Indian Heart Journal (IHJ) is the official peer-reviewed open access journal of Cardiological Society of India and accepts articles for publication from across the globe.

The journal aims to promote high quality research and serve as a platform for dissemination of scientific information in cardiology with particular focus on South Asia. The journal aims to publish cutting edge research in the field of clinical as well as non-clinical cardiology - including cardiovascular medicine and surgery. Some of the topics covered are Heart Failure, Coronary Artery Disease, Hypertension, Interventional Cardiology, Cardiac Surgery, Valvular Heart Disease, Pulmonary Hypertension and Infective Endocarditis.

IHJ open access invites original research articles, research briefs, perspective, case reports, case vignette, cardiovascular images, cardiovascular graphics, research letters, correspondence, reader forum, and interesting photographs, for publication. IHJ open access also publishes theme-based special issues and abstracts of papers presented at the annual conference of the Cardiological Society of India.

IHJ open access is currently indexed in Scopus, Medline and Embase.

ABSTRACTING AND INDEXING

Emerging Sources Citation Index (ESCI)
PubMed/Medline
Embase
Scopus
Reactions Weekly
Embase
PubMed/Medline

EDITORIAL BOARD

Editor
Rakesh Yadav, All India Institute of Medical Sciences, New Delhi, India
Executive Editors
Mohit Dayal Gupta, Govind Ballabh Pant Institute of Postgraduate Medical Education and Research, Department of Cardiology, New Delhi, Delhi, India
Aditya Kapoor, Sanjay Gandhi Post Graduate Institute of Medical Sciences Department of Cardiology, Lucknow, India
Nitish Naik, All India Institute of Medical Sciences, New Delhi, India

Associate Editor
Manish Bansal, Medanta The Medicity, Division of Cardiology, Gurgaon, India

Assistant Editor
Surender Deora, All India Institute of Medical Sciences Jodhpur, Jodhpur, India

Editorial Associates
Sharad Chandra, King George's Medical University Department of Cardiology, Lucknow, India
Vivek Chaturvedi, Govind Ballabh Pant Institute of Postgraduate Medical Education and Research, Department of Cardiology, New Delhi, Delhi, India
Saurabh Gupta, All India Institute of Medical Sciences Department of Cardiology, New Delhi, India
Sudeep Kumar, Sanjay Gandhi Post Graduate Institute of Medical Sciences Department of Cardiology, Lucknow, India
Bishav Mohan, Dayanand Medical College and Hospital Department of Cardiology, Ludhiana, India
Satyajit Singh, All India Institute of Medical Sciences - Raipur, Raipur, India

Editorial Board
Vinay K Bahl, All India Institute of Medical Sciences Department of Cardiology, New Delhi, India
Yellapragada Chandrashekhar, University of Minnesota, Minneapolis, United States
Mrinal Kanti Das, Calcutta Medical Research Institute Department of Cardiology, Kolkata, India
Pradip K Deb, Daffodil Heart Clinic, Kolkata, India
Daljeet Singh Gambhir, Kailash Hospital and Heart Institute, Noida, India
Kewal C Goswami, All India Institute of Medical Sciences Department of Cardiology, New Delhi, India
Santanu Guha, Kolkata Medical College Department of Cardiology, Kolkata, India
M. Khalilullah, Delhi Heart and Lung Institute, New Delhi, India
P P Mohanan, West Fort Hi-Tech Hospital, Department of Cardiology, Thrissur, India
Varun. S Narain, King George's Medical University Department of Cardiology, Lucknow, India
D. B. Pahlajani, Breach Candy Hospital and Research Centre Cardiology and Cardio Thoracic Department, Mumbai, India
Anita Saxena, All India Institute of Medical Sciences Department of Cardiology, New Delhi, India
KK Sethi, Delhi Heart and Lung Institute, New Delhi, India
K.K Talwar, Max Super Speciality Hospital, Department of Cardiology, New Delhi, India
Sanjay Tyagi, Govind Ballabh Pant Institute of Postgraduate Medical Education and Research, Department of Cardiology, New Delhi, India

