DESCRIPTION

The American Journal of Ophthalmology is a peer-reviewed, scientific publication that welcomes the submission of original, previously unpublished manuscripts directed to ophthalmologists and visual science specialists describing clinical investigations, clinical observations, and clinically relevant laboratory investigations. Published monthly since 1884, the full text of the American Journal of Ophthalmology and supplementary material are also presented online at www.AJO.com and on ScienceDirect.

The American Journal of Ophthalmology publishes Full-Length Articles, Perspectives, Editorials, Correspondences, Books Reports and Announcements. Brief Reports and Case Reports are no longer published. We recommend submitting Brief Reports and Case Reports to our companion publication, the American Journal of Ophthalmology Case Reports.

Manuscripts are accepted with the understanding that they have not been and will not be published elsewhere substantially in any format, and that there are no ethical problems with the content or data collection. Authors may be requested to produce the data upon which the manuscript is based and to answer expeditiously any questions about the manuscript or its authors. See AJO policies on redundant publication.

AUDIENCE

Ophthalmologists

IMPACT FACTOR

2016: 5.052 © Clarivate Analytics Journal Citation Reports 2017
ABSTRACTING AND INDEXING

AIM
BIOSIS
Biotechnology Abstracts
Current Advances in Cancer Research
Current Contents
Dent. Ind.
Helminthological Abstracts
INIS Atomindex
Laboratory Hazards Bulletin/Chemical Hazards in Industry
Neuroscience Citation Index
Nutrition Abstracts
Protozoological Abstracts
Review of Medical and Veterinary Mycology
Social Sciences Citation Index
Veterinary Bulletin
Chemical Abstracts
Dok. Arbeitsmed.
Kidney
Medical and Surgical Dermatology
Science Citation Index
Current Advances in Ecological Sciences
Risk Abstracts
Biodeterioration Abstracts
Excerpta Medica
Index Veterinarius
Index to Scientific Reviews
MEDLINE®
EMBASE
Scopus

EDITORIAL BOARD

Editor-in-Chief
Richard Parrish II, MD, Miami, FL, USA

Associate Editors
Anne Coleman, MD, PhD, Los Angeles, CA, USA
Janet Davis, MD, Miami, FL, USA
Eve Juliet Higginbotham, SM, MD, Philadelphia, PA, USA
Gary Holland, MD, Los Angeles, CA, USA
Michael Stewart, MD, Jacksonville, FL, USA

Executive Editors
Donald L. Budenz, MD, MPH, Chapel Hill, NC, USA
Sean Donahue, MD, PhD, Nashville, TN, USA
Robert Folberg, MD, Chicago, IL, USA
David Greenfield, MD, Miami, FL, USA
Seenu Hariprasad, MD, Chicago, IL, USA
Andrew Huang, MD, MPH, St. Louis, MO, USA
Anselm Kampik, MD, München, Germany
John H. Kempen, MD, PhD, Philadelphia, PA, USA
Byron L. Lam, MD, Miami, FL, USA
Ian M. MacDonald, MD, Edmonton, AB, Canada
Todd P. Margolis, MD, PhD, San Francisco, CA, USA
Kevin Miller, MD, Los Angeles, CA, USA
Darius M. Moshfeghi, MD, Stanford, CA, USA
Randall J. Olson, MD, Salt Lake City, UT, USA
Julian D. Perry, MD, Cleveland, OH, USA
Ian Rennie, MD, Sheffield, England, UK
Lucia Sobrin, MD, Boston, MA, USA
Elmer Tu, MD, Chicago, IL, USA
Lawrence Tychsen, MD, St. Louis, MO, USA
Gianni Virgili, MD, Florence, Italy

Editorial Board
Sophie J. Bakri, MD, Rochester, MN, USA
David J. Browning, MD, PhD, Charlotte, NC, USA
James Chodosh, MD, Boston, MA, USA
David Coats, MD, Houston, TX, USA
Sharon Fekrat, MD, Durham, NC, USA
Harry W. Flynn Jr, MD, Miami, FL, USA
Alain Gaudric, MD, Paris, France
Christopher Girkin, Birmingham, AL, USA
Nancy M. Holekamp, MD, St Louis, MO, USA
Kyoko Ishida, MD, PhD, Tokyo, Japan
Mark W. Johnson, MD, Ann Arbor, MI, USA
Thomas Kohnen, MD, PhD, FEBQ, Frankfurt am Main, Germany
Shan Lin, MD, San Francisco, CA, USA
Steven L. Mansberger, MD, MPH, Portland, OR, USA
Robert B. Nussenblat, MD, Bethesda, MD, USA
Louis Pasquale, MD, Boston, MA, USA
Pradeep Ramulu, MD, MHS, PhD, Baltimore, MD, USA
Paul Sternberg, Jr., MD, Nashville, TN, USA
J. Timothy Stout, MD, PhD, MBA, Houston, TX, USA
David T. Tse, MD, Miami, FL, USA
Lihteh Wu, MD, San Jose, Costa Rica

Editor Emeritus
T.J. Liesegang, MD, Jacksonville, FL, USA
GUIDE FOR AUTHORS

The American Journal of Ophthalmology (AJO) is a peer-reviewed, scientific publication that welcomes the submission of original, previously unpublished manuscripts directed to ophthalmologists and visual science specialists. The manuscripts describe clinical investigations, clinical observations, and clinically relevant laboratory investigations. Published monthly since 1884, the full text of the AJO and supplementary material are also presented online at AJO.com and on Science Direct.

The AJO publishes Full-Length Articles, Perspectives, Editorials, Correspondence, Book Reports and Announcements. Brief Reports and Case Reports are no longer published. We recommend submitting Brief Reports and Case Reports to our companion publication, the American Journal of Ophthalmology Case Reports.

Manuscripts are accepted with the understanding that they have not been and will not be published elsewhere substantially in any format, and that there are no ethical concerns with the content or data collection. Authors may be requested to produce the data upon which the manuscript is based and to answer expeditiously any questions about the manuscript or its authors. See AJO policies on redundant publication and access to data.

FULL-LENGTH ARTICLES

Full-Length Articles are previously unpublished manuscripts directed to ophthalmologists and visual science specialists. They include clinical investigations, clinical observations, and clinically relevant laboratory investigations.

Full-Length Articles should, in general, not exceed 7 to 8 single-spaced typewritten pages of manuscript text. References, figure captions, and tables are additional pages that should be used judiciously. Supplemental Material may be provided for the AJO website if a manuscript is accepted. Manuscripts should begin each component on a new page in the following order: (1) title page, (2) text, (3) acknowledgments/disclosure, (4) references, (5) figure captions. The following items are uploaded separate from the manuscript file: (1) abstract, (2) tables, (3) figures, (4) permission forms, (5) appendices/supplementary material. Refer to the Checklist when submitting.

RANDOMIZED CONTROLLED TRIALS

Manuscripts reporting randomized controlled trials should adhere to the requirements for Manuscript Preparation. In addition, text (which may be up to 10 single-spaced typewritten pages in length) should contain subheadings and information specified in the Consolidated Standards of Reporting Trials (CONSORT) statement. A flow diagram to illustrate the randomization procedure or procedures and numbers and the AJO http://www.consort-statement.org Consolidated Standards of Reporting Trials (CONSORT) Statement Form must be submitted with the manuscript. Authors may decide whether this form will appear in print or only online as Supplemental Material. These requirements follow suggestions published in the Journal of the American Medical Association (JAMA). (Begg C, Cho M, Eastwood S, et al. Improving the quality of reporting of randomized controlled trials: the CONSORT Statement. JAMA 1996;276:637-639).

