DESCRIPTION

International Journal of Radiation Oncology • Biology • Physics (IJROBP), known in the field as the Red Journal, publishes original laboratory and clinical investigations related to radiation oncology, radiation biology, medical physics, and both education and health policy as it relates to the field.

This journal has a particular interest in original contributions of the following types: prospective clinical trials, outcomes research, and large database interrogation. In addition, it seeks reports of high-impact innovations in single or combined modality treatment, tumor sensitization, normal tissue protection (including both precision avoidance and pharmacologic means), brachytherapy, particle irradiation, and cancer imaging. Technical advances related to dosimetry and conformal radiation treatment planning are of interest, as are basic science studies investigating tumor physiology and the molecular biology underlying cancer and normal tissue radiation response.

The Red Journal’s sister publications are Practical Radiation Oncology and Advances in Radiation Oncology. Learn more about which types of papers these journals typically accept.

Disclaimer

No responsibility is assumed by the Publisher or the American Society for Radiation Oncology for any injury and/or damage to persons or property as a result of any actual or alleged libelous statements, infringement of intellectual property or privacy rights, products liability, negligence or otherwise, or from any use or operation of any methods, products, instructions or ideas contained in the material herein. Because of rapid advances in the medical sciences, in particular, independent verification of diagnoses and drug dosages should be made. Although all advertising material is expected to conform to ethical (medical) standards, inclusion in this publication does not constitute a guarantee or endorsement of the quality or value of such product or of the claims made of it by its manufacturer.

AUDIENCE

Radiation Oncologists, Medical Oncologists, Surgical Oncologists, Pediatric Oncologists, Gynecologic Oncologists, Medical Physicists, Radiation Therapists, Diagnostic Radiologists.

IMPACT FACTOR

2017: 5.554 © Clarivate Analytics Journal Citation Reports 2018
ABSTRACTING AND INDEXING

BIOSIS
MEDLINE®
EMBASE
Safety Science Abstracts
Energy Research Abstracts
Energy Data Base
Toxicology Abstracts
Electronics and Communications Abstracts
Computer and Information Systems Abstract
Cambridge Scientific Abstracts
Elsevier BIOBASE
PASCAL/CNRS
Current Contents
Sociedad Iberoamericana de Informacion Cientifica
Science Citation Index
Scopus

EDITORIAL BOARD

Editor-in-Chief
Anthony L. Zietman, MD, FASTRO, Massachusetts General Hospital, Boston, MA

Deputy Editor
Sue S. Yom, MD, University of California at San Francisco (UCSF), San Francisco, CA

Senior Editors
Sushil Beriwal, University of Pittsburgh Medical Center (UPMC), Pittsburgh, PA
John C. Breneman, MD, University of Cincinnati, Cincinnati, USA
Ananya Choudhury, MA, PhD, MRCP, FRCP, The Christie NHS Foundation Trust, Manchester, United Kingdom
Janet K. Horton, Duke University School of Medicine, Durham, NC
Salma K. Jabbour, MD, Rutgers Cancer Institute of New Jersey, New Brunswick, NJ
Randall J. Kimple, MD, PhD, University of Wisconsin at Madison, Madison, WI
John P. Kirkpatrick, MD, Duke University Medical Center, Durham, NC
Eric Klein, Brown University/Rhode Island Hospital, Providence, RI
Brian Marples, PhD, William Beaumont Health System, Grosse Pointe, MI
David Palma, MD, MSc, PhD, FRCP, London Regional Cancer Centre, London, Ontario, Canada
Chelsea C. Pinnix, MD, PhD, University of Texas M.D. Anderson Cancer Center, Houston, TX