International Editorial Board
Ali Ahmed, GEORGE WASHINGTON UNIVERSITY MEDICAL CENTER
Takeshi Arita, Kokura Memorial Hospital, Kitakyushu, Japan
Sameer Arora, University of North Carolina at Chapel Hill, Chapel Hill, North Carolina, United States
Samuel J. Asirvatham, Mayo Foundation for Medical Education and Research, Rochester, Minnesota, United States
Enas A Enas, Coronary Artery Disease among Asian Indians Research Foundation and Advanced Heart Lipid Clinic, Downers Grove, Illinois
Rajiv Gulati, Mayo Clinic, Department of Cardiovascular Medicine, Rochester, Minnesota, United States
Vijay S. Iyer, University at Buffalo School of Medicine and Biomedical Sciences, Buffalo, New York, United States
Bharat K. Kantharia, University of Texas John P and Katherine G McGovern Medical School, Houston, Texas, United States
Sunil V. Mankad, Mayo Foundation for Medical Education and Research, Minnesota
Anil Mehra, Keck School of Medicine of USC, Division of Cardiovascular Medicine, Los Angeles, California, United States
Mandeep Mehra, Harvard Medical School, Boston, Massachusetts, United States
Rohit Mehotra, University of Virginia, Charlottesville, Virginia, United States
Navin. C. Nanda, University of Alabama, Tuscaloosa, Alabama, United States
Jagat Narula, Icahn School of Medicine at Mount Sinai, New York
Samir Pancholy, Cardiac Catheterization Laboratory Veterans Administration Medical Center, Wilkes Barre, Pennsylvania
Arman Qamar, Harvard Medical School, Boston, Massachusetts, United States
Sudhir Rathore, Frimley Health NHS Foundation Trust, Camberley, United Kingdom
Hubert Seggewiss, University Hospital Wurzburg, Würzburg, Germany
Partho. P. Sengupta, West Virginia University, Morgantown, West Virginia, United States
Maully Shah, Children's Hospital of Philadelphia, Department of Pediatrics, Philadelphia, Pennsylvania, United States
Samin Sharma, Mount Sinai Hospital NY, Inst. of Cardiovascular, New York, United States
Michael Valentine, Centra Lynchburg General Hospital, CMG Stroobants Cardiovascular Center, Lynchburg, Virginia, United States

Editorial Secretariat
Manish Babbar, Secretary and Analyst

Acute Coronary Syndrome
Rajiv Agarwal
Thomas Alexander
Balram Bhargava
Anjan Lal Dutta
Ajit Mullasari
Satyendra Tiwari

Cardiac & Vascular Surgery
Z. S. Meharwal
Ramakant Panda
Sachin Talwar
O. P. Yadav
R. D. Yadava

Cardiomyopathies
Ajay Bahl
P. S. Banerjee
Soura Mookerjee
Jagan Mohan Tharakan

Cardiovascular Disease in Special Population
Harinder K Bali
P. C. Manoria
Sundeep Mishra
O. P. Sharma
Yash Paul Sharma

Cardiovascular Pharmacology
Sandeep Bansal
Ashok Goyel
PB Jayagopal
S. K. Maulik
Mukesh Sharma

Clinical Cardiology
A K Pancholia
Manotosh Panja
Nakul Sinha
M. Somasundaram
Harsh Wardhan

Coronary Artery Disease
Amal K Banerjee
Praful G Kerkar
Amal Khan
H. M. Mardikar
K. Venugopal

Coronary Imaging
Rajeev Bagarahatta
Arunangshu Ganguly
G. Sengotuvellu
Sandeep Singh

Coronary Interventions
C N Manjunath
Samuel K Mathew
Tejas Patel
Lekha Pathak
Ashok Seth

Echocardiography
R. Alagesan
Rakesh Gupta
Satish Kaushik
J. C. Mohan
G. Vijayaraghavan

Electrophysiology
Sudhanshu Dwivedi
Yash Lokhandwala
C. Narasimhan
Anil Saxena
Amit Vora

EP Devices
Rabin Chakraborty
T. S. Kler
Mohan Nair
Jayprakash Shenthar
Balbir Singh

Epidemiology and Trials
Arup Dasbiswas
Rajeev Gupta
Ganesan Karthikeyan
J. P. S. Sawhney
G. S. Wander

Heart Failure
V. K. Chopra
Justin Paul
Ambuj Roy
Sandeep Seth
B P Singh

Hypertension
Hriday Kumar Chopra
Soumitra Kumar
Pintu Nahata
Tiny Nair
C. Venkata S. Ram

Lipidology
Rajeev Bajaj
Kajal Ganguly
S. S. Iyengar
Soumitra Ray
Sanjeev Sanghvi

Non-Coronary Interventions
Praveen Chandra
Santosh Sateesh
Vijay Trehan
R. D. Yadava