PERSPECTIVES

Invitation-only AJO Perspectives are focused opinions regarding the evidence supporting the use of a current technique, procedure, therapy, or clinical approach, tempered by the experience and viewpoints of the authors(s). Perspectives should not be a review article. Perspective preparation should follow the guidelines of a Full-Length Article, including a structured abstract of 250 words or less and Table of Contents statement of 75 words or less. The Perspective should be of appropriate length but should not exceed 9 pages of single-spaced typewritten text, 35 references, and 8 figures or equivalent tables. Authors share the cost of color figure reproduction. Perspectives are subject to the standard peer-review process, which is necessary to meet the policies and standard procedures of the AJO.

EDITORIALS
Editorials provide a forum for interpretive, analytical, or reflective opinions related to manuscripts in the AJO or statements about clinical, scientific, or socioeconomic issues. The invitation-only Editorial should be objective and dispassionate, but is likely to provide alternative points of view and some bias. Editorials should not exceed 1200 words with no more than 15 references. In general, figures and tables should not be used.

Editorials do not have an Abstract.

CORRESPONDENCE

Letters about recent articles published in the AJO are encouraged and should be submitted through the Elsevier Editorial System within 8 weeks of the article’s publication. Correspondence may correct errors, provide support or agreement, or offer different points of view and additional information.

Correspondence submitted should not exceed 500 words of text and six references. One of the references should be the Article in question. The corresponding author should provide the name of the institution, city and country which will be included in the published article.

Figures and tables are generally not accepted. The AJO does not use the Correspondence section for reporting case reports or short clinical research articles. Correspondence is considered for publication by the Editorial Board and is subject to editing. The authors of articles discussed in the correspondence are given an opportunity to reply in an expedited fashion, adhering to the AJO policy on Responsibility of Authors. If authors do not reply to the correspondence within 14 days, this statement may appear in the AJO print issue in association with the correspondence: “The Authors failed to provide a response to the correspondence in a timely manner.” Please provide a complete title page as defined above under Full-Length Article instructions. Financial disclosures should be provided at the end of the correspondence and may be published. (see Acknowledgment section B for information to disclose).

When appropriate, an effort is made before publication to resolve any controversies between correspondents and the authors of an article.

SYSTEMATIC REVIEWS AND META-ANALYSES

The American Journal of Ophthalmology (AJO) is interested in publishing high-quality systematic reviews and meta-analyses. Authors submitting a systematic review to AJO should refer to the article “Preparing a Systematic Review for the American Journal of Ophthalmology: Updated Guidance.” Mandatory for each systematic review submission is inclusion of a completed PRISMA checklist (PRISMA Statement for Reporting Systematic Reviews and Meta-Analyses of Studies That Evaluate Health Care Interventions) to optimize the reporting of the systematic review. When preparing the checklist, the authors should indicate the page and line at which each PRISMA statement requisite has been fulfilled in the manuscript.

A series of recent reporting or methodological tools, including risk of bias tools and the Cochrane Handbook, are strongly suggested as background knowledge in the preparation of the manuscript. These tools were originally designed to be used by systematic reviewers who assess published studies, thus the tools address quality issues which should have been implemented by study authors in the design and protocol phase. Nonetheless, these tools may assist them in preparing a manuscript that discloses strengths and limitations of their study. A further suggested tool is the use of the GRADE framework to help the authors assign an overall quality of the evidence and, finally, to better interpret their results.

The registration of a review protocol on specialized registries, such as PROSPERO (https://www.crd.york.ac.uk/PROSPERO) is highly recommended. A published protocol allows the users of a systematic review to cross-check whether the methods prespecified in the protocols were in fact implemented, or whether there were post-hoc changes as well as the reasons for them. The protocol registration serves to identify selective reporting of results of a systematic review. The protocol registration is expected to have been made in sufficient advance to allow the review conduction, unless the authors label their work as a rapid review and give reasons for this expedited process.
The submission should be accompanied by a cover letter which explains why the review question is important to clinicians or users, including patients and policymakers. This cover letter should also present the expertise of authors' team members with clinical skills as well as that of authors with systematic review methods and statistical expertise.

Items that are not mandatory in the AJO guidance will be considered by the Editors at their discretion, depending on the topic and context, when evaluating the submission of a systematic review to AJO.

**References**


**Process for pre-approval of a Systematic Review and/or Meta-Analysis**

The AJO will only publish systematic reviews and/or meta-analyses which contain all of the above elements, with a particular interest in ensuring that these are free of bias. This includes, but is not limited to, requiring that the protocol and eligibility criteria be pre-defined before the systematic review and/or meta-analysis is conducted. Therefore, the AJO will only review a systematic review and/or meta-analysis that has been pre-approved by the Editorial Board before the systematic review and/or meta-analysis is conducted; the only exception to this are protocols pre-approved by the Cochrane Collaboration. The form with complete instructions for pre-approval may be downloaded [here](http://www.ncbi.nlm.nih.gov/books/NBK62478/).

Potential authors must understand that the pre-approval of a systematic review and/or meta-analysis is not a complete review. The pre-approval request will first be sent for a clinical review to ensure that the clinical question in the introduction section is appropriate and relevant. If so, the pre-approval request will then be sent for a complete review (particularly of the methods) to someone with expertise in systematic reviews and meta-analyses. Both the clinical and methods reviewers may provide feedback, this should not be anticipated.

Authors should be aware that pre-approval is a necessary but not sufficient condition for publication in the AJO, as the actual submission of the systematic review and/or meta-analysis will still be subjected to the AJO peer-review process. To obtain pre-approval, authors should download the above-linked form and fill it out precisely according to instructions. It may then be emailed to the AJO Office at ajo@elsevier.com for initial editorial review. If approved, further instructions will be provided for document submission within the EES system.
ANNOUNCEMENTS

The AJO offers limited opportunities to announce national or international meetings, symposia, or workshops. Other honors or awards may also be appropriate to announce. The Editor-in-Chief makes the final decision about material to include in the Announcements section of the AJO. Announcements are presented in very brief format in the print publication, with more extensive information at www.AJO.com. Announcements should be sent in digital format by e-mail to the AJO at AJO@Elsevier.com.

BOOK REVIEWS

The AJO offers limited opportunity for reviews of ophthalmic books, monographs, or software. Reviews are by invitation only. Publishers or authors are invited to submit requests for their material to be reviewed by writing the AJO at AJO@Elsevier.com.

The Book Review Editor will then forward the material to one or more of the AJO’s reviewers for evaluation. The Editor-in-Chief makes the final decision as to what material will be published. The reviews are presented in very brief format in the print publication, with more extensive information available at www.AJO.com.

OBITUARIES

Obituaries may be offered by readers or requested by the Editor-in-Chief to commemorate the lives of remarkable individuals who are internationally renowned for their contributions to Ophthalmology. The Editor-in-Chief makes the final decision about publishing Obituaries.

