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of Ophthalmology is a peer-reviewed, scientific publication that welcomes the submission of original, previously unpublished manuscripts directed to ophthalmologists and visual science specialists describing clinical investigations, clinical observations, and clinically relevant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.

AUDIENCE

Ophthalmologists

IMPACT FACTOR

2022: 4.200 © Clarivate Analytics Journal Citation Reports 2023
ABSTRACTING AND INDEXING

AIM
BIOSIS Citation Index
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
Index Veterinarius
Index to Scientific Reviews
PubMed/Medline
Embase
Scopus

EDITORIAL BOARD

Editor-in-Chief
Richard Parrish II, Miami, Florida, United States of America

Associate Editors
Donald L. Budenz, Chapel Hill, North Carolina, United States of America
Anne L. Coleman, Los Angeles, California, United States of America
Janet L. Davis, Miami, Florida, United States of America
Eve Juliet Higginbotham, Philadelphia, Pennsylvania, United States of America
Gary N. Holland, Los Angeles, California, United States of America
Michael W. Stewart, Jacksonville, Florida, United States of America

Executive Editors
Sean P. Donahue, Nashville, Tennessee, United States of America
Sharon Fekrat, Durham, North Carolina, United States of America
Robert Folberg, Chicago, Illinois, United States of America
Seenu M. Hariprasad, Chicago, Illinois, United States of America
Andrew J. W. Huang, Saint Louis, Missouri, United States of America
Anselm Kampik, München, Germany
Byron L. Lam, Miami, Florida, United States of America
Ian MacDonald, Edmonton, Alberta, Canada
Edward E. Manche, Stanford, California, United States of America
Steven L. Mansberger, Portland, Oregon, United States of America
Todd Margolis, San Francisco, California, United States of America
Kevin M. Miller, Los Angeles, California, United States of America
Darius M. Moshfeghi, Stanford, California, United States of America
Julian D. Perry, Cleveland, Ohio, United States of America
Pradeep Ramulu, Baltimore, Maryland, United States of America
Ian G. Rennie, Sheffield, United Kingdom
Lucia Sobrin, Boston, Massachusetts, United States of America
Elmer Y. Tu, Chicago, Illinois, United States of America
Lawrence Tychsen, St. Louis, Missouri, United States of America
Gianni Virgili, Firenze, Italy

Social Media Editor
Nimesh A. Patel, Harvard Medical School, Department of Ophthalmology, Boston, Massachusetts, United States of America

Editorial Board
Ron A. Adelman, New Haven, Connecticut, United States of America
Natalie A. Afshari, La Jolla, California, United States of America
Sophie J. Bakri, Rochester, Minnesota, United States of America
James D. Brandt, Sacramento, California, United States of America
Soon-Phaik Chee, Singapore, Singapore
Chui Ming Gemmy Cheung, Singapore, Singapore
Jay Chhablani, Pittsburgh, Pennsylvania, United States of America
James Chodosh, Boston, Massachusetts, United States of America
Tanuj Dada, New Delhi, India
Helen Danesh-Meyer, Auckland, New Zealand
John H. Fingert, Iowa City, Iowa, United States of America
Harry Flynn Jr., Miami, Florida, United States of America
Sunjir J. Garg, Philadelphia, Pennsylvania, United States of America
Alain Gaudric, Paris, France
Christopher A. Girkin, Birmingham, Alabama, United States of America
Mae O. Gordon, Saint Louis, Missouri, United States of America
Andrzej Grzybowski, Olsztyn, Poland
M. Bowes Hamill, Houston, Texas, United States of America
Mary Elizabeth Hartnett, Salt Lake City, Utah, United States of America
Leslie Hyman, Philadelphia, Pennsylvania, United States of America
Kyoko Ishida, Tokyo, Japan
Vishal Jhanji, Pittsburgh, Pennsylvania, United States of America
Mark W. Johnson, Ann Arbor, Michigan, United States of America
John H. Kempen, Philadelphia, Pennsylvania, United States of America
Tero Kivelä, HELSINKI, Finland
Douglas Koch, Houston, Texas, United States of America
Thomas Kohnen, Frankfurt am Main, Germany
Michael S. Kook, Ulsan, South Korea
Steven M. Kymes, Saint Louis, Missouri, United States of America
Aaron Yuntai Lee, Seattle, Washington, United States of America
Cecilia Lee, Seattle, Washington, United States of America
Christopher K S Leung, Hong Kong, Hong Kong
Shan C. Lin, San Francisco, California, United States of America
Samuel Masket, Los Angeles, California, United States of America
Randall Olson, Salt Lake City, Utah, United States of America
Paul F. Palmberg, Miami, Florida, United States of America
Louis Pasquale, New York, New York, United States of America
Jacob J. Pe’er, Jerusalem, Israel
Philip J. Rosenfeld, Miami, Florida, United States of America
Ahmara G. Ross, Philadelphia, Pennsylvania, United States of America
Johanna M. Seddon, Boston, Massachusetts, United States of America
H. Nida Sen, Bethesda, Maryland, United States of America
Paul Sternberg, Jr., Nashville, Tennessee, United States of America
J. Timothy Stout, Houston, Texas, United States of America
David T. Tse, Miami, Florida, United States of America
Elizabeth A. Vanner
Ruikang Wang, Seattle, Washington, United States of America
Jayne S. Weiss, New Orleans, Louisiana, United States of America
Basil K. Williams, Jr, Philadelphia, Pennsylvania, United States of America
Lihteh Wu, San José, Costa Rica