Editorial Board
Kevin Albuquerque, MD, FRCS, University of Texas Southwestern Medical Center, Dallas, TX
Hania Al-Hallaq, PhD, University of Chicago, Chicago, IL
Carryn Anderson, MD, University of Iowa Hospital and Clinics, Iowa City, IA
Smith Apisarnthanarax, MD, UW Medicine, Northwest Hospital and Medical Center, Seattle, WA
Elizabeth Baldini, MD, MPH, Dana-Farber Cancer Institute and Harvard Medical School, Boston, MA
Yazid Belkacemi, MD, PhD, University Hospital of Henri Mondor, Créteil, France
Rachel C. Blitzblau, MD, Duke University Medical Center, Durham, NC
Marjan Boerma, PhD, University of Arkansas for Medical Sciences, Little Rock, AR
Kristy K. Brock, PhD, University of Michigan, Ann Arbor, MI
Belinda Campbell, MD, Peter MacCallum Cancer Centre, Victoria, Australia
Kevin Camphausen, MD, National Cancer Institute, Bethesda, MD
David J. Carlson, PhD, Yale University School of Medicine, New Haven, CT
Richard Castillo, PhD, Emory University, Atlanta, GA
Michael D. Chan, MD, Wake Forest Baptist Medical Center, Winston-Salem, NC
Junzo P. Chino, MD, Duke University Medical Center Durham, NC
Rob Coppes, PhD, University Medical Center Groningen, Groningen, Netherlands
Megan Daly, MD, University of California, Davis Sacramento, CA
Issam El Naqa, PhD, University of Michigan, Ann Arbor, MI
Ralph Philip Ermoian, MD, University of Washington, Seattle, WA
Mererid Evans, PhD, Velindre NHS Trust, Cardiff, United Kingdom
Jonas D. Fontenot, MD, Mary Bird Perkins Cancer Center, Baton Rouge, LA
Meredith E. Giuliani, MBBS, Med, FRCP, Princess Margaret Cancer Centre, Toronto, Ontario, Canada
Robert T. Griffin, PhD, University of Arkansas, Little Rock, AR
GUIDE FOR AUTHORS

INTRODUCTION

*International Journal of Radiation Oncology, Biology, Physics (IJROBP)*, known in the field as the Red Journal, publishes original laboratory and clinical investigations related to radiation oncology, radiation biology, medical physics, and both education and health policy as it relates to the field.

This journal has a particular interest in original contributions of the following types: prospective clinical trials, outcomes research, and large database interrogation. In addition, it seeks reports of high-impact innovations in single or combined modality treatment, tumor sensitization, normal tissue protection (including both precision avoidance and pharmacologic means), brachytherapy, particle irradiation, and cancer imaging. Technical advances related to dosimetry and conformal radiation treatment planning are of interest, as are basic science studies investigating tumor physiology and the molecular biology underlying cancer and normal tissue radiation response.

Because of the large number of manuscripts submitted annually and the limited print space available, the Red Journal has had to become substantially more selective in what it can accept for publication.

Manuscripts with the highest likelihood of acceptance include novel prospective pilot studies (phase 1 and 2); randomized phase 2 and 3 studies; secondary analyses from prospective studies; and health sciences research, especially research that covers cost effectiveness and comparative effectiveness, quality assurance/quality of care, and meta-analyses/systematic reviews that may influence future directions.

Our lower priority manuscripts include studies with a large-sized population treated in a consistent manner (i.e., the study will be one of the largest series in the medical literature, potentially an instructional "classic"); retrospective, hypothesis-generating studies with truly novel findings and appropriate methodology quality and innovation of methods (i.e., the study introduces some new means of analysis not previously available or newly applied); manuscripts that provide new insights into the natural history of disease or patterns of failure; and manuscripts that cover a current, controversial area in which the impact of findings has the high potential to solicit a related high-profile editorial or counterpoint piece.