Richard K. Parrish, II, MD, Editor-in-Chief
American Journal of Ophthalmology
rparrish@med.miami.edu

For comments and questions, you may contact the Editorial Office of the AJO by email: ajo@elsevier.com.

BEFORE YOU BEGIN

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

Use of animals in biomedical research
If animals are used in the protocol or the study, the manuscript should describe in the Methods section the animal care protocol that was followed, name the institution that sponsored the study, and identify relevant IRB approval. Biomedical research involving animals must conform to generally accepted principles of animal maintenance and care, such as those of the Association for Research in Vision and Ophthalmology (http://www.arvo.org).

Conflict of interest in peer-review process and disclosure
Authors, editors, or reviewers may hold conflicting or competing interests that could result in bias during the peer review process. Although there are many types of bias, financial disclosure requires specific and detailed reporting. The AJO requires that all authors and coauthors report ALL FINANCIAL DISCLOSURES IN MEDICINE, whether or not the authors judge them to be related to the specific manuscript being submitted.

Financial disclosure should include:

The entity: government, foundation, grant, commercial company, academic institution, etc.

Personal Fees: income from honoraria, consulting, lectures, speakers' bureaus, expert testimony, commercial employment, stock or equity interests, or intellectual property rights (royalties, patents, licenses, copyright)
Miscellaneous Forms of Support: drugs, equipment, travel expenses, writing assistance, administrative support, etc.

Authors who have no financial disclosures in medicine should state, "No financial disclosures." The author disclosure information should be submitted in a specific format in the Acknowledgment Section. The disclosures will be available to reviewers during the peer review process and published with an accepted article. The failure of an author, reviewer, or editor to declare all financial interests interferes with the reader's entitlement to know this potential source of bias and will result in a reprimand from the journal when it is discovered.

Reviewers and editors should also declare any conflicts of interest with regard to a manuscript under review. AJO reviewers and editors must recuse themselves if they cannot render fair and objective assessments.

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).

Attesting to authorship contributions
All persons designated as authors should qualify for authorship, and all those who qualify should be listed. Authors must attest that each meets the 4 criteria of authorship defined by the International Committee of Medical Journal Editors during the "Additional Information" step of the manuscript submission process; this attestation will be automatically included in the Acknowledgment Section of the manuscript when published. These criteria require that an author should have participated sufficiently in the work to take public responsibility for appropriate portions of the content as well as take responsibility for the integrity of their coauthors as well. One or more authors should take responsibility for the integrity of the work as a whole, from inception to published article.

The order of authorship on the byline should be a joint decision of the co-authors. Authors should be prepared to explain the order in which authors are listed. The AJO does not permit dual first authors and requests only one corresponding author.

In multicenter trials, the writing group authors should be listed along with the group name (e.g., Smith TT, Jones JJ, on behalf of the Pediatric Amblyopia Study Group). Other group members should be listed in an appendix before the references.

Once a manuscript has been submitted, the order of authorship (including adding or removing authors) should not be changed. Exceptions must be approved by the Editor-in-Chief and the Corresponding Author. The Corresponding Author is responsible for assuring that all the involved authors concur with the change.

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

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

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

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

**Copyright transfer preparation**
After acceptance of a manuscript by the Editorial Board, the publisher, Elsevier, will send to the Corresponding author the forms to complete the transfer of copyright to Elsevier. Do not send copyright transfer forms to the AJO office. Elsevier conforms to the National Institutes of Health and other governmental open access policies.

**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. After acceptance, open access papers will be published under a noncommercial license. For authors requiring a commercial CC BY license, you can apply after your manuscript is accepted for publication.

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

**Subscription**
- Articles are made available to subscribers as well as developing countries and patient groups through our universal access programs.
- No open access publication fee payable by authors.

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

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

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

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

The gold open access publication fee for this journal is **USD 3399**, excluding taxes. Learn more about Elsevier's pricing policy: [https://www.elsevier.com/openaccesspricing](https://www.elsevier.com/openaccesspricing).
Green open access
Authors can share their research in a variety of different ways and Elsevier has a number of green open access options available. We recommend authors see our green open access page for further information. Authors can also self-archive their manuscripts immediately and enable public access from their institution’s repository after an embargo period. This is the version that has been accepted for publication and which typically includes author-incorporated changes suggested during submission, peer review and in editor-author communications. Embargo period: For subscription articles, an appropriate amount of time is needed for journals to deliver value to subscribing customers before an article becomes freely available to the public. This is the embargo period and it begins from the date the article is formally published online in its final and fully citable form. Find out more.

This journal has an embargo period of 12 months.

Elsevier Researcher Academy
Researcher Academy is a free e-learning platform designed to support early and mid-career researchers throughout their research journey. The "Learn" environment at Researcher Academy offers several interactive modules, webinars, downloadable guides and resources to guide you through the process of writing for research and going through peer review. Feel free to use these free resources to improve your submission and navigate the publication process with ease.

Language (usage and editing services)
Please write your text in good American English. 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 http://webshop.elsevier.com/languageediting/ or visit our customer support site http://support.elsevier.com for more information.

Informed consent
When human subjects participate in studies or reports, the authors must state in the Methods section that the study and data accumulation were carried out with approval from the appropriate Institutional Review Board (IRB), Informed Consent for the research was obtained from the patients or subjects, and, for US authors, the study is in accordance with HIPAA regulations. Alternatively, the authors can state that the IRB (name the IRB) waived the need for IRB approval; the authors, however, cannot make the decision that IRB approval was not needed. If waived, the authors must confirm that the study and data accumulation were in conformity with all country, federal, or state laws, informed consent was obtained, and the study was in adherence to the tenets of the Declaration of Helsinki. Do not use patients’ names, initials, dates, or hospital numbers, especially in illustrative material. Informed Consent for research requires that the subjects agreed to participate after explanation of the nature and possible consequences of the study. This Informed Consent for Research is distinct from the simple informed consent to perform a procedure or test on a patient.

Online manuscript submission
The AJO accepts online submission of manuscripts through Elsevier Editorial System. When a manuscript is submitted online, authors, selected reviewers, editors, and the AJO office can track the progression of the manuscript until a final disposition is made.

Elsevier Editorial System can be accessed at ees.elsevier.com/ajo/. On the Elsevier Editorial System front page, click the "Register" link to input your demographics and set up your account. After your registration is complete, a notice will be sent to your e-mail address indicating your user ID and your password. Use this information to log in to Elsevier Editorial System as an author by choosing the "Login" link on the toolbar and select "Submit New Manuscript." Follow the prompts to complete your submission according to the specifications below. Contact the Editorial Office if you have any problems or questions. You may change your password to something more familiar to you, or update any personal information including your e-mail address, at any time by clicking on the Change Details link icon at the top of your screen. Abstract, Manuscript, Tables, and Figures must be prepared as SEPARATE, individual files; the system requires that each of these files be uploaded separately and blocks incomplete manuscripts from being submitted to the office. Although Elsevier Editorial System presently accepts many file formats for the peer-review process, authors should use only those formats that are acceptable to the publisher, Elsevier, in order to ensure proper publication in the print issues. Please refer to the following individual sections for specific file requirements for text, tables, and figures. Each uploaded file must have a corresponding file extension (such as .doc, .tif). Adherence to the guidelines is essential, and faulty manuscripts will be returned to authors for correction before peer-review or simply rejected.
If the AJO office uploads a manuscript on behalf of an author, the Corresponding Author will receive an e-mail receipt of the manuscript and related notices regarding the manuscript. Once a manuscript has been uploaded into the system, status updates are available by logging into Corresponding Author's account.