Editor Emeritus
T.J. Liesegang, , FL, United States of America
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.

The focus of this journal is baccalaureate and higher degree nursing education, educational research, policy related to education, educational administration, and education and practice partnerships. Manuscripts with a clinical nursing focus are not accepted.

BEFORE YOU BEGIN

Submission Types

FULL-LENGTH ARTICLES - Full-Length Articles include clinical investigations, clinical observations, randomized controlled trials, and clinically relevant laboratory investigations.

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 author(s). Perspectives should not be a review article. Please see specific criteria for submission in the Perspective section of this guide.

EDITORIALS - Invitation-only Editorials provide a forum for interpretive, analytical, or reflective opinions related to manuscripts in the AJO or statements about clinical, scientific, or socioeconomic issues. Please see specific criteria for submission in the Editorial section of this Guide.

CORRESPONDENCE - Correspondence may correct errors, provide support or agreement, or offer different points of view. It should not be used to publish one’s own study or report a case.

SYSTEMATIC REVIEWS AND META-ANALYSES - Please see specific criteria for submission of Systematic Reviews/Meta-analyses in this Guide.

OBITUARIES - Obituaries are by invitation only from the Editor-in-Chief to commemorate the lives of remarkable individuals who are internationally renowned for their contributions to Ophthalmology and to the Journal in particular. The Editor-in-Chief makes the final decision about publishing Obituaries.

ILLUSTRATIONS AND INSIGHTS - This online-only section features unique ophthalmology-based images and videos with brief accompanying descriptions. Please see specific formatting and submission instructions in the related section below.

I. Images:

This section contains unique images detailing presentations of ophthalmic disease. A single submission may have up to 4 images per submission arranged in a 2x2 panel. Along with the figure files, please include a Word file with a title page followed by a 200-word maximum description of the figures. Figures must be uploaded individually to Editorial Manager, separate from the text file. Digital figures should be of high quality and in one of the following file formats only: TIFF (non-transparent), JPEG (with "maximum quality" setting), or EPS. NIH guidelines for online figures suggest a minimum of 1500 pixels wide. Individual figure files should not be larger than 12 MB. Figure parts may be labeled by letter if the lettering is unobtrusive and does not mar the integrity of the illustrated information.
Other text on figures should be avoided unless absolutely necessary. All symbols or abbreviations that appear on the figures should be defined in the accompanying descriptive file. Arial font is suggested for any figure text. Use periods as decimals rather than commas. Figures should be cropped to show only significant details.

II. Videos:
This section seeks to publish outstanding videos in Ophthalmology. These can include surgical or clinical videos demonstrating novel techniques or unusual findings. Along with the video file, please include a Word file with a title page followed by a 500-word maximum description of the video with up to 5 references. The description will not have titled sections. It should provide brief relevant background information, a summary of the video with steps and instrumentation used, and a conclusion statement highlighting the relevance. Please do not promote commercial products or use copyrighted music or materials in your video.