Authors must register with the Red Journal’s electronic manuscript system. Those who have previously reviewed or submitted a manuscript for the IJROBP may already be registered. Once the submission files are uploaded, the system automatically generates an electronic PDF proof used for reviewing. All correspondence, including editor decisions and requests for revisions, is conducted by e-mail through redjournal@astro.org

**Article Types and Guidelines**

*Scientific Articles*

Manuscript ≤3500 words, tables and figures ≤6, references ≤50

Required Elements:
Title page Summary ≤75 words Abstract ≤300 words Blinded manuscript References Figure captions if figures are present Uniform disclosure forms (1 for each author) Original laboratory and clinical investigations related to radiation oncology, radiation biology, and medical physics. Submissions are thoroughly reviewed for scientific originality, significance, relevance, and priority, and the topics must be of broad interest to the journal’s readers. The Red Journal only accepts high-priority manuscripts that report cutting-edge science and that promise to have a strong impact on clinical practice.

*Scientific Letters*

Manuscript ≤1000 words, tables and figures ≤6, references ≤20

Required Elements:
Title page Summary ≤75 words Abstract ≤300 words Blinded manuscript References Figure captions if figures are present Uniform disclosure forms (1 for each author) Like Scientific Articles, Scientific Letters focus on original laboratory and clinical investigations. The difference is that Scientific Letters are either more preliminary in nature or report a study that is of insufficient size to justify a full Scientific Article yet still has important implications for our field and its practice. that do not have the breadth to be a full-length scientific article.
Critical Reviews
Manuscript ≤6000 words, tables and figures ≤

Required Elements:
Title page Summary ≤75 words Abstract ≤300 words Blinded manuscript References Figure captions if figures are present Uniform disclosure forms (1 for each author) Invited contributions from experts in the field exploring interesting topics.

Short Communications
Editorials

Manuscript ≤1500 words, tables and figures ≤6, references≤10

Required Elements:
Title page Manuscript References Figure captions if figures are present Uniform disclosure forms (1 for each author) Brief commentary, analysis, or opinion pieces about a published article or other topic of special interest.

Brief Opinions

Manuscript ≤500 words, tables and figures ≤1

Required Elements:
Title page Blinded manuscript References Figure captions if figures are present Uniform disclosure forms (1 for each author) Opinion on scientific, educational, or policy issues.

Brief Opinions

Manuscript ≤500 words, tables and figures ≤1

Required Elements:
Title page Blinded manuscript References Figure captions if figures are present Uniform disclosure forms (1 for each author) Opinion on scientific, educational, or policy issues.

Comments

Manuscript ≤400 words, tables and figures ≤1, references≤10

Required Elements:
Title page Manuscript References Figure captions if figures are present Uniform disclosure forms (1 for each author) Comments are letters to the editor that remark on work published in the Red Journal and participate in discussion with the authors. Authors of the original work will usually be invited to respond to these comments before publication.

Gray Zone
Cases

Manuscript ≤250 words, tables and figures ≤2, references ≤2

Required Elements:
Title page Blinded (?) manuscript References Figure captions if figures are present Uniform disclosure forms (1 for each author) The goal of this series is to initiate discussion about controversial but instructive clinical scenarios. These are typically short vignettes explaining a clinical problem, ideally presenting a correlated figure, and asking 1-4 questions to a set of invited experts. A case may be submitted by 1 or 2 authors only. Up to 5 experts may be suggested as possible respondents. Please be aware that accepted cases may be edited prior to publication to clarify the subject matter or highlight aspects of interest.

Expert Opinions (Invited)

Manuscript ≤250 words, tables and figures ≤2, references ≤2

Required Elements:
Title page Blinded manuscript References Figure captions if figures are present Uniform disclosure forms (1 for each author) In these short articles, experts in certain areas offer their answers to case questions submitted to the Gray Zone. These may be written in bullet-point or paragraph format. Answers to the questions from the case should be specific as possible. Expert opinion submissions are limited to 1 or 2 authors only. Although these are invited articles, the editors will decline to publish answers that are overly similar to other answers or not in line with the journal's policies.
Misellaneous
Around the Globe

Manuscript ≤3500 words, tables and figures ≤6, references ≤50

Required Elements:
Title page Summary ≤75 words Abstract ≤300 words Blinded manuscript References Figure captions if figures are present Uniform disclosure forms (1 for each author) These articles are usually, but not always, commissioned by the Editor-in-Chief. They describe the nature of health care in an individual nation and the unique and distinguishing influence of local culture, training, and economics on the practice of radiation oncology.