Nuclear Cardiology & Cardiac Imaging
Mona Bhatia
INTRODUCTION

Indian Heart Journal (IHJ) is the official peer reviewed open access journal of Cardiological Society of India (CSI) and accepts articles for publication from across the globe. IHJ is a bi-monthly journal and aims to publish work of the highest quality from all sub-specialties of cardiology- clinical and non-clinical including cardiovascular medicine and surgery. The journal invites original research articles, research briefs, perspective, case reports, case vignette, cardiovascular images, cardiovascular graphics, research letters, correspondence, reader forum, and interesting photographs, for publication. The aim of the publication is to promote research in India and serve as platform for dissemination of scientific information in cardiology particularly from South Asia.

Categories of Articles

Articles can be submitted as Original Research Articles, Research Briefs, Review Articles, Research Letters and Correspondence.

Animal studies are not considered for publication in Indian Heart Journal.

Please do not submit any manuscript as Editorial, unless specifically solicited.

Original Research Articles: Original, in-depth research article that represents new and significant contributions to medical science. These articles should report research relevant to clinical cardiology including randomized clinical trials, Cardiac intervention studies, studies of screening and diagnostic tests, cohort studies, systematic reviews, cost-effectiveness analyses, case control studies and cross-sectional studies. Before reporting a clinical trial we strongly urge the authors to register their clinical trials involving human subjects in CTRI (Clinical Trials Registry of India), available at http://www.ctri.in, hosted by the Indian Council of Medical Research. Each manuscript should be accompanied by a structured abstract of not more than 250 words using the following headings: Objective, Methods (discussing design, setting, participants/patients, interventions (if any) and endpoints), Results, and Conclusions. Four to five key words to facilitate indexing should be provided in alphabetical order below the abstract. The text should be arranged in sections on INTRODUCTION, METHODS, RESULTS and DISCUSSION. One line key messages could also be provided at the end of the manuscript in a box under headings: ‘What is Already Known?’ and ‘What this Study Adds?’ Number of tables and figures should be limited to a maximum of 4 and 2, respectively. Extra tables and figures, subject to clearance by editorial review process, can be allowed on payment or may be made available only at the journal website. The typical text length for such contributions is up to 3000 words (including title page, abstract, tables, figures, acknowledgments and key messages). Number of references should be limited to 40.

Research Briefs: Brief accounts of descriptive, observational studies, epidemiological assessments, and surveys are published as Research Briefs. A series of cases can also be considered as Research Briefs. Abstract should be unstructured, limited to 100 words, and highlight the aims, methods and main results. Provide 2-3 key words. The text should contain not more than 1000 words, two illustrations/ tables and up to 15 references, preferably recent publications. The text should be arranged in order of INTRODUCTION, METHODS, RESULTS and DISCUSSION. One line key messages could also be provided at the end of the study. The number of authors should be limited to 5.

Review Articles: These are comprehensive review articles on topics of current interest in Cardiology. The review should not exceed 5000 words (including tables, and figures). Authors submitting review articles should include an abstract of around 200 words describing the need and purpose of review, methods used for locating, selecting, extracting and synthesizing data, and main conclusions. The number of references should be limited to 50. Following types of articles can be submitted under this category:

- Newer drugs
- New technologies
- Review of a current concept

Please note that generally review articles are by invitation only. But unsolicited review articles will be considered for publication on merit basis. The authors may consult the Honorary Editor before submitting such articles, as similar reviews may already be in submission. Normally, a review article on a subject already published in Indian Heart Journal in last 3 years is not considered.
Opinion Paper: Articles published under this heading intend to cover challenging and controversial topics of current interest in clinical cardiology and the intersection between medicine and society. The issues covered could be of national, regional (South East Asia) or global interest. Though the articles are usually solicited, we welcome submissions and proposals from researchers and opinion makers, provided they have sufficient credible experience and recognition on the subject for giving opinions. The following guidelines need to be followed: The number of authors should be limited to maximum of 3. The topic should be specific and related to the practice of cardiology in general. Word limit: 2000 words and may include one figure and one table. Unstructured abstract of up to 150 words is acceptable. The views should be supported by appropriate evidence and references. Number of references should be limited to a maximum of 10.