Video formatting: In order to ensure that your video or animation material is directly usable, please provide the file in one of our recommended file formats—MOV or MP4—with a preferred maximum of 5 MB in total. The video should be less than 2 min and 30 seconds in length. Videos may have subtitles or voiceover recording included. Accompanying photos for pre or post-operative framing can be included with the video.

Video supplied will be published online in Elsevier Web products, including ScienceDirect. Please supply a 'still' 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 Elsevier's Media Overview.

Contact information
For comments and questions, you may contact the Editorial Office by email: ajo@elsevier.com. If you are having trouble logging into Editorial Manager, please visit this link for more information or contact support@elsevier.com. To write the Editor-in-Chief, contact Richard K. Parrish, II, MD, at rparrish@med.miami.edu.

Communication about manuscripts occurs primarily through email and only with corresponding authors, so it is important for authors to keep their contact information (address, institution, phone numbers, and email address) current in Editorial Manager. Due to privacy protections within EM, these changes can only be made by the user and cannot be done by the AJO Office.

Checklist for AJO submission
Please ensure that the following items have been completed or created prior to submission:

- Designate one author as corresponding author with contact details.
- If the paper was previously rejected by another journal, include previous reviews and responses in cover letter
- Cover Letter indicating the manuscript's category (Full-Length Article, Perspective, Editorial, Correspondence)
- Permission for figures if there is identifiable material or photograph, including retinal imaging
- ICMJE Conflict of Interest form prepared for each author
- One copy of the manuscript formatted according to the instructions
- Title page including title, authors' full names, institutions, and corresponding author contact information
- Structured abstract limited to 250 words for Full-Length Articles, Perspectives, and Systematic Reviews/Meta-analyses
- Acknowledgments section provides information about funding sources, financial disclosures, and to recognize statistical and other contributors
- References in current AMA format
Figure Captions page after references

Figures and tables are not embedded in the manuscript text file, but prepared for individual upload

Tables created in Word and include titles, description, and footnotes.

Figures in TIFF, JPEG, or EPS format

Online-only/Supplementary figures and tables are properly labeled and included

Table of Contents statement prepared for revisions

Appendix (if appropriate)

CONSORT statement for Randomized Controlled Trials

Ethics in publishing
Please see our information on Ethics in publishing.

Declaration of generative AI in scientific writing
The below guidance only refers to the writing process, and not to the use of AI tools to analyse and draw insights from data as part of the research process.

Where authors use generative artificial intelligence (AI) and AI-assisted technologies in the writing process, authors should only use these technologies to improve readability and language. Applying the technology should be done with human oversight and control, and authors should carefully review and edit the result, as AI can generate authoritative-sounding output that can be incorrect, incomplete or biased. AI and AI-assisted technologies should not be listed as an author or co-author, or be cited as an author. Authorship implies responsibilities and tasks that can only be attributed to and performed by humans, as outlined in Elsevier’s AI policy for authors.

Authors should disclose in their manuscript the use of AI and AI-assisted technologies in the writing process by following the instructions below. A statement will appear in the published work. Please note that authors are ultimately responsible and accountable for the contents of the work.

Disclosure instructions
Authors must disclose the use of generative AI and AI-assisted technologies in the writing process by adding a statement at the end of their manuscript in the core manuscript file, before the References list. The statement should be placed in a new section entitled ‘Declaration of Generative AI and AI-assisted technologies in the writing process’.

Statement: During the preparation of this work the author(s) used [NAME TOOL / SERVICE] in order to [REASON]. After using this tool/service, the author(s) reviewed and edited the content as needed and take(s) full responsibility for the content of the publication.

This declaration does not apply to the use of basic tools for checking grammar, spelling, references etc. If there is nothing to disclose, there is no need to add a statement.

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 compliance, your article may be checked by Crossref Similarity Check and other originality or duplicate checking software.
Presentations

Presentations The 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 AJO.