Cover Images

Manuscript ≤400 words(200 about the work, 200 about the artist)

Required Elements:
Title page Manuscript Image References Uniform disclosure forms (1 for each author) The Red Journal welcomes interesting images and original artwork by people within the radiation oncology community.

Errata

Manuscript ≤200 words, tables and figures ≤1, references ≤5

Required Elements:
Title page Manuscript References Figure captions if figures are present Uniform disclosure forms (1 for each author)

Imaging the Past

Manuscript ≤600 words (400 about the history behind the image, 200 about the artist)

Required Elements:
Title page Manuscript Image References Uniform disclosure forms (1 for each author) The Red Journal welcomes interesting historic images from over a century of radiation oncology.

Obituaries

Manuscript ≤1500 words, tables and figures ≤1, references ≤10

Required Elements:
Title page Manuscript References Figure captions if figures are present Uniform disclosure forms (1 for each author) A biographical and research contribution retrospective may be solicited by the Editor-in-Chief; however, outside submissions are welcome, preferably with photographs. The Editor-in-Chief, as well as the Red Journal Senior Editors, will determine acceptability of these submissions, as they will not be sent out for review.

BEFORE YOU BEGIN

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

The Red Journal maintains a zero-tolerance policy when addressing allegations of plagiarism, duplicate publication (self-publication), data falsification, and scientific misconduct. Articles will be retracted if ethics violations are substantiated. Plagiarism is defined by the World Association for Medical Editors (WAME) as the "use of others' published and unpublished ideas or words (or other intellectual property) without attribution or permission, and presenting them as new and original rather than derived from an existing source." The Red Journal participates in the CrossCheck/iThenticate program to investigate incidents of possible plagiarism.
**Studies in humans and animals**

If the work 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. The manuscript should be in line with the Recommendations for the Conduct, Reporting, Editing and Publication of Scholarly Work in Medical Journals and aim for the inclusion of representative human populations (sex, age and ethnicity) as per those recommendations. The terms sex and gender should be used correctly.

Authors 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.

All animal experiments should comply with the ARRIVE guidelines and should be carried out in accordance with the U.K. Animals (Scientific Procedures) Act, 1986 and associated guidelines, EU Directive 2010/63/EU for animal experiments, or the National Institutes of Health guide for the care and use of Laboratory animals (NIH Publications No. 8023, revised 1978) and the authors should clearly indicate in the manuscript that such guidelines have been followed. The sex of animals must be indicated, and where appropriate, the influence (or association) of sex on the results of the study.

**Studies Involving Biomarkers**

The Red Journal requires that authors reporting on biomarker studies must adhere to REMARK criteria as listed in their guidelines. Reports that are predictive of therapeutic outcome or the natural history of disease are desired. Highest priority will be given to articles that are likely to have direct clinical applications and are definitive based on size of cohort, methodological approach, statistical analysis, multivariate analysis, reproducibility, and patient follow-up. Biomarker studies of interest to the Red Journal include or are based on and accompanied by supporting mechanistic biological data; if prospective, are definitive in size and statistical power; if retrospective, include a validation study; are predictive and estimate response or survival in advance of therapy and have potential application in clinical practice; contain thorough specimen collection data (see REMARK), assay validation, and statistical rigor; and describe a unique cohort with results that directly impact clinical practice. (For rare cancer types, it is recognized that small cohorts will be analyzed.) Reference link: http://www.ncbi.nlm.nih.gov/pubmed/16106022

**Guidelines for reporting preclinical research**

The National Institutes of Health (NIH) held a workshop in June 2014 with the Nature Publishing Group and Science on the issue of reproducibility and rigor of research findings, with journal editors representing over 30 basic/preclinical science journals in which NIH-funded investigators have most often published. The workshop focused on identifying the common opportunities in the scientific publishing arena to enhance rigor and further support research that is reproducible, robust, and transparent. The journal editors came to consensus on a set of principles to facilitate these goals. The Red Journal editorial board have chosen to uphold the high standards for preclinical research reporting established by the workshop, and we attach the summarized recommendations here. Please pay particular attention to these before submission.