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

Referees
Please submit the names and institutional e-mail addresses of several potential referees. For more details, visit our Support site. Note that the editor retains the sole right to decide whether or not the suggested reviewers are used.

Manuscript review and selection
Full-Length Articles, Editorials, and Perspectives are peer-reviewed. Only finely polished, publication ready manuscripts should be submitted to the AJO or risk possible rejection prior to peer review. In view of the large and increasing number of manuscripts submitted, the AJO now performs a triage of all submitted manuscripts to determine if they are appropriate and would likely be accepted following peer review. About 50% of manuscripts will be returned to authors because the content is not competitive with current manuscripts due to insufficient new material, repetitive material, poor design or poor writing. This is consistent with the pattern of major medical journals.

After an initial review of the manuscript, the Editor-in-Chief determines whether the manuscript is appropriate for the AJO and selects an Executive Editor from the Editorial Board who is an expert in the field and who will be responsible for guiding the manuscript through the review process. The Executive Editor then selects several outside reviewers to ensure that at least two reviews are completed. The AJO does not reveal the identity of its reviewers.

Once these reviews are completed, the Executive Editor critiques and synthesizes the comments of the reviewers, and provides additional Executive Editor's comments to the Editor-in-Chief. The Editor-in-Chief reviews the manuscript together with all comments and makes the publication decision, which is then e-mailed to the Corresponding Author, along with consolidated comments of the reviewers of the manuscript. Because of space constraints in the printed version, only about 20% of submitted Full-Length Articles are accepted. The AJO might not provide complete review of each manuscript but rather enough of a review to determine if acceptable for the AJO.

General manuscript preparation guidelines

COVER LETTER

Manuscripts must be accompanied by a cover letter that should include information on prior or duplicate publication or submission, as well as the originality of the manuscript and any other information that the authors want to convey to the Editor-in-Chief. The authors should indicate whether the manuscript was previously rejected or evaluated in any form by another journal, and they should describe specifically how they have improved the manuscript.

The principal investigator or the Corresponding Author of a manuscript containing original data must confirm in the cover letter that he or she "had full access to all the data in the study and takes responsibility for the integrity of the data and the accuracy of the data analysis as well as the decision to submit for publication."

Cover letters for revised manuscripts must answer, point by point, any concerns noted by reviewers.

MANUSCRIPTS (including title page, abstract, text, references, figure captions, and tables) should be single-spaced on 21.5 x 28 cm (8.5 x 11 in.) pages. One-inch margins should be used on all sides. The right margin should be ragged, not justified.

STYLE

Follow guidelines of style, terminology, measurement, and quantitation as set forth in the American Medical Association Manual of Style (10th ed. Oxford University Press, NY, 2007). Arial font size 12 is recommended, as this font causes the fewest problems during conversion to PDF.

REPORTING VISUAL ACUITY
The AJO encourages authors to report the visual acuity in the manuscript using the same nomenclature that was used in the study, provided the data was recorded in the Snellen system (using either meters or feet), decimal fraction or logMAR systems. The same visual acuity nomenclature should be presented throughout the manuscript. A Table of Equivalent Visual Acuity Measurements will be provided for the reader in each print issue of AJO. Although standardized reporting of visual acuity would be a better option, it has not yet been accepted by all research groups. The Snellen equivalent in feet should be noted in parentheses next to each visual acuity that is not in the Snellen format, in order to aid readers in the United States.

**STATISTICS**

The AJO requests authors to ensure statistical expertise for a study that has statistical content. Statistical methods must be identified in the manuscript whenever they are used. Software programs used for statistical analyses should be identified so reviewers or readers may verify calculations. When P values are used, the actual P value (for example, $P = .032$) is preferred to an inequality (for example, $P < .05$). Reporting basic summary statistics, such as the mean and the standard error, as well as confidence limits, also helps the reader understand the conclusions of the study. Models such as analysis of variance, covariance, multiple regressions, and the like must be specified. A sample size calculation and power analysis should be included when appropriate. Authors should state the levels for alpha and beta errors and the clinically significant difference that was used to determine the power calculation. Numeric equivalents should precede all percentages, as in the following examples: "Of 80 patients, 20 (25%) had retinopathy" or "20 (25%) of 80 patients had retinopathy."

**Peer review**

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

**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. 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. 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: http://www.elsevier.com/guidepublication). 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**

**Title page**

The manuscript’s title should be as brief as possible and no longer than 135 characters and spaces. The title page must include: The title of the article (informative and concise; avoid questions, declarative sentences, and abbreviations). The full name of each author and complete address of institutional affiliations. Academic degrees should not be provided. The name, address, phone number, fax number, and e-mail address of the Corresponding Author.

Once a manuscript has been submitted, the order and number of authors should not change.

Because the Journal requires that all authors meet and attest to the ICMJE standards of authorship during the submission process, it is understood that authors have contributed substantially to the design, study, and writing of the paper, at times perhaps equally. Authors should choose amongst themselves which order they will appear in the article listing without "dual" or shared positions, i.e. first author, corresponding author, etc. If further recognition for author contribution is desired, authors may choose to upload their protocol as part of the online-only supplementary material and refer to this document in their manuscript. Any other statement regarding equal contribution is not according to current Journal style practices.
The Corresponding Author will be responsible for all questions about the manuscript and for reprint requests. Only one author can be designated as Corresponding Author; the Corresponding Author need not be the first author on the manuscript. Select a Corresponding Author who will be located at the same address for an extended period in order to respond to post-publication correspondence. Corresponding authors that do not reply in an expeditious manner to all correspondence from AJO both before and after acceptance may be restricted from further submissions to the AJO.

Number the pages of the manuscript consecutively, beginning with the Title Page as page 1. For Full-Length Articles, the text should, in general, not exceed 8 single-spaced typewritten pages. Please use a spell-checker in addition to careful editing of the manuscript before submission. Authors should not add line numbering as this is automatically added by Elsevier Editorial System.

Organize and prepare the manuscript to include the following sections:

**Introduction:** Describe the purpose of the study, the research rationale, and any major hypothesis that was tested. The Introduction should present the hypothesis and limit references to only the most pertinent previous publications.

**Methods:** The first paragraph of the Methods section should describe all the specifics of the study design (see glossary of study designs below) and information about human informed consent or animal care. State whether the IRB approval was prospective (before the study began) or retrospective and indicate precisely what the IRB approved. Name of IRB that approved the research or provide a statement and rationale as to why the named IRB waived approval. Indicate proper informed consent for the treatment and/or participation in the research, and confirm compliance with HIPAA, Clinical Trials registration (number and location of the registration), Investigational New Drug (IND) or Investigational Device Exemption (IDE) (provide number), and Institutional Animal Care and Use Committee guidelines. If the IRB waived the need for approval of this research or study, then indicate adherence to the Declaration of Helsinki and all federal or state laws in your country. Authors cannot make the decision as to whether IRB approval is needed; your IRB should make that decision and provide a waiver if they feel it does not require IRB approval.