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. Content should make no assumptions about the beliefs or commitments of any reader; contain nothing which might imply that one individual is superior to another on the grounds of age, gender, race, ethnicity, culture, sexual orientation, disability or health condition; and use inclusive language throughout. Authors should ensure that writing is free from bias, stereotypes, slang, reference to dominant culture and/or cultural assumptions. We advise to seek gender neutrality by using plural nouns ("clinicians, patients/clients") as default/wherever possible to avoid using "he, she," or "he/she." We recommend avoiding the use of descriptors that refer to personal attributes such as age, gender, race, ethnicity, culture, sexual orientation, disability or health condition unless they are relevant and valid. When coding terminology is used, we recommend to avoid offensive or exclusionary terms such as "master", "slave", "blacklist" and "whitelist". We suggest using alternatives that are more appropriate and (self-) explanatory such as "primary", "secondary", "blocklist" and "allowlist". These guidelines are meant as a point of reference to help identify appropriate language but are by no means exhaustive or definitive.

Reporting sex- and gender-based analyses

Reporting guidance

For research involving or pertaining to humans, animals or eukaryotic cells, investigators should integrate sex and gender-based analyses (SGBA) into their research design according to funder/sponsor requirements and best practices within a field. Authors should address the sex and/or gender dimensions of their research in their article. In cases where they cannot, they should discuss this as a limitation to their research's generalizability. Importantly, authors should explicitly state what definitions of sex and/or gender they are applying to enhance the precision, rigor and reproducibility of their research and to avoid ambiguity or conflation of terms and the constructs to which they refer (see Definitions section below). Authors can refer to the Sex and Gender Equity in Research (SAGER) guidelines and the SAGER guidelines checklist. These offer systematic approaches to the use and editorial review of sex and gender information in study design, data analysis, outcome reporting and research interpretation - however, please note there is no single, universally agreed-upon set of guidelines for defining sex and gender.

Definitions

Sex generally refers to a set of biological attributes that are associated with physical and physiological features (e.g., chromosomal genotype, hormonal levels, internal and external anatomy). A binary sex categorization (male/female) is usually designated at birth ("sex assigned at birth"), most often based solely on the visible external anatomy of a newborn. Gender generally refers to socially constructed roles, behaviors, and identities of women, men and gender-diverse people that occur in a historical and cultural context and may vary across societies and over time. Gender influences how people view themselves and each other, how they behave and interact and how power is distributed in society. Sex and gender are often incorrectly portrayed as binary (female/male or woman/man) and unchanging whereas these constructs actually exist along a spectrum and include additional sex categorizations and gender identities such as people who are intersex/have differences of sex development (DSD) or identify as non-binary. Moreover, the terms "sex" and "gender" can be ambiguous—thus it is important for authors to define the manner in which they are used. In addition to this definition guidance and the SAGER guidelines, the resources on this page offer further insight around sex and gender in research studies.
Article transfer service
This journal uses the Elsevier Article Transfer Service to find the best home for your manuscript. This means that if an editor feels your manuscript is more suitable for an alternative journal, you might be asked to consider transferring the manuscript to such a journal. The recommendation might be provided by a Journal Editor, a dedicated Scientific Managing Editor, a tool assisted recommendation, or a combination. If you agree, your manuscript will be transferred, though you will have the opportunity to make changes to the manuscript before the submission is complete. Please note that your manuscript will be independently reviewed by the new journal. More information.

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 a '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.

Author Rights
As an author you (or your employer or institution) have certain rights to reuse your work. More information. Find out how you can share your research published in Elsevier journals.

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 authors may also be reimbursed for associated publication fees. To learn more about these agreements please visit https://www.elsevier.com/fundingbodies

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 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, let 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.

**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.

**Manuscript submission**

The *AJO* accepts online submission of manuscripts through Elsevier Editorial System. The AJO’s Editorial Manager portal can be accessed at https://www.editorialmanager.com/ajo/default.aspx. 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. If you have already registered or suspect you have an account, please do not register again but rather retrieve your password using your previously registered email address or contact the Editorial Office at ajo@elsevier.com for assistance if that email is no longer valid.

**PREPARATION**

**Abbreviations/Acronyms**

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. Systeme 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.

**Abstract**

For Original Articles, Perspectives, and Systematic Reviews/Meta-analyses, 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.
Acknowledgements and Financial Disclosure

The AJO requires disclosure information in a specific format. The following information should appear, in the order indicated (labeled a through c), in an Acknowledgement section between the Manuscript Text and the References. The information will appear in the published article, along with the automatically-added contributions attestation made during the submission process. The information in this section is made in addition to providing the ICMJE Conflict of Interest forms with submission.