**Conflict of Interest**

All authors are requested to disclose any actual or potential conflict of interest including any financial, personal, or other relationships with other people or organizations within three years of beginning the submitted work that could inappropriately influence, or be perceived to influence, their work. See also https://www.elsevier.com/conflictofinterest. Further information and an example of a Conflict of Interest form can be found at: http://service.elsevier.com/app/answers/detail/a_id/286/supporthub/publishing. IJROBP adheres to the policy on conflict of interest promulgated by the International Committee of Medical Journal Editors (ICMJE), which states, in part, that "to prevent ambiguity, authors must state explicitly whether potential conflicts do or do not exist." (See Conflict of Interest Notification.) All authors are required to include an ICMJE form with submission, available for free download at http://www.icmje.org/. Authors also must state their disclosures on the title page of the manuscript. If there are not disclosures, authors must say, "Conflict of interest: none."

**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').

Contributors
Each author is required to declare his or her individual contribution to the article: all authors must have materially participated in the research and/or article preparation, so roles for all authors should be described. The statement that all authors have approved the final article should be true and included in the disclosure.

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.

Statistical Analyses
In addition to the corresponding author, the name of the author(s) responsible for any statistical analyses and who may be contacted in case of questions should be specified.

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.

Registration of clinical trials
Registration in a public trials registry is a condition for publication of clinical trials in this journal in accordance with International Committee of Medical Journal Editors recommendations. Trials must register at or before the onset of patient enrolment. The clinical trial registration number should be included at the end of the abstract of the article. A clinical trial is defined as any research study that prospectively assigns human participants or groups of humans to one or more health-related interventions to evaluate the effects of health outcomes. Health-related interventions include any intervention used to modify a biomedical or health-related outcome (for example drugs, surgical procedures, devices, behavioural treatments, dietary interventions, and process-of-care changes). Health outcomes include any biomedical or health-related measures obtained in patients or participants, including pharmacokinetic measures and adverse events. Purely observational studies (those in which the assignment of the medical intervention is not at the discretion of the investigator) will not require registration.
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.

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.

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.

Open Access
This journal does not ordinarily have publication charges; however, authors can now opt to make their articles available to all (including non-subscribers) via the ScienceDirect platform, for which a fee of US $2500 applies (for further information on open access see https://www.elsevier.com/openaccessoptions). Please note that you can only make this choice after receiving notification that your article has been accepted for publication, to avoid any perception of conflict of interest. The fee excludes taxes and other potential costs 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 open access form that is emailed to them once the manuscript is received by Elsevier. Whatever access option you choose, you retain many rights as an author. More information can be found here: https://www.elsevier.com/copyright.

Your publication choice will have no effect on the peer review process or acceptance of submitted articles.

Articles published under the OA option will be subject to the following user license:

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.
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 WebShop.

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.

Submission
Our online submission system guides you stepwise through the process of entering your article details and uploading your files. The system converts your article files to a single PDF file used in the peer-review process. Editable files (e.g., Word) are required to typeset your article for final publication. All correspondence, including notification of the Editor's decision and requests for revision, is sent by e-mail. Please submit your article via our electronic manuscript system.

PREPARATION
Double Blind Review
The Red Journal uses double-blind review, which means that the identities of the authors are concealed from the reviewers, and vice versa. For more information please refer to https://www.elsevier.com/reviewers/peer-review.

