please visit our video instruction pages at https://www.elsevier.com/artworkinstructions. Note: since video and animation cannot be embedded in the print version of the journal, please provide text for both the electronic and the print version for the portions of the article that refer to this content.

Data visualization
Include interactive data visualizations in your publication and let your readers interact and engage more closely with your research. Follow the instructions here to find out about available data visualization options and how to include them with your article.

Supplementary data
Elsevier accepts electronic supplementary material to support and enhance your scientific research. Supplementary files offer the author additional possibilities to publish supporting applications, high-resolution images, background datasets, sound clips, and more. Supplementary files supplied will be published online alongside the electronic version of your article in Elsevier Web products, including ScienceDirect: http://www.sciencedirect.com. To ensure that your submitted material is usable, please provide the data in one of our recommended file formats. Authors should submit the material in electronic format together with the article and supply a concise and descriptive legend for each file. For more detailed instructions please visit our artwork instruction pages at https://www.elsevier.com/artworkinstructions.

Research data
This journal encourages and enables you to share data that supports your research publication where appropriate, and enables you to interlink the data with your published articles. Research data refers to the results of observations or experimentation that validate research findings. To facilitate reproducibility and data reuse, this journal also encourages you to share your software, code, models, algorithms, protocols, methods and other useful materials related to the project.

Below are a number of ways in which you can associate data with your article or make a statement about the availability of your data when submitting your manuscript. If you are sharing data in one of these ways, you are encouraged to cite the data in your manuscript and reference list. Please refer to the "References" section for more information about data citation. For more information on depositing, sharing and using research data and other relevant research materials, visit the research data page.

Data linking
If you have made your research data available in a data repository, you can link your article directly to the dataset. Elsevier collaborates with a number of repositories to link articles on ScienceDirect with relevant repositories, giving readers access to underlying data that gives them a better understanding of the research described.

There are different ways to link your datasets to your article. When available, you can directly link your dataset to your article by providing the relevant information in the submission system. For more information, visit the database linking page.

For supported data repositories a repository banner will automatically appear next to your published article on ScienceDirect.

In addition, you can link to relevant data or entities through identifiers within the text of your manuscript, using the following format: Database: xxxx (e.g., TAIR: AT1G01020; CCDC: 734053; PDB: 1XFN).

Mendeley Data
This journal supports Mendeley Data, enabling you to deposit any research data (including raw and processed data, video, code, software, algorithms, protocols, and methods) associated with your manuscript in a free-to-use, open access repository. During the submission process, after uploading your manuscript, you will have the opportunity to upload your relevant datasets directly to Mendeley Data. The datasets will be listed and directly accessible to readers next to your published article online.
For more information, visit the Mendeley Data for journals page.

Data statement
To foster transparency, we encourage you to state the availability of your data in your submission. This may be a requirement of your funding body or institution. If your data is unavailable to access or unsuitable to post, you will have the opportunity to indicate why during the submission process, for example by stating that the research data is confidential. The statement will appear with your published article on ScienceDirect. For more information, visit the Data Statement page.

Submission checklist
Before you submit your article, please be sure that:
One author has been designated as the corresponding author with contact details:
• E-mail address
• Full postal address
• Phone numbers
All necessary files have been uploaded, and contain:
• All illustration legends
• All tables (including title, description, footnotes)
Manuscript has been spell-checked and grammar-checked
References are in the correct format for this journal
All references mentioned in the Reference list are cited in the text, and vice versa
Permission has been obtained for use of copyrighted material from other sources (including the Web)
Color illustrations are clearly marked as being intended for color reproduction on the Web (free of charge) and in print, or to be reproduced in color on the Web (free of charge) and in black-and-white in print
If only color on the Web is required, black-and-white versions of the illustrations are also supplied for printing purposes
For any further information please visit our customer support site at https://service.elsevier.com.

AFTER ACCEPTANCE
Use of the Digital Object Identifier
The Digital Object Identifier (DOI) may be used to cite and link to electronic documents. The DOI is a unique alpha-numeric character string assigned to a document by the publisher upon the initial electronic publication. The assigned DOI never changes. Therefore, it is an ideal medium for citing a document, particularly articles in press, because they have not yet received their full bibliographic information.

Example of a correctly given DOI (in URL format; here an article in the journal Physics Letters B):
http://dx.doi.org/10.1016/j.physletb.2010.09.059

Proofs
One set of page proofs (as PDF files) will be sent by e-mail to the corresponding author or a link will be provided in the e-mail so that author can download the files. The PDF proofs can be annotated, for which you will need to download Adobe Reader version 7 (or higher) available free from http://get.adobe.com/reader. Instructions on how to annotate PDF files will accompany the proofs (also given online). The exact system requirements are given at the Adobe site: http://www.adobe.com/products/reader/tech-specs.html.
If you do not wish to use the PDF annotations function, you may list the corrections (including replies to the query form) and return them to Elsevier in an e-mail. Please list your corrections quoting line number. If this is not possible, then mark the corrections and any other comments (including replies to the query form) on a printout of your proof and return by fax, or scan the pages and send by e-mail or by post. Please use this proof only for checking the typesetting, editing, completeness, and correctness of the text, tables, and illustrations. Significant changes to the article as accepted for publication will be considered at this stage only with permission from the Editor. We will do everything possible to get your article published quickly and accurately – please let us have all your corrections within 48 hours. It is important to ensure that all corrections are sent back to us in one communication: please check carefully before replying, as inclusion of any subsequent corrections cannot be guaranteed. Proofreading is solely your responsibility. Note that Elsevier may proceed with the publication of your article if no response is received.
Online proof correction
Corresponding authors will receive an e-mail with a link to our online proofing system, allowing annotation and correction of proofs online. The environment is similar to MS Word: in addition to editing text, you can also comment on figures/tables and answer questions from the Copy Editor. Web-based proofing provides a faster and less error-prone process by allowing you to directly type your corrections, eliminating the potential introduction of errors.
If preferred, you can still choose to annotate and upload your edits on the PDF version. All instructions for proofing will be given in the e-mail we send to authors, including alternative methods to the online version and PDF.
We will do everything possible to get your article published quickly and accurately. Please use this proof only for checking the typesetting, editing, completeness and correctness of the text, tables and figures. Significant changes to the article as accepted for publication will only be considered at this stage with permission from the Editor. It is important to ensure that all corrections are sent back to us in one communication. Please check carefully before replying, as inclusion of any subsequent corrections cannot be guaranteed. Proofreading is solely your responsibility.

AUTHOR INQUIRIES
For inquiries relating to the submission of articles (including electronic submission) please visit this journal's homepage (http://www.ajconline.org). For detailed instructions on the preparation of electronic artwork, please visit https://www.elsevier.com/artworkinstructions. Contact details for questions arising after acceptance of an article, especially those relating to proofs, will be provided by the publisher. You can track accepted articles at https://www.elsevier.com/trackarticle. You can also check our Author FAQs at https://www.elsevier.com/authorFAQ and/or contact Customer Support via https://service.elsevier.com.

Reprints
Price schedules and order cards for reprints are mailed to the author upon publication of the article. Individual reprints must be obtained through the author.