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 include all medical financial disclosures from each author including 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

Authorship

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.

Authorship order - 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. Once a manuscript has been submitted, the order of authorship or adding authors can only be changed at the revision stage with a written explanation justifying this action in the revision cover letter. Removing authors is discouraged and must be approved by the Editor-in-Chief with consent from the author in question. The Corresponding Author is responsible for proving that all involved authors concur with any change. Authorship changes cannot be submitted with proof corrections.

Shared positions - Shared positions - In line with our adherence to AMA guidelines, the AJO permits shared authorship between two authors for first and/or last author with the consent of the author group. First or last co-authorship can be shared between two authors if they have contributed equally according to ICMJE guidelines. The term "co-senior" is also permitted in lieu of "co-last." To designate shared authorship, mark the author names with an asterisk on the Title Page and state, "Dr X and Y contributed equally as co-first (or last) authors." This should also be noted in the Acknowledgement section. Only one Corresponding Author is permitted during the submission process, but a second Corresponding Author can be designated on the Title Page for post-publication communications. Other shared contributions will not be designated but their responsibilities should be delineated in the Author Contributions section of the Acknowledgement and CRediT statements.

Study Group/Writing Committee Authorship - In multicenter trials, the immediate 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). The group member list should be expanded in an appendix before the references.

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

**Cancer Classification**
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

**Clinical Trials and Clinical Trial Registration**
The AJO recommends that researchers and authors adopt and adhere to the Pharmaceutical Research and Manufacturers (PhRMA) "Principles for the Conduct of Clinical Trials and Communication of Clinical Trial Results." 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.

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](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](http://www.controlled-trials.com).

**Conflict of Interest**
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. 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.

Each co-author must complete an ICMJE Conflict of Interest Form and submit it to the corresponding author. Although the ICMJE form requires "potential" and "relevant" conflicts, to promote transparency we request authors to report all financial relationships. Mutual funds need not be listed.


All submissions must have the ICMJE Conflict of Interest Form completed and uploaded for each author preferably as part of the initial submission process, but no later than first revision. The form posted on the ICMJE website ([http://www.icmje.org/coi_disclosure.pdf](http://www.icmje.org/coi_disclosure.pdf)) includes instructions to help authors provide the correct information. For non-native English speakers, there is a glossary of terms that are used in the form.

Every published manuscript will have a blanket statement, inserted by the publisher; either "None of the authors has any conflicts of interest to disclose." OR "Authors with financial interests or relationships to disclose are listed after the references." Corresponding authors are asked to confirm or update conflict of interest statements as part of the final steps of manuscript acceptance with the journal office, prior to transmittal to the publisher. For further information, see [https://www.elsevier.com/authors/journal-authors/policies-and-ethics](https://www.elsevier.com/authors/journal-authors/policies-and-ethics).
Correspondence and Replies

Letters about recent articles published in the AJO are encouraged and should be submitted through Editorial Manager within 8 weeks of the article's print publication. Correspondence submitted should not exceed 500 words of text and six references. The title must read, "Comment on," followed by the Article in question, which must also be the first reference. Please provide a complete Title Page including author names, institutions, city, and country. Acknowledgment/Disclosure statement (defined above) must be included. Figures and tables are discouraged and generally not accepted. Correspondence is subject to peer review and editing.

Replies: According to the AJO policy on Responsibility of Authors, authors of articles discussed in the Correspondence are asked to reply within 14 days, adhering Correspondence formatting guidelines. If authors do not respond within 14 days, the letter may be published alone, stating the authors failed to reply or declined to reply.

When appropriate, efforts are made to resolve any controversies between correspondents and authors before publication, and correspondents may be asked to contact the authors directly if their comments do not meet AJO publication standards for ongoing scholarly discourse or if they duplicate peer reviewer commentary.

Cover Letter

Manuscripts must be accompanied by a cover letter that should include information on 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.