Files for Submission
Our submission system accepts the following files for upload. Note that the title page, summary, blinded manuscript, and table files must be submitted as Word documents. Figure file requirements are detailed in the Artwork section below

Article Structure
Cover Letter
You are welcome to include a letter addressing the Editor-in-Chief to introduce your manuscript or to explain things not conveyed elsewhere in the submission process.

Title Page (With Author Details):
This should include the title, the short title, authors’ names and affiliations, the name of the author(s) responsible for statistical analyses, a complete address for the corresponding author and author(s) responsible for statistical analyses including telephone and e-mail address, the conflict of interest statement, and the acknowledgments.

Summary
This brief description of the manuscript (=75 words in length) should be included in its own separate file. The summary should be no more than 3 brief sentences in length, and it should simply state the problem, the methodology, and the conclusions. Data is unnecessary

Blinded Manuscript (No Author Details)
The main body of the paper should not include any identifying information, such as the authors’ names or affiliations.

The blinded manuscript should include the following:
Abstract: A brief, structured overview of the research conducted, including its purpose, the methods and materials used, the results, and the conclusions drawn.

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

Methods and Materials: Provide sufficient detail to allow the work to be reproduced. Methods already published should be indicated by a reference; only relevant modifications should be described.

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.

References: List the references in the order in which they appear in the text, making sure each reference cited is provided and vice versa.

Figure Captions: Include a caption for each figure. The caption should consist of a brief title (not on the figure itself) and a description of the illustration. Be sure to explain all symbols and abbreviations used within the figure.

Table Files (Blinded)

Include all of the tables in one Word document with no identifying information.

Number tables consecutively in accordance with their appearance in the text. Footnotes in tables can include definitions of abbreviations, designated footnotes, and table legends, in that order, as needed. Designated footnotes take standard symbols (*, †, ‡, ††, ‡‡, and so on). Place footnotes to tables below the table body. Avoid vertical rules. Be sparing in the use of tables and ensure that the data presented in tables do not duplicate results described elsewhere in the article.

Figure Files (Blinded) Figures should be identified within the figure files themselves, in the file name, and in the description column in EES on upload. Each figure should be uploaded separately and should not contain any identifying information.

Number the illustrations according to their sequence in the text. Use a logical naming convention for your artwork files. Size the illustrations close to the desired dimensions of the printed version. Submit each illustration as a separate file.

Supplementary Material (Blinded)

This material could be in the form of tables, figures, appendices, extraneous methods, data sets, and so on, and identifying author information should be excluded.

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. (A1), Eq. (A2), etc.; in a subsequent appendix, Eq. (B1) and so on. Similarly for tables and figures: Table A1; Fig. A1, etc.

Uniform Disclosure Form Each author is required to complete and include an International Committee of Medical Journal Editors uniform disclosure form with submission, available for free download at http://www.icmje.org/.

Editorial Decisions

Once the peer review process is complete, each manuscript will receive one of the following decisions: Decline: The manuscript was not selected for peer review. Reject: The manuscript was not selected for publication. Many factors contribute to acceptance, including but not limited to the importance
of the research to the field of oncology, the originality of the work, the quality of the study, or
the priority of the work to the Red Journal and its readership. Unacceptable/Major Revision:
A number of issues were raised in peer review that need to be addressed for the manuscript to
be reconsidered. If the author wishes to address the issues, the manuscript must be revised and
resubmitted within two months of the decision. Acceptable/Minor Revision: The editors and
reviewers found the manuscript potentially acceptable for publication provided minor adjustments are
made. Such manuscripts must be revised and resubmitted within one month of the decision. Accept:
The manuscript has been selected for publication. Additional information will be provided regarding
the production process.