Methods section should also include setting (multicenter, institutional, or clinical practice); patients and study population (including patient numbers, selection procedures, inclusion/exclusion criteria, randomization, and masking); intervention or observation procedure; and main outcome measure(s). Previously published procedures should be identified by reference only unless they are uncommon to AJO readers. Provide sufficient detail to enable others to duplicate the research. Use standard chemical or nonproprietary pharmaceutical nomenclature. Identify in parentheses specific sources by brand name, company, city, state, and/or country.

**Results:** Describe outcomes and measurements in an objective sequence with a minimum of discussion. Tables and figures should be cited in text in sequence. Data should be accompanied by confidence intervals (usually at the 95% interval) and exact $P$ values or other indications of statistical significance.

**Discussion:** Elucidate (but do not reiterate) the results, identify any statistically or clinically significant limitations or qualifications of the study, provide responses to other and contradictory literature, and state the conclusions that are directly supported by the data. Excessive generalization and undue speculation should be avoided. Give equal emphasis to positive and negative findings, state whether and what additional study is required, and conclude with the clinical applications or implications supported by the study. The conclusions should be incorporated into the end of the discussion.

Authors should avoid statements of economic benefits and costs unless their manuscript includes economic data and analyses. Avoid claiming priority (first publication) of the content unless you provide the literature search protocol used. Do not allude to work that has not been completed.

ackn ACKNOWLEDGMENTS/DISCLOSURE:
The AJO requires disclosure information from the authors in a specific format. The following information should appear, in the order indicated (labeled a through c), in the Acknowledgement section of the manuscript just prior to the References. The information will appear in the published article, along with the automatically-added contributions attestation made during the submission process. This information should not appear on the Title page of the manuscript.

a. Funding/Support: Any government and non-government support (e.g. commercial companies, foundations, etc.) must be acknowledged. Provide location of any grantors or commercial companies and any grant numbers.

b. Financial Disclosures: The disclosure statement for the manuscript should comprise ALL FINANCIAL DISCLOSURES IN MEDICINE BY EVERY AUTHOR whether or not you judge them to be related to the submitted manuscript. This includes all personal fees such as income from honoraria, consulting, lectures, speakers' bureaus, expert testimony, commercial employment, stock or equity interests, or intellectual property rights (royalties, patents, licenses, copyright) as well as miscellaneous support such as drugs, equipment, travel expenses, writing assistance, administrative support, etc. Provide location of any commercial companies or grants mentioned. If you have no financial disclosures related or unrelated to this manuscript, you should state, "No financial disclosures."

c. Other Acknowledgments such as Statisticians, Medical Writers, Expert contributions. Provide location or institution of each person mentioned. Because readers may infer endorsement of the data and conclusions, all persons must give permission to be acknowledged and this must be confirmed in the cover letter.

The AJO is no longer using the ICMJE Disclosure form.

For further clarification, see "Conflict of interest in peer-review process and disclosure" in Author Information at AJO.com and the following open access articles:


APPENDIX
Appendixes should be used sparingly, but they are appropriate to provide survey forms, list the members of a study group, or complex formulas and information. Please note that Supplemental Material for the AJO website may be provided for Full-Length Articles and Perspectives at the time of acceptance.

Abstract
Provide a structured abstract of 250 words or less with the following five headings:

Purpose: State the principal question or objective of the study and the major hypothesis tested, if any.

Design: Describe the study as retrospective or prospective. Identify the study design. Interventional studies should be listed as a randomized clinical trial, non-randomized clinical trial, or interventional case series (three or more cases). Observational studies should be listed as a case control study, cross-sectional study, cohort study, or observational case series (three or more cases). An experimental study should be listed as an animal study or laboratory investigation. A perspective, meta-analysis, or auto-designation study should be indicated, as appropriate.

Methods: Use the following subheadings under Methods as appropriate for your study or, alternatively, provide the same information in prose format:
Setting: Such as multicenter, institutional, or clinical practice. Patient or Study Population: Including patient numbers (one or both eyes), selection procedures, inclusion/exclusion criteria, randomization procedure, and masking. Intervention or Observation Procedure(s) Main Outcome Measure(s)

Results: Describe the outcome and measurements, when applicable. Results should be accompanied by data with confidence intervals and the exact level of statistical significance. Results should also identify any significant limitations or qualifications of the data.
**Conclusions:** State the conclusions directly supported by the data and describe the clinical applications. Avoid over-generalizations. Give equal emphasis to positive and negative findings, and note specific additional study required.

**Highlights**
Highlights are a short collection of bullet points that convey the core findings of the article. Highlights are optional and should be submitted in a separate editable file in the online submission system. Please use ‘Highlights’ in the file name and include 3 to 5 bullet points (maximum 85 characters, including spaces, per bullet point). You can view example Highlights on our information site.

**Abbreviations**
Restrict abbreviations to those that are widely used and understood by all ophthalmologists. Avoid abbreviations that have meaning only within the context of the specific manuscript. Introduce each abbreviation in parentheses after the first use of the full term in each portion of the submission including in the abstract, in the text, in the figures captions, and in the tables. Système International units and abbreviations of standard measurements, such as mm Hg, cm, and mL, are used without initial expansion. Avoid abbreviations in any titles, headings, or subheadings.

**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).

**Artwork**
Digital figures must be uploaded individually into the Elsevier Editorial System according to publication-ready requirements. Figures CANNOT be embedded in the manuscript text file. Photographic figures should not be in Word, nor are PDFs, Excel files, or PowerPoint slides permitted for any figure due to their low native resolution.

a) peer **AJO Requirements for Publication Quality Digital Figures:**
Digital figures should be of high quality and in one of the following file formats only: TIFF (with LZW compression), JPEG (with "maximum quality" setting), or EPS. Line art and graphs only may be submitted in Word, if they were created in Microsoft Word or Excel.

Figures must be at least 3.5 inches wide, at least 300 dpi resolution, and a minimum of 1050 pixels wide. NIH guidelines for online figures suggest a minimum of 1500 pixels wide. Individual figure files should not be larger than 12 MB.
For multi-part figures, please ensure that the composite is clear, readable, and of sufficient resolution. Each part should be referred to by location (i.e., 1 Top Right, 2 Middle Left, etc.) rather than by letter. Do not put “part” labels on the face of figures. If the author desires to submit each part separately, an additional composite may be submitted to indicate placement.

Text on figures should be avoided unless absolutely necessary. Any text, arrows, and other symbols should be large enough to remain legible after reduction. All symbols or abbreviations that appear on the figures should be defined in the caption. Arial font is suggested for any figure text. Publication can be delayed by poor-quality figures.

b) other Other General Figure Guidelines

Figures should be cropped to show only significant details. When a patient is identifiable in a photograph, the author(s) must supply the AJO with evidence of the patient’s permission to publish the photograph. (The permission must be submitted to the AJO as a scanned document through Elsevier Editorial System.)

The Editor-in-Chief reserves the right to withdraw a previously accepted manuscript if the author cannot produce high-quality figures in a timely manner to accompany the text.