Drug and Equipment Names

Generic drug names should be used when possible. When a trade name is necessary, include the generic drug name in parentheses after the trade name at first use in both the Abstract and Text. For equipment, include the manufacturer's name, city, state, and/or country parenthetically at first use in both the Abstract and Text.

Editorials

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.

English Editing Assistance

The journal office may return a submission and recommend professional editing prior to formal review. Authors who require editing to eliminate 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 https://webshop.elsevier.com/language-editing/ or visit the customer support site https://service.elsevier.com for more information.

Errata and Retractions

Errors may be noted in published articles that require the publication of an erratum. If authors take note of a minor error in their published work, they may write the Editorial Office to inquire about an erratum. The inquiry should note the exact statement in error and offer a corrected statement. Errata should be rare and not be used as post-publication copyediting.

Some errors, however, may compromise 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.
Editor-in-Chief should be promptly informed of the final decision of the institution involved, and if a fraudulent article has been published, the 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.

**Figures**

Figures must be uploaded individually into Editorial Manager, separate from the manuscript text file. Legends for print figures should be placed at the end of the Manuscript file. Digital figures should be of high quality and in one of the following file formats only: TIFF (non-transparent), JPEG (with "maximum quality" setting), or EPS. Line art and graphs only may be submitted in Microsoft Word if they were created in Word or Excel. NIH guidelines for online figures suggest a minimum of 1500 pixels wide. Individual figure files should not be larger than 12 MB. To upload figures, go to the "Attach Files" page of the submission form. Click "Browse" to browse your desktop for the files or drag and drop them into the window. Select "Figure" as the File Type. In the "Description" box enter the figure number for each figure file.

For multi-part figures, please ensure that the composite is clear, readable, and of sufficient resolution. Figure parts may be labeled by letter if the lettering is unobtrusive and does not mar the integrity of the illustrated information.

Other 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. Use periods as decimals rather than commas.

Figures should be cropped to show only significant details. When a patient is identifiable in a photograph or when retinal imaging (see Retinal Imaging section) is submitted, authors must supply a Consent Form for Identifiable Photograph.

If you submit color figures, these figures will appear in color online at no additional charge. If you choose for these figures to be reproduced in the print version of the AJO, however, the cost for the first color figure is 650 USD, and the cost for every subsequent color figure is 100 USD. Authors will be billed for color figure(s) by Elsevier after acceptance. Please indicate your preference for color, in print or online only, at that time. Further information on the preparation of electronic artwork.

Illustration services - Elsevier's Author Services 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.

**FORMS**

A. ICMJE CONFLICTS OF INTEREST FORM

B. CONSORT STATEMENT

C. CONSENT FORM FOR IDENTIFIABLE PHOTOGRAPHS

**Highlights**

Highlights are optional yet highly encouraged as they increase the discoverability of your article via search engines. They consist of a short collection of bullet points that capture the novel results of your research as well as new methods that were used during the study (if any). Please have a look at the examples here: example Highlights. Highlights should be submitted in a separate editable file in the online submission system. Please use 'Highlights' in the file name and include 3 to 5 bullet points (maximum 85 characters, including spaces, per bullet point). Illustrations and Insights This online-only section of the AJO features unique ophthalmology-related images and videos with brief accompanying descriptions. Please see specific submission instructions for each sub-category below.
Illustrations and Insights Title page: The submission title should be as brief as possible and no longer than 135 characters and spaces. Submissions to this section are limited to 3 authors. Please see the authorship section of this Guide for further information on authorship criteria. The title page should be page 1 of the accompanying descriptive file and must include the title, the full name of each author, and complete address of institutional affiliations. The name, address, phone number, and e-mail address of the Corresponding Author is also required. The Corresponding Author will be responsible for all questions regarding the submission, therefore author should ensure their email address is correct in the system for at least one year after publication. When a patient is identifiable in a photograph or video, authors must supply a Consent Form for Identifiable Photograph. Refer to "Consent form for identifiable photographs" in the "Forms" section.

I. Images:
This section contains unique images detailing presentations of ophthalmic disease. A single submission may have up to 4 images per submission arranged in a 2x2 panel. Along with the figure files, please include a Word file with a title page followed by a 200-word maximum description of the figures.