Short Communication: Under this heading, short communication pertaining to research would be included. Research Letters reporting original research should not exceed 500 words of text and upto 5 references. They may have no more than 4 authors; other persons who have contributed to the study may be indicated in an acknowledgment section, with their permission. An abstract of up to 50 words reporting the key findings should also be included. Letters must not duplicate other material published, submitted or planned to be submitted for publication. In general, the matter of the letter could be unstructured but should follow the general sequence of introduction, methods, results and discussion and all other standard guidelines of a manuscript.

Correspondence: Letters commenting upon recent articles in Indian Heart Journal are welcome. Such letters should be received within 16 weeks of the article's publication. At the Editorial board’s discretion, the letter may be sent to the authors for reply and the letter alone or letter and reply together may be published after appropriate review. Letters should not have more than 300 words; contain no more than 1 Figure/Table and upto 5 most recent references. The text need not be divided into sections. The number of authors should not exceed 3, including the authors’ reply in response to a letter commenting upon an article published in Indian Heart Journal. In the latter case, inclusion of only one of the authors (of the article in question) is permissible, besides the corresponding author names of additional persons who have helped in data acquisition can be mentioned in the acknowledgment section.

Contact details for submission
If assistance is required by the authors, please refer to the tutorials for authors and/or customer support that are available on the EVISE website; you may also contact the Editorial Office. Please do not post, fax or e-mail your manuscripts to the Editorial Office.

Editorial Office
Indian Heart Journal
Dr Rakesh Yadav
Email: rakeshyadav123@yahoo.com, drrakeshyadav123@gmail.com

BEFORE YOU BEGIN

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

Animal studies are not considered for publication in Indian Heart Journal.

Conflict of interest
IHJ follows the ICMJE recommendations regarding conflict of interest disclosures. All authors are required to report the following information with each submission: (1) All third-party financial support for the work in the submitted manuscript. (2) All financial relationships with any entities that could be viewed as relevant to the general area of the submitted manuscript. (3) All sources of revenue with relevance to the submitted work who made payments to you, or to your institution on your behalf, in the 36 months prior to submission. (4) Any other interactions with the sponsor of outside of the submitted work should also be reported. (5) Any relevant patents or copyrights (planned, pending, or issued). (6) Any other relationships or affiliations that may be perceived by readers to have influenced, or give the appearance of potentially influencing, what you wrote in the submitted work. As a general guideline, it is usually better to disclose a relationship than not. This information will be acknowledged at publication in a Transparency Document link directly in the article. Additional information on the ICMJE recommendations can be found at: http://www.icmje.org/. The form for
conflict of interest disclosure can be downloaded here: http://www.icmje.org/coi_disclosure.pdf (if this link does not display properly in your browser, please right-click the link and select "Save Target As..." or "Save Link as..." from the pop-up menu).

**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.

**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').

**Authorship**
All authors should have made substantial contributions to all of the following: (1) the conception and design of the study, or acquisition of data, or analysis and interpretation of data, (2) drafting the article or revising it critically for important intellectual content, (3) final approval of the version to be submitted.

**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.

**Reporting clinical trials**
Randomized controlled trials should be presented according to the CONSORT guidelines. At manuscript submission, authors must provide the CONSORT checklist accompanied by a flow diagram that illustrates the progress of patients through the trial, including recruitment, enrollment, randomization, withdrawal and completion, and a detailed description of the randomization procedure. The CONSORT checklist and template flow diagram are available online.

**Article transfer service**
This journal is part of our Article Transfer Service. This means that if the Editor feels your article is more suitable in one of our other participating journals, then you may be asked to consider transferring the article to one of those. If you agree, your article will be transferred automatically on your behalf with no need to reformat. Please note that your article will be reviewed again by the new journal.

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

**Elsevier supports responsible sharing**
Find out how you can [share your research](#) published in Elsevier journals.

**Role of the funding source**
You are requested to identify who provided financial support for the conduct of the research and/or preparation of the article and to briefly describe the role of the sponsor(s), if any, in study design; in the collection, analysis and interpretation of data; in the writing of 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.

**Open access**
Please visit our Open Access page from the Journal Homepage for more information.

**Language (usage and editing services)**
Please write your text in good English (American or British usage is accepted, but not a mixture of these). 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 Author Services.

