ADVANCES IN RADIATION ONCOLOGY
An official journal of the American Society for Radiation Oncology

DESCRIPTION

Advances in Radiation Oncology is a peer reviewed, wide-ranging open access journal from the American Society for Radiation Oncology (ASTRO). Included in PubMed Central, Advances complements the research in the International Journal of Radiation Oncology • Biology • Physics and Practical Radiation Oncology. The mission of Advances in Radiation Oncology is to provide original clinical research aimed at improving the lives of people living with cancer and other diseases treated with radiation therapy. The purpose of Advances is to provide information for clinicians who use radiation therapy by publishing:

Clinical trial reports and reanalyses. Basic science original reports. Manuscripts examining health services research, comparative and cost effectiveness research, and systematic reviews. Case reports documenting unusual problems and solutions. High quality multi and single institutional series, as well as other novel retrospective hypothesis generating series. Timely critical reviews on important topics in radiation oncology, such as side effects. Articles reporting the natural history of disease and patterns of failure, particularly as they relate to treatment volume delineation. Articles on safety and quality in radiation therapy. Essays on clinical experience. Articles on practice transformation in radiation oncology, in particular: Aspects of health policy that may impact the future practice of radiation oncology. How information technology, such as data analytics and systems innovations, will change radiation oncology practice. Articles on imaging as they relate to radiation therapy treatment.

Advances is a gold open access journal, so authors, readers and patients have free access to all articles. All work published by this journal is thoroughly peer reviewed by the editorial board and expert reviewers in radiation oncology. Authors retain copyright of their articles and reuse is governed under a Creative Commons license so that readers can freely and easily share information. Learn more about the types of articles sought by the editorial team.

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.
ABSTRACTING AND INDEXING

Directory of Open Access Journals (DOAJ)

EDITORIAL BOARD

Editor-in-Chief
Robert C. Miller, MD, MBA, FASTRO, University of Maryland School of Medicine, Baltimore, MD

Senior Editors
Curtiland Deville, Rhode Island Hospital / Warren Alpert Medical, RI
Sharad Goyal, MD, Rutgers Cancer Institute of New Jersey, New Brunswick, NJ
Kathleen M. Hintenlang, PhD, FAAPM, FACR, The Ohio State University, Columbus, OH
Bradford S. Hoppe, Proton Therapy Institute, University of Florida, Jacksonville, FL
Isabel L. Jackson, PhD, University of Maryland School of Medicine, Baltimore, MD
Sinae Kim, Rutgers Cancer Institute of New Jersey, New Brunswick, NJ
William Small Jr., MD, FACRO, FACR, FASTRO, Stritch School of Medicine, Chicago, IL
Chiaojuung Jillian Tsai, MD, PhD, Memorial Sloan-Kettering Cancer Center, New York, NY
Gregory Videtic, MD, Cleveland Clinic, Cleveland, OH
Catheryn Yashar, University of California, San Diego, CA

Advisory Board
W. Robert Lee, MD, MS, Duke University, Durham, NC
Anthony Zietman, MD, Harvard University/Massachusetts General Hospital, Boston, MA

Associate Editors
Mohamed Abazeed, Cleveland Clinic, Cleveland, OH
Safia Ahmed, MD, Mayo Clinic, Rochester, MN
Jonathan Ashman, MD, Mayo Clinic, Phoenix, AZ
Edouard Azzam, PhD, Rutgers New Jersey Medical School, Newark, NJ
Mark Bernard, MD, University of Kentucky, Lexington, KY
Bin Cai, PhD, Washington University, St. Louis, MO
Gene Cardarelli, Rhode Island Hospital, RI
James Caudell, MD, PhD, Moffitt Cancer Center, Tampa, FL
Christina Hunter Chapman, MD, MS, University of Michigan, Ann Arbor, MI
Fumiko Chino, MD, Duke University, Durham, NC
Casey Chollet-Lipscomb, Tennessee Oncology, Nashville, TN
Parima Daroui, MD, PhD, University of California, Irvine, CA
Tedd DeWeese, Mayo Clinic, Scottsdale, AZ
Sonja Dieterich, PhD, UC Davis, Sacramento, CA
Stella Flampouri, University of Florida, Jacksonville, FL
Thomas J. Galloway, MD, Fox Chase Cancer Center, Philadelphia, PA
Oscar Garcia, MPH, Torrance, CA
Laurie Gaspar, FASTRO, FACR, MD, MBA, University of Colorado Denver, Aurora, CO
Carrie Glide-Hurst, PhD, Henry Ford Health System, Detroit, MI
Jerry Jaboin, MD, PhD, Oregon Health and Science University, Portland, OR
Sachin Jhawar, MD, Rutgers University Robert Wood Johnson Medical School, Newark, NJ
Shannon Kahn, MD, Emory Saint Joseph’s Hospital, Atlanta, GA
Tasneem Kaleem, MD, Mayo Clinic, Jacksonville, FL
Namita Khanna, MD, Winship Cancer Institute, Atlanta, GA
Miriam A. Knoll, MD, John Theurer Cancer Center, an HMH-MSKCC partnership, Hackensack, NJ
Anne Koch, Princess Margaret Cancer Centre, Toronto, Canada
Nataniel Lester-Coll, University of Vermont, Burlington, VT
Simon S. Lo, MB, ChB, FACR, University of Washington School of Medicine, Seattle, WA
Stephen Lutz, Blanchard Valley Health Systems, Blanchard, OH
Charles Mayo, MD, University of Michigan Hospitals, Ann Arbor, MI
Shearwood McClelland III, MD, Indiana University, Indianapolis, IN
Sabin Motwani, MD, Renewed Hope Radiation Oncology, Inc., Oxnard, CA
Sameer Nath, MD, University of Colorado School of Medicine, Aurora, CO
Chika Nwachukwu, MD, PhD, Stanford University, Stanford, CA
Zoubir Ouhib, Boca Raton Regional Hospital, Delray Beach, FL
Atmaram Panandiker, Scripps Proton Therapy Center, San Diego, CA
Melva Pinn-Bingham, Vidant Medical Group, Ahoske, NC
Eriq Pollom, MD, Stanford University, Stanford, CA
James Robar, Dalhousie University School of Medicine, Halifax, NS, Canada
GUIDE FOR AUTHORS