Color Artwork

The authors should use color figures only when necessary. If a manuscript has been submitted and reviewed with color photos, it will be published in color unless the Editor-in-Chief elects otherwise after communication with the Corresponding Author. The Publisher requires authors to pay for color art that appears in their article. The cost for the first color figure is $650, and the cost for every subsequent color figure is $100. Authors will be billed for color figure(s) after the article has been published.

Illustration services

Elsevier's WebShop offers Illustration Services to authors preparing to submit a manuscript but concerned about the quality of the images accompanying their article. Elsevier's expert illustrators can produce scientific, technical and medical-style images, as well as a full range of charts, tables and graphs. Image 'polishing' is also available, where our illustrators take your image(s) and improve them to a professional standard. Please visit the website to find out more.

Figure captions

All captions should be listed together on a Captions page after the references. Each caption should be numbered consecutively in the text, have a brief title, and contain a complete description of each figure. The brief title should specify the disease process or study patients that are in the manuscript. The title and caption should contain enough information so that the figure can be understood independently of the manuscript text and "stand alone". Use complete sentences for the captions except in the title, and avoid abbreviations. Single figures should not be numbered.

When multiple-panel figures are submitted, refer to each panel from Top left to Top right, then Bottom left to Bottom right. Do not use lettering (e.g., A, B, C, etc) on the figures.

Example. FIGURE 1. Patient 3 with staphylococcal corneal abscess. (Top left) The patient's cornea is shown preoperatively with the abscess located superior to the visual axis, (Top right) 3 days postoperatively with the corneal transplant well centered and clear, and (Bottom left) 4 months postoperatively with a crystal clear cornea. (Bottom right) The patient, 1 year postoperatively, shows smooth corneal surface with all sutures removed.

Tables

Tables take up substantial space in the print journal and should be limited in number. The information in the text and tables should not be duplicative.

Tables should be numbered consecutively in Arabic numerals by order of citation in the text. Single tables should not be numbered. Each table should have a brief title so that the reader can understand what is being displayed in the table without reference to the text. Each table should be submitted individually and separately from the manuscript text file. The table number and table title should be on the same line at the top of the table. The title and caption should contain enough information so that the table can be understood independently of the manuscript text and "stand alone". Avoid abbreviations in any titles. All abbreviations within the table and comments about the table should be included in a footnote to the table.
All tables should be created in a Microsoft Word document using the table tools. Do not format tables as columns or tabs. Do not use picture tools to create tables. Do not create tables in other programs and paste them into Word. Use additional pages when a table does not fit onto one page. Ensure that no information is hanging off of the page due to poor formatting.

Footnotes to tables are indicated by superscripted letters $^a$, $^b$, $^c$, etc.

**References**

References should be numbered consecutively in the text and in the reference list. In the text, reference numbers are entered as superscripts. If you use an automated reference numbering software (e.g., Endnote or Reference Manager) the linkage must be turned off.


References to journal articles should follow the current AMA format and include:

1) Authors' surnames and initials (list 6; for more than 6 authors, list the first 3 followed by "et al.")
2) Title of Article
3) Italicized Journal name (as abbreviated in PubMed)
4) Year
5) Volume number
6) Issue number
7) Inclusive page numbers

References to books should include:

1) The author or authors
2) Chapter title (if any)
3) Editor or editors (if any)
4) Book title
5) Edition (other than the first)
6) City of publication
7) Publisher
8) Copyright year
9) Inclusive pages of the chapter or section cited

Examples are as follows:


Unpublished data, such as studies in preparation or submitted for publication, posters, and unpublished abstracts the reader cannot retrieve in a literature search, are to be incorporated parenthetically in the text. The Corresponding Author is to provide authorization for use of this personal communication.
Association for Research in Vision and Ophthalmology (ARVO) and other abstract references are discouraged. If used, ARVO abstract citations should appear parenthetically within the text, not as bibliographic references, in the exact format recommended by ARVO. Citations should include: (1) name of first author, (2) "IOVS", (3) year, (4) volume number, (5) "ARVO E-Abstract", and (6) program number. Eg., (Roska BM, et al. IOVS 2002;43:ARVO E-Abstract 1415).

Personal communications should be cited parenthetically in the text, as in this example: (Evans DW, written communication, September 1, 1997). The Corresponding Author should provide authorization for use of this personal communication.

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. This identifier will not appear in your published article.


Internet references

Internet references should be limited to important Full-Length articles that are not available in print or have been updated on the Internet since initial print publication. If a print reference is available, it should be used. The online reference should be listed with complete information including title and authors with the addition of the URL address and accession date. The URL address and availability must be confirmed again with any revision submission. Because Internet articles frequently are not available at a future date, the authors must make a print copy of the material they are referencing from the Internet, hold it indefinitely, and provide it to the AJO at any time in the future.


Reference management software

Most Elsevier journals have their reference template available in many of the most popular reference management software products. These include all products that support Citation Style Language styles, such as Mendeley and Zotero, as well as EndNote. Using the word processor plug-ins from these products, authors only need to select the appropriate journal template when preparing their article, after which citations and bibliographies will be automatically formatted in the journal's style. If no template is yet available for this journal, please follow the format of the sample references and citations as shown in this Guide.

Users of Mendeley Desktop can easily install the reference style for this journal by clicking the following link:
http://open.mendeley.com/use-citation-style/american-journal-of-ophthalmology

When preparing your manuscript, you will then be able to select this style using the Mendeley plug-ins for Microsoft Word or LibreOffice.

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.

**AudioSlides**

The journal encourages authors to create an AudioSlides presentation with their published article. AudioSlides are brief, webinar-style presentations that are shown next to the online article on ScienceDirect. This gives authors the opportunity to summarize their research in their own words and to help readers understand what the paper is about. More information and examples are available. Authors of this journal will automatically receive an invitation e-mail to create an AudioSlides presentation after acceptance of their paper.

**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.

**Accepted manuscript/supplemental material**

The AJO also seeks to further enhance recognition for the contributors of the scientific content in the AJO. Therefore, the first author and the senior author (or both authors if there are only two) of accepted manuscripts will be asked to provide a biographic sketch (limited to 75 words) and a digital photo to be placed on the website linked with the online version at www.AJO.com.

With revision or acceptance of the manuscript, the Corresponding Author may submit Supplemental Material for consideration for posting on the Internet. Appropriate content may include expanded data sets and spreadsheets, additional digitized figures and illustrations, videos, or expanded techniques and methods sections. Supplemental Material must be submitted at the time of revision submission according to specifications, and such material will be edited. When uploading your Supplemental Material on the Attach Files page of Elsevier Editorial System, please choose Miscellaneous Material for all parts and label each part (e.g., Supplemental Figure Caption, Supplemental Figure 1, Supplemental Video, etc.). A legend for each Supplemental Figure or Video should be provided. If you are including supplemental material with your submission, please note the following on your manuscript title page, "Supplemental Material available at AJO.com" and also note, at the appropriate location in the manuscript and in parenthesis, (Supplemental Material at AJO.com). The Supplemental Material will be forwarded by the AJO office to Dr Peter Kaiser, the AJO Associate Editor supervising the Supplemental Material at AJO.com.

For Supplemental Material, the text must be in Microsoft Word format, and the digital audio/visual must adhere to the requirements for figures listed above.