**Informed consent and patient details**
Studies on patients or volunteers require ethics committee approval and informed consent, which should be documented in the paper. Appropriate consents, permissions and releases must be obtained where an author wishes to include case details or other personal information or images of patients and any other individuals in an Elsevier publication. Written consents must be retained by the author but copies should not be provided to the journal. Only if specifically requested by the journal in exceptional circumstances (for example if a legal issue arises) the author must provide copies of the consents or evidence that such consents have been obtained. For more information, please review the [Elsevier Policy on the Use of Images or Personal Information of Patients or other Individuals](#). Unless you have written permission from the patient (or, where applicable, the next of kin), the personal details of any patient included in any part of the article and in any supplementary materials (including all illustrations and videos) must be removed before submission.

**Manuscript submission**
The [Indian Heart Journal](#) accepts online submissions in electronic format. All new manuscripts must be submitted through Indian Heart Journal online and review Website ([https://www.evise.com/profile/api/navigate/IHJ](https://www.evise.com/profile/api/navigate/IHJ)). Please follow the following steps to submit your manuscript:
1. Open the homepage of the Journal's Website [https://www.evise.com/profile/api/navigate/IHJ](https://www.evise.com/profile/api/navigate/IHJ)
2. Register yourself for free by clicking on register on the top and create a user profile with a desired username and mandatory details. On submission of the information, you will receive an e-mail confirming your registration along with the "Password".
3. "Log In" on the main navigation menu (at the top of the journal screen to open the login page) using the username and password emailed to you at the time of registration.
4. Click "Author Log in", this takes you to the "Author Main Menu".

Our online submission system guides you stepwise through the process of entering your article details and uploading your files. Editable article files (e.g., Word, LaTeX) are mandatory to use in the peer-review process and typeset your article for final publication. All correspondence, including notification of the Editor's decision and requests for revision, is sent by e-mail.

**Criteria for Acceptance**
All manuscripts should meet the following criteria: the material is original, study methods are appropriate, data are sound, conclusions are reasonable and supported by the data, and the information is important; the topic has general cardiology interest; and that the article is written in reasonably good English. Knowledge, attitude, practice (KAP) studies are generally not accepted. The article should be submitted strictly in the style of Indian Heart Journal (vide infra). Manuscripts which do not follow the guidelines are likely to be sent back to authors without initiating the peer-review process. The current acceptance rate of submitted articles is higher for original studies but lower for case reports and review articles. In general review articles should be submitted only after consulting with the Editorial office. All accepted manuscripts are subject to editorial modifications to suit the
language and style of Indian Heart Journal and suggestions may be made to the authors by the Editorial Board to improve the scientific value of the journal. Manuscripts once accepted will be edited in accordance with Editorial Policy and returned to the author for approval. Rejected manuscripts are retained for three months to answer any queries. The journal reserves the right to analyze the information obtained from submitted manuscripts as a part of editorial research to improve the peer-review process and for teaching and training activities; this does not include use of the manuscript data.

Submit your article
Please submit your article via https://www.evise.com/profile/api/navigate/IHJ.

PREPARATION

Covering letter
The covering letter should explain any deviation from the standard IMRAD (Introduction, Methods, Results, and Discussion) format and should outline the importance and uniqueness of the work. It should include the signed declaration from all authors on:
1. The category of manuscript (original research, review articles, case reports etc.)
2. Statement that the material has not been previously published or submitted elsewhere for publication (This restriction does not apply to abstracts published in connection with scientific meetings.)
3. Transfer of copyright to the *Indian Heart Journal* upon the acceptance of the manuscript for publication
4. All authors have reviewed the article and agree with its contents
5. Information of any conflicts of interest (of any) of the authors
6. Sources of research support, if any, including funding, equipment, and drugs

The covering letter should also include the mailing address, telephone and fax numbers, and e-mail address of the corresponding author.

Manuscript preparation
The manuscripts should comply with the following guidelines. Title page (Page 1) should contain:
- Title
- Name(s) of author(s), their academic qualifications and current affiliations
- Name, mailing and e-mail addresses of the corresponding author
- Key words
- Information relating to any conflicts of interest of any of the authors and sources of research support, if any, including funding, equipment, and drugs should be included in the manuscript before references. Also include acknowledgement of financial support, if any.

The title represents the subject matter of the manuscript. A subtitle can be added if necessary. The title should be brief and comprehensive. Keywords should be the listed terms in the medical subject's headings (MeSH) of the Index Medicus, to help in easy indexing.

The manuscript should be well organized and written in simple and correct English under appropriate headings. The abbreviations and acronyms should be spelled out when they occur first time.