Figures must be uploaded individually to Editorial Manager, separate from the text file. Digital figures should be of high quality and in one of the following file formats only: TIFF (non-transparent), JPEG (with "maximum quality" setting), or EPS. NIH guidelines for online figures suggest a minimum of 1500 pixels wide. Individual figure files should not be larger than 12 MB. Figure parts may be labeled by letter if the lettering is unobtrusive and does not mar the integrity of the illustrated information. Other text on figures should be avoided unless absolutely necessary. All symbols or abbreviations that appear on the figures should be defined in the accompanying descriptive file. Arial font is suggested for any figure text. Use periods as decimals rather than commas. Figures should be cropped to show only significant details.

II. Institutional Review Board
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.

Legends
Figure legends should be listed together on a Legends page after the references. Each legend should be numbered consecutively in the text, have a brief title specifying the disease process or study topic, and contain a complete description of each figure. 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, you may refer to them by location, e.g. Top left, Top right, etc. or letter them on the figure, e.g. Figure 1A, etc.

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

Table legends should be within the table. All abbreviations in each table must be defined even when repetitive to other tables.
**Manuscript Text Format**

Manuscripts should be double-spaced, in a single column, on standard 8.5 x 11 in. pages. One-inch margins should be used on all sides. The right margin should be ragged, not justified. Follow guidelines of style, terminology, measurement, and quantitation as set forth in the *American Medical Association Manual of Style* (11th ed. Oxford University Press, 2020). Arial font size 12 is recommended, as this font causes the fewest problems during conversion to PDF.

**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).

**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) Running head or short title, which should be a maximum of 60 characters. The full name of each author and complete address of institutional affiliations. Academic degrees should not be provided. Please see the Authorship section of this Guide for further information on authorship criteria Meeting presentations The name, address, phone number, fax number, and e-mail address of the Corresponding Author. The Corresponding Author will be responsible for all questions about the manuscript and for reprint requests and should therefore ensure their email address is correct in the system for at least a year after publication.

**TEXT**
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 Editorial Manager.

Organize and prepare the manuscript to include the following sections:
a. **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.
b. **Methods**: The Methods section should provide sufficient detail to enable others to duplicate the research. 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. 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).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. Use standard chemical or nonproprietary pharmaceutical nomenclature. Identify in parentheses specific sources by brand name, company, city, state, and/ or country.
c. **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.

d. **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. Following the manuscript text should be the Acknowledgement/Disclosure statement, References, and Legends for Figures if needed. Please consult the appropriate instructions for formatting each of these sections.

**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)

**Ocular Trauma**


**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. Perspectives 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.

**Precedence**

The *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. Avoid claiming priority (first publication) of the content unless you provide the literature search protocol used, 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)."

**Preprint Server**

For work submitted to a preprint server, it is the corresponding author's responsibility to promptly update the preprint server entry to indicate that the paper has been accepted and is currently in press; the author must add proper citation of the online version to the preprint server entry to point users to the peer-reviewed, accepted version of the article.

**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* [https://www.goodreports.org/reporting-checklists/consort/](https://www.goodreports.org/reporting-checklists/consort/) 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.

References
The AJO reference style is identical to current AMA style. Indicate references by (consecutive) superscript Arabic numerals in the order in which they appear in the text. The numerals are to be used outside periods and commas, inside colons and semicolons. For further detail and examples, please refer to the most recent publication of the AMA Manual of Style, A Guide for Authors and Editors. Authors are solely responsible for correct references.

Examples:
Journal article:

Book:

Book chapter:

Dataset:

Website:

Abstracts, unpublished data, posters, and personal communications should be cited within the text as parenthetical citations. Example: (Evans DW, written communication, September 1, 1997). The Corresponding Author should provide authorization for use of these items.

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. This journal uses the JAMA (Journal of the American Medical Association) template.

Refractive Surgery Results

Research data
This journal encourages and enables you to share data that supports your research publication where appropriate, and enables you to interlink the data with your published articles. Research data refers to the results of observations or experimentation that validate research findings. To facilitate reproducibility and data reuse, this journal also encourages you to share your software, code, models, algorithms, protocols, methods and other useful materials related to the project.
Below are a number of ways in which you can associate data with your article or make a statement about the availability of your data when submitting your manuscript. If you are sharing data in one of these ways, you are encouraged to cite the data in your manuscript and reference list. Please refer to the "References" section for more information about data citation. For more information on depositing, sharing and using research data and other relevant research materials, visit the research data page.