**Research data**

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

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

**Data linking**

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

There are different ways to link your datasets to your article. When available, you can directly link your dataset to your article by providing the relevant information in the submission system. For more information, visit the database linking page.
For **supported data repositories** a repository banner will automatically appear next to your published article on ScienceDirect.

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

**Mendeley Data**

This journal supports Mendeley Data, enabling you to deposit any research data (including raw and processed data, video, code, software, algorithms, protocols, and methods) associated with your manuscript in a free-to-use, open access repository. Before submitting your article, you can deposit the relevant datasets to **Mendeley Data**. Please include the DOI of the deposited dataset(s) in your main manuscript file. The datasets will be listed and directly accessible to readers next to your published article online.

For more information, visit the [Mendeley Data for journals page](https://www.mendeley.com/data-for-journals/).

**Data statement**

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

**Checklist for AJO submission**

Below is a checklist of items required by the **AJO** for evaluation of a submission. These items should be included in each submission. Please be sure that you have thoroughly read the instructions for preparation and submission of your manuscript before submitting it. Otherwise, the peer reviewers may refuse to proceed with review.

- Cover Letter indicating the manuscript’s category (Full-Length Article, Perspective, Editorial, Correspondence)
- Permission for figures if there is identifiable material or photograph
- One copy of the manuscript, single-spaced and formatted according to the instructions.
- Title page
  - Title
  - Each author's complete name and affiliation. Academic degrees are no longer requested.
  - The complete and correct address, phone number, fax number, and e-mail address of the Corresponding Author.
- Structured abstract limited to 250 words for Full-Length Articles and Perspectives
- Acknowledgments section to provide information about funding sources, financial disclosures, and to recognize statistical and other contributors.
- Appendix (if appropriate)
- References
- Figure Captions
- Tables
- Figures (properly formatted and labeled according to the instructions)
- CONSORT statement for Randomized Controlled Trials (if applicable).

**Revised manuscripts**

Revisions must be returned to the **AJO** within 1 month to retain revision status; after that time, the Editor-in-Chief may request another cycle of peer-review or reject the manuscript. The Corresponding Author must reply to each point made in the revision request and may state points of disagreement with the reviewer’s comments. Please submit revisions in your account under "Submissions Needing Revision" on Elsevier Editorial System with the files prepared according to online manuscript submission guidelines. Please follow the instructions on the Elsevier Editorial System under "Guidelines for Revisions".

**AFTER ACCEPTANCE**
Online proof correction

Corresponding authors will receive an e-mail with a link to our online proofing system, allowing annotation and correction of proofs online. The environment is similar to MS Word: in addition to editing text, you can also comment on figures/tables and answer questions from the Copy Editor. Web-based proofing provides a faster and less error-prone process by allowing you to directly type your corrections, eliminating the potential introduction of errors. If preferred, you can still choose to annotate and upload your edits on the PDF version. All instructions for proofing will be given in the e-mail we send to authors, including alternative methods to the online version and PDF.

We will do everything possible to get your article published quickly and accurately. Please use this proof only for checking the typesetting, editing, completeness and correctness of the text, tables and figures. Significant changes to the article as accepted for publication will only be considered at this stage with permission from the Editor. It is important to ensure that all corrections are sent back to us in one communication. Please check carefully before replying, as inclusion of any subsequent corrections cannot be guaranteed. Proofreading is solely your responsibility.

Offprints

The corresponding author will, 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.

Publication process

The Editor-in-Chief accepts the manuscript with the understanding that the authors cooperate in a timely manner with the production process, including any response to future correspondence from the AJO or its readers. The authors are required to provide an edited print-ready version of the manuscript at the final revision stage (or earlier). The Publisher employs copy editors that format the manuscript to AJO style but do not perform extensive editorial copyediting.

The article will then be processed into page proofs, with all art and tables in place. The Production Editor will send the Corresponding Author a galley proof by e-mail or mail, which should be corrected and returned within 48 hours. Authors must check their proofs very carefully, because approval indicates that all copyediting changes have been accepted unless corrections are returned to the Production Editor. A second proof will not be provided. Authors must also answer any copyediting queries within the proof. Notification of the costs for printing illustrations in color and page charges will be provided at this proofing stage. An order form for the article reprints will be sent to the Corresponding Author before publication. Reprints should be ordered prior to publication.

Good quality illustrations using the above guidelines must be made available to the printer; the Editor-in-Chief reserves the right to withdraw acceptance at any time if the images do not meet expectations, the authors do not provide them in a timely fashion, or other aspects of the publication process are not diligently followed to the satisfaction of the Editor-in-Chief.

The authors may participate in scientific programs and presentations providing the highlights of the manuscript but should be aware that the manuscript acceptance will be withdrawn if it is published in substantive content elsewhere in print or electronically prior to the AJO publication, per the Policy on Duplicate Publication. After publication of a manuscript in the AJO, the authors and readers may monitor any future citations of the article by specialized software at AJO.com.

AJO on the internet

The AJO Table of Contents and Abstracts for each month are available on the Internet at AJO.com. Forthcoming issue line-ups can also be received through e-mail by signing up for ScienceDirect. The full text of AJO is available online and to recipients of ScienceDirect if they are subscribers to the print edition or if an article has been made open access by the author or funder. Supplemental Material augments Full-Length Articles and Perspectives, and special features present new content on the electronic AJO. InternetAdvance offers the manuscripts that have been accepted but not yet printed.
in the \textit{AJO}. Book Reviews and Announcements are also listed in the print issue with more complete information available at \texttt{AJO.com}. The website provides a keyword search and an electronic link to abstracts for many of the references in published material. Authors may track any future citations to their \textit{AJO} printed manuscripts at \texttt{AJO.com}.

\textbf{AJO policies}

\begin{enumerate}
\item \textbf{REJECTION BY PREVIOUS JOURNAL}
If the manuscript has been previously rejected or evaluated in any form by another journal, the authors should note that in the cover letter and indicate how they have improved the manuscript.

\item \textbf{DUPLICATE PUBLICATION}
To protect the mission of the \textit{AJO} as a peer-reviewed journal, only original material will be published in the \textit{AJO}. Authors who distribute e-prints, preprints, reprints, or substantive content in any format, including digital, of an article into the public domain before publication risk losing the opportunity to publish in the \textit{AJO}. When authors submit material for publication in the \textit{AJO}, they must claim the copyright and must transmit copyright of their material to the \textit{AJO}. Publication of the material elsewhere (duplicate publication) without permission of the \textit{AJO} is a copyright infringement.

\item \textbf{STATEMENTS OF PRIORITY}
The \textit{AJO} discourages statements of priority (such as "we are the first to report...") because of the inability to be familiar with all published works or presentations on a subject. Either consider deleting the statement of priority or provide a standard statement that adheres to \textit{AJO} policy, such as "we are unaware of previous reports of this finding (phenomenon, procedure, or other appropriate wording) and could find no reference to it in a computerized search (include the name of the database, such as PubMed)."