The Introduction should address the subject of the paper. The Methods section should describe in adequate detail the laboratory or study methods followed and state the statistical procedures employed in the research. This section should also identify the ethical guidelines followed by the investigators with regard to the population or patient samples used. A statement should be made that their study conforms to widely accepted ethical principles guiding human research (such as the Declaration of Helsinki) AND also that their study has been approved by a local ethics committee.

The Results section should be concise and include pertinent findings and necessary tables and figures. The Discussion should contain conclusions based on the major findings of the study, a review of the relevant literature, clinical application of the conclusions and future research implications. Following the Discussion, Acknowledgements of important contributors and funding agencies may be given. The editorial office must receive written, signed consent from each contributor recognized in the Acknowledgements because the statement can imply endorsement of data and conclusions.
**Peer review**
This journal operates a double 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.

**Double-blind review**
This journal uses double-blind review, which means the identities of the authors are concealed from the reviewers, and vice versa. More information is available on our website. To facilitate this, please include the following separately:
*
- **Title page (with author details):** This should include the title, authors' names, affiliations, acknowledgements and any Declaration of Interest statement, and a complete address for the corresponding author including an e-mail address.
- **Blinded manuscript (no author details):** The main body of the paper (including the references, figures, tables and any acknowledgements) should not include any identifying information, such as the authors' names or affiliations.

**Article structure**

**Subdivision - numbered sections**
Divide your article into clearly defined and numbered sections. Subsections should be numbered 1.1 (then 1.1.1, 1.1.2, ...), 1.2, etc. (the abstract is not included in section numbering). Use this numbering also for internal cross-referencing: do not just refer to 'the text'. Any subsection may be given a brief heading. Each heading should appear on its own separate line.

**Introduction**
State the objectives of the work and provide an adequate background, avoiding a detailed literature survey or a summary of the results.

**Material and methods**
Provide sufficient details to allow the work to be reproduced by an independent researcher. Methods that are already published should be summarized, and indicated by a reference. If quoting directly from a previously published method, use quotation marks and also cite the source. Any modifications to existing methods should also be described.

**Theory/calculation**
A Theory section should extend, not repeat, the background to the article already dealt with in the Introduction and lay the foundation for further work. In contrast, a Calculation section represents a practical development from a theoretical basis.

**Results**
Results should be clear and concise.

**Discussion**
This should explore the significance of the results of the work, not repeat them. A combined Results and Discussion section is often appropriate. Avoid extensive citations and discussion of published literature.

**Conclusions**
The main conclusions of the study may be presented in a short Conclusions section, which may stand alone or form a subsection of a Discussion or Results and Discussion section.

**Appendices**
If there is more than one appendix, they should be identified as A, B, etc. Formulae and equations in appendices should be given separate numbering: Eq. (A.1), Eq. (A.2), etc.; in a subsequent appendix, Eq. (B.1) and so on. Similarly for tables and figures: Table A.1; Fig. A.1, etc.

**Essential title page information**
- **Title.** Concise and informative. Titles are often used in information-retrieval systems. Avoid abbreviations and formulae where possible.
- **Author names and affiliations.** Please clearly indicate the given name(s) and family name(s) of each author and check that all names are accurately spelled. You can add your name between parentheses in your own script behind the English transliteration. Present the authors' affiliation addresses (where the actual work was done) below the names. Indicate all affiliations with a lower-
case superscript letter immediately after the author's name and in front of the appropriate address. Provide the full postal address of each affiliation, including the country name and, if available, the e-mail address of each author.

- **Corresponding author.** Clearly indicate who will handle correspondence at all stages of refereeing and publication, also post-publication. This responsibility includes answering any future queries about Methodology and Materials. **Ensure that the e-mail address is given and that contact details are kept up to date by the corresponding author.**

- **Present/permanent address.** If an author has moved since the work described in the article was done, or was visiting at the time, a 'Present address' (or 'Permanent address') may be indicated as a footnote to that author's name. The address at which the author actually did the work must be retained as the main, affiliation address. Superscript Arabic numerals are used for such footnotes.

**Abstract**
A concise and factual abstract is required. The abstract should be included as the first page in the main manuscript file. The abstract should state briefly the purpose of the research, the principal results and major conclusions. An abstract is often presented separately from the article, so it must be able to stand alone. For this reason, References should be avoided, but if essential, then cite the author(s) and year(s). Also, non-standard or uncommon abbreviations should be avoided, but if essential they must be defined at their first mention in the abstract itself.