INTRODUCTION

Advances in Radiation Oncology is a peer reviewed, wide-ranging open access journal from the American Society for Radiation Oncology (ASTRO). Included in PubMed Central, Advances complements the research in the International Journal of Radiation Oncology, Biology, Physics and Practical Radiation Oncology.

Advances is a gold open access journal, so authors, readers, and patients have free access to all articles. All work published by this journal is thoroughly peer reviewed by the editorial board and expert reviewers in radiation oncology. Authors retain copyright of their articles, and reuse is governed under a Creative Commons license so that readers can freely and easily share information.

How to Submit

Authors must register with Advances’ electronic manuscript system. Those who have previously reviewed or submitted a manuscript for Advances or our sister journal, the International Journal of Radiation Oncology, Biology, Physics, 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 EES or advances@astro.org.

Article Publication Charges

<table>
<thead>
<tr>
<th>Article Type</th>
<th>ASTRO Member Charge</th>
<th>Non-Member Charge</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scientific Article</td>
<td>$1500</td>
<td>$2000</td>
</tr>
<tr>
<td>Critical Review</td>
<td>$1500</td>
<td>$2000</td>
</tr>
<tr>
<td>Case Reports</td>
<td>$750</td>
<td>$1000</td>
</tr>
<tr>
<td>Short Communications</td>
<td>$750</td>
<td>$1000</td>
</tr>
</tbody>
</table>

Article Types

Scientific Articles

Manuscript ≤ 6000 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. Advances only accepts high-priority manuscripts that report cutting-edge science and that promise to have a strong impact on clinical practice.

Research Letter

Manuscript ≤ 2000 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, Research Letters focus on original laboratory and clinical investigations. The difference is that Research Letters are often more preliminary in nature.

Critical Reviews

Manuscript ≤ 6000 words, tables and figures ≤ 10

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.

Teaching Cases

Manuscript ≤ 2000 words, tables and figures ≤ 6, references ≤ 50

Required Elements: Title page Abstract (≤ 300 words) Blinded manuscript References Figure Legends Uniform disclosure forms (1 for each author)
Advances in Radiation Oncology welcomes case reports with high-resolution images, preferably in color, including X rays or scans of characteristic or classic conditions relevant to radiation oncology, for consideration in the Teaching Case section. All identifying information of patients, such as names, dates of birth, dates of service, or patient identification codes must be removed. If the case report or the image includes individually identifiable health information, authors must comply with the applicable privacy laws and obtain a HIPAA-compliant patient authorization form.

**Short Communications**

Brief Opinions  
Manuscript ≤ 2000 words, tables and figures ≤ 6  

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

Brief Opinion pieces are short articles that are commentary, analysis, or opinion pieces about a published article or other topic of special interest.

**Letters to the Editor**  
Manuscript ≤ 400 words, tables and figures ≤ 1  

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

Letters to the editor remark on work published in Advances in Radiation Oncology and participate in discussion with the authors. Authors of the original work will usually be invited to respond to these comments before publication.

**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)  

Authors are encouraged to report errors in their work to correct the literature. Errata are published in the printed journal and linked back to the original manuscript electronically. The Editor-in-Chief makes all decisions on whether errata are published.

**BEFORE YOU BEGIN**

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

Advances 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." Advances 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**

Advances 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 Advances 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. Advances 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. Advances 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**

Submission of an article implies that the work described has not been published previously (except in the form of an abstract or as part of a published lecture or academic thesis or as an electronic preprint, see https://www.elsevier.com/sharingpolicy), 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, without the written consent of the copyright holder.

**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.

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 an 'Exclusive License Agreement' (see more information on this). Permitted third party reuse of 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 is an open access journal: all articles will be immediately and permanently free for everyone to read and download. To provide open access, this journal has an open access fee (also known as an article publishing charge APC) which needs to be paid by the authors or on their behalf (e.g., by their research funder or institution). Permitted third-party (re)use is defined by the following Creative Commons user licenses (see https://www.elsevier.com/openaccesslicenses):

- **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 http://ees.elsevier.com/advancesradonc/.

**PREPARATION**

**Double Blind Review**
Advances in Radiation Oncology 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 sent to 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. For more information on the types of peer review, please visit: https://www.elsevier.com/reviewers/peer-review.

**Files for Submission**

EES 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 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 Advances in Radiation Oncology 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.

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).

**Artwork**

**Color artwork**

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). 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.

**References**

**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.
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.

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 https://service.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 be notified and receive a link to the published version of the open access article on ScienceDirect. This link is in the form of an article DOI link which can be shared via email and social networks. 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. 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.

**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