\item \textbf{MULTICENTER STUDIES}
The \textit{AJO} encourages the submission of multicenter studies. On the title page, preferably the writing group authors should be listed along with the group name (eg, Smith TT, Jones JJ, on behalf of the Pediatric Amblyopia Study Group). Other group members should be listed in an appendix before the references. When the study group name alone is listed on the title page, the Copyright Transfer Agreement requires only the original signature of the Corresponding Author.

\item \textbf{SUGGESTIONS FOR RESEARCH PRESENTERS AT SCIENTIFIC MEETINGS PRIOR TO PUBLICATION}
The \textit{AJO} and the scientific community encourage presentation at meetings. Presenters planning to submit information to a peer-reviewed journal, however, should not share their slides, materials, or additional information with newspapers or tabloids before publication. If the presenter is given a preprint of a planned publication by a newspaper or tabloid, the presenter again could ask the writer to withhold the information until after the information has been published in the peer-reviewed literature. Violations could result in public reprimand regarding copyright infringement and may result in a presenter being subjected to greater scrutiny when future materials are considered for publication in the \textit{AJO}.

\item \textbf{CORRECTIONS AND RETRACTIONS}
Errors may be noted in published articles that require the publication of a correction or an erratum. Most corrections are minor. Some errors, however, may negate the value of the initial manuscript. These do not include inadequacies exposed by the emergence of new scientific information, in which case no corrections or withdrawals are needed.

If substantial doubts arise about the honesty of a work, either submitted or published, it is the Editor-in-Chief’s responsibility to ensure that the possible fraud is addressed. It is not usually the task of the Editor-in-Chief to conduct a full investigation or to make a determination; that responsibility lies with the institution where the work was done or with the funding agency. The Editor-in-Chief should be promptly informed of the final decision of the institution involved, and if a fraudulent article has been published, the \textit{AJO} will print a retraction. If the study was not under the aegis of an IRB or if this
method of investigation does not result in a satisfactory conclusion, the Editor-in-Chief may choose to publish an expression of concern with an explanation or a full retraction, following an attempt for clarification from the authors.

The Editor-in-Chief may ask the authors' institution to assure the AJO of the validity of earlier work published in the AJO or to retract it.

G. confide CONFIDENTIALITY
The Editorial Board and reviewers should respect authors' confidentiality because authors have entrusted the AJO with the results of their scientific work and creative effort. Authors' rights may be violated by disclosure of the confidential details of the review of their manuscript.

Reviewers also have rights to confidentiality, which must be respected. Editors should not disclose information about manuscripts (including their receipt, their content, their status in the reviewing process, their criticism by reviewers, or their ultimate fate) to anyone other than the authors themselves and reviewers.

Editors should make clear to their reviewers that manuscripts sent for review are privileged communications and are the private property of the authors. Therefore, reviewers and members of the Editorial Board should respect the authors' rights by not publicly discussing the authors' work or appropriating their ideas before the manuscript is published. Reviewers should not be allowed to make copies of the manuscript for their files and are prohibited from sharing it with others, except with the permission of the editor.

H. conduct CONDUCT AND COMMUNICATION OF CLINICAL TRIALS
The AJO recommends that researchers and authors (and commercial companies) adopt and adhere to the Pharmaceutical Research and Manufacturers (PhRMA) "Principles for the Conduct of Clinical Trials and Communication of Clinical Trial Results" listed at the http://www.phrma.org/sites/default/files/pdf/042009_clinical_trial_principles_final.pdf. These principles describe the relationship of PhRMA member companies with others involved in clinical research and set forth the rules companies have volunteered to follow in order to protect the safety of research participants wherever the companies conduct clinical trials. In the principles, the PhRMA companies commit to the timely communication of all meaningful results of clinical trials, whether those results are positive or negative. The principles further state that the results should be communicated in an objective, accurate, balanced, and complete manner.

I. access AJO ACCESS TO SCIENTIFIC DATA
Thorough peer review by the AJO may require that organizations that sponsor research provide access to data and analyses that are not provided in a submitted manuscript, and sometimes such access is needed after publication as well. The opportunity also exists to post this information on the AJO website as Supplemental Material in association with the published manuscript.

J. microb REPORTING NEW MICROBIAL ORGANISMS IN OPHTHALMIC INFECTIONS
The AJO is interested in confirming that certain organisms participate in ocular disease. The text must provide adequate laboratory information that can substantiate the microbial identification. This requires that any unusual pathogen be confirmed by two different methods or at two independent laboratories. The journal Cornea initiated this confirmatory policy (Wilhelmus KR. New corneal infections: preventing a crisis of identity. Cornea 2003;22:95-96).

K. cancer CANCER CLASSIFICATION SCHEME
Authors should use the American Joint Commission on Cancer classification scheme when describing patients with ophthalmic malignancies; see American Joint Committee on Cancer.ACC Cancer Staging Manual, Seventh Edition, Springer, New York.

L. ocular OCULAR TRAUMA TERMINOLOGY

M. regis CLINICAL TRIALS REGISTRATION
The AJO requires that human clinical trials are registered before enrollment in order for the results to be published in the AJO. See Arch Ophthalmol 2005;123:1263-1264 for complete statement. Phase III trials should be registered as well as many phase II trials. Most phase I trials do not need to be registered. The Methods section should contain a statement about where the registration information is available to the public. Satisfactory public databases include the National Institute of Health maintained site at http://www.clinicaltrials.gov (for either NIH or non-NIH sponsored studies) or the International Standard Randomized Controlled Trials at http://www.controlled-trials.com.

N. refractive surgery STANDARDED GRAPHS AND TERMS FOR REFRACTIVE SURGERY RESULTS


Forms
A. flow CONSORT STATEMENT
B. iphoto CONSENT FORM FOR IDENTIFIABLE PHOTOGRAPHS

Glossary of study designs

Randomized Clinical Trial: A human trial involving at least one experimental treatment group and one control treatment group, concurrent enrollment, and follow-up of the experimental and control groups with assignment to experimental and control groups by a randomization process. Persons responsible for treatment and subjects are not able to influence the treatment assignment, and assignment remains unknown to the staff and subjects until eligibility has been determined.

Nonrandomized Clinical Trial: A human trial involving at least one experimental treatment group and one control group, concurrent enrollment, and follow-up of the treatment and control groups. Assignment to experimental control groups is by a process other than randomization.

Interventional Case Series: Three or more cases, which may or may not be consecutive, that describe the outcome of an intervention without a control group for comparison.

Cohort Study: A longitudinal observational study that includes subjects with identifying characteristics and involves measurements or observations on more than one occasion.

Case-control Study: An observational, and usually retrospective, study of subjects with identifying characteristics and a disease or abnormality (cases) for comparison to subjects with similar characteristics, but without the disease or abnormality (controls). Comparison proceeds from effect to cause and generally yields odds ratio (usually an approximation of relative risk).

Cross-sectional Study: An observational study that identifies subjects with and without the disease or abnormality being studied at the same time. Study yields prevalence data and may or may not be population based.

Observational Case Series: Three or more cases in which natural history of the disease or abnormality is described. Cases may be collected and studied retrospectively or prospectively over any time frame.

Experimental Study: Animal or laboratory research describing observations, surgical or medical interventions, testing, or devices. Experimental studies are generally prospective and utilize a protocol in which controls are included.

Meta-analysis of Literature: Analysis of literature using statistical methods to integrate and summarize several studies.

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.