**Keywords**
Immediately after the abstract, provide a minimum of 3 keywords to maximum of 12 keywords, using American spelling and avoiding general and plural terms and multiple concepts (avoid, for example, 'and', 'of'). Be sparing with abbreviations: only abbreviations firmly established in the field may be eligible. These keywords will be used for indexing purposes.

**Abbreviations**
Define abbreviations that are not standard in this field in a footnote to be placed on the first page of the article. Such abbreviations that are unavoidable in the abstract must be defined at their first mention there, as well as in the footnote. Ensure consistency of abbreviations throughout the article.

**Acknowledgements**
Collate acknowledgements in a separate section at the end of the article before the references and do not, therefore, include them on the title page, as a footnote to the title or otherwise. List here those individuals who provided help during the research (e.g., providing language help, writing assistance or proof reading the article, etc.).

**Formatting of funding sources**
List funding sources in this standard way to facilitate compliance to funder's requirements:

Funding: This work was supported by the National Institutes of Health [grant numbers xxxx, yyyy]; the Bill & Melinda Gates Foundation, Seattle, WA [grant number zzzz]; and the United States Institutes of Peace [grant number aaaa].

It is not necessary to include detailed descriptions on the program or type of grants and awards. When funding is from a block grant or other resources available to a university, college, or other research institution, submit the name of the institute or organization that provided the funding.

If no funding has been provided for the research, please include the following sentence:

This research did not receive any specific grant from funding agencies in the public, commercial, or not-for-profit sectors.

**Units**
Follow internationally accepted rules and conventions: use the international system of units (SI). If other units are mentioned, please give their equivalent in SI.

Units of measurement should be given in conventional units. All bio-clinical measurements should be given in conventional units, with Systeme International d'unites (SI) units given in parenthesis. Generic rather than trade names of drugs should be used.

**Artwork**
**Figures and graphics**

1. For graphics, a digital picture of 300 dpi or higher resolution in TIFF, EPS, and JPEG format should be submitted.
2. Figures should be in Arabic numerals, consecutively according to the order in which they have been first cited in the text, if there is more than 1 figure. Each figure should be cited in the text.
3. Each figure/illustration should be provided with a suitable legend that includes enough information to permit its interpretation without reference to the text.
4. All photomicrographs should indicate the magnification of the prints.
5. When symbols, arrows, numbers or letters are used to identify parts of the illustrations, each one should be explained clearly in the legend.

**Electronic artwork**

**General points**

- Make sure you use uniform lettering and sizing of your original artwork.
- Embed the used fonts if the application provides that option.
- Aim to use the following fonts in your illustrations: Arial, Courier, Times New Roman, Symbol, or use fonts that look similar.
- Number the illustrations according to their sequence in the text.
- Use a logical naming convention for your artwork files.
- Provide captions to illustrations separately.
- Size the illustrations close to the desired dimensions of the published version.
- Submit each illustration as a separate file.
- Ensure that color images are accessible to all, including those with impaired color vision.

A detailed guide on electronic artwork is available. You are urged to visit this site; some excerpts from the detailed information are given here.

**Formats**

If your electronic artwork is created in a Microsoft Office application (Word, PowerPoint, Excel) then please supply 'as is' in the native document format.

Regardless of the application used other than Microsoft Office, when your electronic artwork is finalized, please 'Save as' or convert the images to one of the following formats (note the resolution requirements for line drawings, halftones, and line/halftone combinations given below):

- EPS (or PDF): Vector drawings, embed all used fonts.
- TIFF (or JPEG): Color or grayscale photographs (halftones), keep to a minimum of 300 dpi.
- TIFF (or JPEG): Bitmapped (pure black & white pixels) line drawings, keep to a minimum of 1000 dpi.
- TIFF (or JPEG): Combinations bitmapped line/half-tone (color or grayscale), keep to a minimum of 500 dpi.

**Please do not:**

- Supply files that are optimized for screen use (e.g., GIF, BMP, PICT, WPG); these typically have a low number of pixels and limited set of colors;
- Supply files that are too low in resolution;
- Submit graphics that are disproportionately large for the content.

**Color artwork**

Please make sure that artwork files are in an acceptable format (TIFF (or JPEG), EPS (or PDF) or MS Office files) and with the correct resolution. If, together with your accepted article, you submit usable color figures then Elsevier will ensure, at no additional charge, that these figures will appear in color online (e.g., ScienceDirect and other sites) in addition to color reproduction in print. Further information on the preparation of electronic artwork.