Use of Word Processing Software
It is important that the file be saved in the native format of the word processor used. The text
should be in single-column format, and line numbering should be turned off. Keep the layout of the
text as simple as possible. Most formatting codes will be removed and replaced on processing the
article. In particular, do not use the word processor's options to justify text or to hyphenate words.
However, do use bold face, italics, subscripts, superscripts, and so on. When preparing tables, if you
are using a table grid, use only one grid for each individual table and not a grid for each row. If
no grid is used, use tabs, not spaces, to align columns. The electronic text should be prepared in a
way very similar to that of conventional manuscripts (see also the Guide to Publishing with Elsevier:
https://www.elsevier.com/guidepublication). Note that source files of figures, tables and text graphics
will be required whether or not you embed your figures in the text. See also the section on Electronic
artwork. To avoid unnecessary errors you are strongly advised to use the “spell check” and “grammar
check” functions of your word processor.

Article structure
Divide your article into clearly defined sections, listed below. Any subsection may be given a brief
heading. Each heading should appear on its own separate line.

Subsections should be used as much as possible when cross-referencing text: refer to the subsection
by heading as opposed to simply "the text."

Abstract
A brief, structured overview of the research conducted, including its purpose, the methods and
materials used, the results, and the conclusions drawn.

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

Methods and Materials
Provide sufficient detail to allow the work to be reproduced. Methods already published should be
indicated by a reference; only relevant modifications should be described.

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.

References
List the references in the order in which they appear in the text, making sure each reference cited
is provided and vice versa.

Figure Captions
Include a caption for each figure. The caption should consist of a brief title (not on the figure itself)
and a description of the illustration. Be sure to explain all symbols and abbreviations used within
the figure.
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. (A1), Eq. (A2), etc.; in a subsequent appendix, Eq. (B1) and so on. Similarly for tables and figures: Table A1; Fig. A1, 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.

Math formulae
Please submit math equations as editable text and not as images. Present simple formulae in line with normal text where possible and use the solidus (/) instead of a horizontal line for small fractional terms, e.g., X/Y. In principle, variables are to be presented in italics. Powers of e are often more conveniently denoted by exp. Number consecutively any equations that have to be displayed separately from the text (if referred to explicitly in the text).

Embedded math equations
If you are submitting an article prepared with Microsoft Word containing embedded math equations then please read this (related support information).

Footnotes
Footnotes should be used sparingly. Number them consecutively throughout the article, using superscript Arabic numbers. Many word processors build footnotes into the text, and this feature may be used. Should this not be the case, indicate the position of footnotes in the text and present the footnotes themselves separately at the end of the article. Do not include footnotes in the Reference list. Footnotes in tables can include abbreviations, designated footnotes, and table legends, in that order, as needed. Designated footnotes take standard symbols (*, †, ‡, §, ¶, #, **, ††, and so on).

Artwork
Electronic Artwork
General points: 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 printed version. Submit each illustration as a separate file.

A detailed guide on electronic artwork is available on our website: https://www.elsevier.com/artworkinstructions. You are urged to visit this site; some excerpts from the detailed information are given here. 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/halftone (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) regardless of whether or not these illustrations are reproduced in color in the printed version. **For color reproduction in print, you will receive information regarding the costs from Elsevier after receipt of your accepted article.** Please indicate your preference for color: in print or online only. For further information on the preparation of electronic artwork, please see https://www.elsevier.com/artworkinstructions.

**Illustration Services**

The Red Journal offers complimentary illustration services for line drawings and graphs in all accepted articles. During the typesetting of your paper, Elsevier’s production group will redraw and enhance labels and drawings as needed for clarity and consistency. Authors will be able to review these polished figures when they receive the article proofs.

**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**

Number tables consecutively in accordance with their appearance in the text. Footnotes in tables can include definitions of abbreviations, designated footnotes, and table legends, in that order, as needed. Designated footnotes take standard symbols (*, †, ‡, §, ‖, †‖, ‡‖, and so on). Place footnotes to tables below the table body. Avoid vertical rules. Be sparing in the use of tables and ensure that the data presented in tables do not duplicate results described elsewhere in the article.