**Figure captions**

Ensure that each illustration has a caption. Supply captions separately, not attached to the figure. A caption should comprise a brief title (not on the figure itself) and a description of the illustration. Keep text in the illustrations themselves to a minimum but explain all symbols and abbreviations used.

**Tables**

Please submit tables as editable text and not as images. Tables can be placed either next to the relevant text in the article, or on separate page(s) at the end. Number tables consecutively in accordance with their appearance in the text and place any table notes below the table body. Be sparing in the use of tables and ensure that the data presented in them do not duplicate results described elsewhere in the article. Please avoid using vertical rules and shading in table cells.
1. Number tables in the order of their find it citation in the text. Each table should be cited in the text in Arabic numerals.
2. Titles should be brief and a short or abbreviated heading for each column should be given. Explanatory matter should be placed in footnotes and not in the heading.
3. Abbreviations in each table should be explained in footnotes.
4. The data presented in a table should not be repeated in the text or figure.

References
The authors are responsible for the accuracy and completeness of the references and their citations in the text.
1. References should be numbered consecutively in the order in which they are first mentioned in the text.
2. References in text, tables and legends should be identified by superscript Arabic numerals at the end of the sentence outside any punctuation. If several different studies or papers are cited within one sentence, the number should be placed where it will accurately identify the correct study.
3. The names of authors in the text should concur with the reference list.
4. References cited only in tables or in legends to figures should be numbered in accordance with a sequence established by the first identification in the text of the particular table or illustration.
5. Abstracts as references may be used; "unpublished observations" and "personal communications" may not be used as references, although references to written, not oral, communications may be inserted (in parentheses) in the text.
6. Papers accepted but not yet published may be included as references by adding "In press" after the journal name. Information from manuscripts submitted but not yet accepted should be cited in the text as "unpublished observations" (in parentheses).
7. In general: • All authors/editors should be listed unless the number exceeds three, when you should give three followed by "et al." • Full page number for first page and as many digits as are changed for final page need to be mentioned.

Example


For more details and examples of correct forms of references, please refer to ICMJE guidelines sheet at http://www.nlm.nih.gov/bsd/uniform_requirements.html.

Editorial Process
The Indian Heart Journal commits to high ethical and scientific standards. Submitted manuscripts are considered with the understanding that they have not been published previously in print or electronic format (except in abstract or poster form) and are not under consideration by another publication or electronic medium.

Statements and opinions expressed in the articles published in the Journal are those of the authors and not necessarily of the Editor. Neither the Editor nor the Publisher guarantees, warrants, or endorses any product or service advertised in the Journal.

Submitted manuscripts are reviewed by two or more referees along with a section editor to determine whether an article is suitable for publication in IHJ based on their scientific merit, originality, validity of the material presented and readability. Decision about provisional or final acceptance is communicated within 8-12 weeks.

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.

Supplementary material
Supplementary material such as applications, images and sound clips, can be published with your article to enhance it. Submitted supplementary items are published exactly as they are received (Excel or PowerPoint files will appear as such online). Please submit your material together with the article and supply a concise, descriptive caption for each supplementary file. If you wish to make changes to
supplementary material during any stage of the process, please make sure to provide an updated file. Do not annotate any corrections on a previous version. Please switch off the 'Track Changes' option in Microsoft Office files as these will appear in the published version.

**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**

- Covering letter mentioning.
- Manuscript category.
- Single-journal submission affirmation.
- Sources of funding, equipment, drugs.
- Informed patient consent statement. /ethical approval
- Funding agency’s role in data interpretation

**AFTER ACCEPTANCE**
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.

Offprints

The corresponding author will be provided with a personalized link providing free access to the final published version of the article on http://www.sciencedirect.com/. This link can also be used for sharing via email and social networks. Both corresponding and co-authors may order offprints at any time via Elsevier's WebShop (http://webshop.elsevier.com/myarticleservices/offprints). Authors requiring printed copies of multiple articles may use Elsevier WebShop's 'Create Your Own Book' service to collate multiple articles within a single cover (http://webshop.elsevier.com/myarticleservices/booklets).

AUTHOR INQUIRIES

Visit the Elsevier Support Center to find the answers you need. Here you will find everything from Frequently Asked Questions to ways to get in touch. You can also check the status of your submitted article or find out when your accepted article will be published.

© Copyright 2018 Elsevier | https://www.elsevier.com