**References**

**Citations in Text**

Please ensure that every reference cited in the text is also present in the reference list (and vice versa). Unpublished results and personal communications are not recommended in the reference list, but may be mentioned in the text. If these references are included in the reference list they should follow the standard reference style of the journal and should include a substitution of the publication date with either “Unpublished results” or “Personal communication.” Citation of a reference as “in press” implies that the item has been accepted for publication.

**Reference links**

Increased discoverability of research and high quality peer review are ensured by online links to the sources cited. In order to allow us to create links to abstracting and indexing services, such as Scopus, CrossRef and PubMed, please ensure that data provided in the references are correct. Please note that incorrect surnames, journal/book titles, publication year and pagination may prevent link creation. When copying references, please be careful as they may already contain errors. Use of the DOI is highly encouraged.

A DOI is guaranteed never to change, so you can use it as a permanent link to any electronic article. An example of a citation using DOI for an article not yet in an issue is: VanDecar J.C., Russo R.M., James D.E., Ambeh W.B., Franke M. (2003). Aseismic continuation of the Lesser Antilles slab beneath northeastern Venezuela. Journal of Geophysical Research, https://doi.org/10.1029/2001JB000884. Please note the format of such citations should be in the same style as all other references in the paper.

**Web references**

As a minimum, the full URL should be given and the date when the reference was last accessed. Any further information, if known (DOI, author names, dates, reference to a source publication, etc.), should also be given. Web references can be listed separately (e.g., after the reference list) under a different heading if desired, or can be included in the reference list.
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.

References in a special issue
Please ensure that the words 'this issue' are added to any references in the list (and any citations in the text) to other articles in the same Special Issue.

Reference style

Journal abbreviations source
Journal names should be abbreviated according to the List of Title Word Abbreviations.

Video
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 strongly encouraged to include links to these within the body of the article. This can be done in the same way as a figure 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. In order to ensure that your video or animation material is directly usable, please provide the file in one of our recommended file formats with a preferred maximum size of 150 MB per file, 1 GB in total. Video and animation files supplied will be published online in the electronic version of your article in Elsevier Web products, including ScienceDirect. Please supply 'stills' 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. 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 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.

Submission Checklist
The following list will be useful during the final checking of an article prior to sending it to the journal for review. Please consult this Guide for Authors for further details of any item.

Ensure that the following items are present:
One author has been designated as the corresponding author with contact details:
- E-mail address
- Full postal address
- Phone number

All necessary files have been uploaded, and contain:
- Keywords
- All figure captions
- All tables (including title, description, footnotes)

Further considerations:
- Manuscript has been checked for spelling and grammatical errors
- 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 Internet)

Printed version of figures (if applicable) in color or black-and-white
- Indicate clearly whether or not color or black-and-white in print is required.

For any further information please visit our customer support site at http://support.elsevier.com.

AFTER ACCEPTANCE

Proofs
One set of page proofs (as PDF files) will be sent by e-mail to the corresponding author (if we do not have an e-mail address then paper proofs will be sent by post) or, a link will be provided in the e-mail so that authors can download the files themselves. Elsevier now provides authors with PDF proofs which can be annotated; for this you will need to download the free Adobe Reader, version 9 (or higher). Instructions on how to annotate PDF files will accompany the proofs (also given online).

The exact system requirements are given at the Adobe site.
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, for any reason, 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 scan the pages and return via e-mail. 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. We will do everything possible to get your article published quickly and accurately. 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, at no cost, receive a customized Share Link providing 50 days free access to the final published version of the article on ScienceDirect. The Share Link can be used for sharing the article via any communication channel, including email and social media. For an extra charge, paper offprints can be ordered via the offprint order form which is sent once the article is accepted for publication. Both corresponding and co-authors may order offprints at any time via Elsevier's Webshop. Corresponding authors who have published their article gold open access do not receive a Share Link as their final published version of the article is available open access on ScienceDirect and can be shared through the article DOI link.

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