Data linking

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

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

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

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

Mendeley Data

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

For more information, visit the Mendeley Data for journals page.

Data statement

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

Retinal Imaging

To safeguard the future confidentiality of a patient whose retinal or anterior segment photographs may appear in a publication, the AJO requires that authors obtain written permission of patients to publish their ocular images. This policy applies only to those photographs appearing in print or online rather than all images that may have been investigated in the course of the study.

For further information on the development of this policy, see the following editorial: Parrish RK, Pasquale LR, Lee AY, Folberg R, Stewart MW, Duncan Powers SL. Who could know who I am? The possibility of patient identification with retinal imaging. Am J Ophthalmo 2020;216;A3-A4.

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."

**Supplementary Material**

*Author Biosketch and Photo:* Upon revision, you may provide a biographic sketch and photo for up to 2 authors for online publication at www.ajo.com. Biosketches and biophotos should be uploaded individually, minimum 325 pixels by 500 pixels and 300 dpi resolution, in either GIF or JPEG format and named with author name. The photo should be head & shoulders in a professional setting. Biosketch is limited to 75 words and one paragraph. If there are more than two authors on the paper, the first photo and biosketch should be the first author and the second photo and biosketch should be determined by collective author agreement. Include affiliations and the author's primary research interests. There is no charge for color biophotos.

**Appendix:** Appendices should be used sparingly but are appropriate to provide survey forms, list the members of a study group, or complex formulas and information. These can be uploaded as Supplementary Text.

**Supplementary Tables, Figures, and Video:** AJO.com offers the opportunity to present additional data that cannot be published in the print issue, including additional illustrations and tables, videotapes of procedures, and animations. When uploading your supplemental material on the Attach Files page, please choose Multimedia Supplementary Materials for all parts and label each part (e.g., Supplemental Figure Legend, Supplemental Figure 1, Supplemental video etc.). The legend for all Supplemental Material should also be uploaded as Multimedia Supplementary Materials. Each figure legend or table title must contain enough information so as to be able to be understood independent of the manuscript. On the manuscript title page state, "Supplemental Material available at AJO.com." Supplementary material must be called out in the manuscript.

**Video formatting:** 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 Elsevier's Media Overview. Note: since video and animation cannot be embedded in the print version of the journal, please provide text for both the electronic and the print version for the portions of the article that refer to this content.

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

**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." 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. Pre-approval for conducting a Systematic Review is no longer required.

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, 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

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. All tables should be created in a Microsoft Word document using the table tools. Do not format tables as columns or tabs. 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. Adding photographic material to a Table requires it be submitted as a Figure.

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.

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

**TABLE OF CONTENTS STATEMENT**
Upon revision, the Corresponding Author is requested to provide a Table of Contents Statement (up to 75 words in length) that presents the content and clinical implications of the article for the Table of Contents of the Journal (see print copy of AJO). It should not contain abbreviations or first-person pronouns (I, we).

**Visual Acuity Reporting**
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.

**REVIEW PROCESS**

*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

Each manuscript submission will be acknowledged by an email from the Editorial Office and assigned a manuscript number which should be used in all correspondence regarding the submission. 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. Pertinent comments will be provided to the corresponding author. Re-review may be required if one or more reviewers request to see the revision or if modifications are extensive.

*Revised manuscripts*
Revisions should be returned to the AJO within 60 days 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" with the files prepared according to online manuscript submission guidelines. Authors may also provide a tracked-changes version along with a clean copy of their revised paper for the reviewers' convenience.

If you elect to withdraw your paper rather than submit a revision, please log on to the system and select "Decline to Revise."

**AFTER ACCEPTANCE**

*Proofs*
After accepted manuscripts are typeset and copyedited for style, corresponding authors will receive an e-mail with a link to our online proofing system, allowing direct annotation and correction of proofs. Proofs should be returned within 72 hours. Each corresponding author is expected to proofread all pages carefully and answer all queries. Proof correction should not be used to make significant edits to the manuscript or authorship without express permission from the Editor. Proof corrections are final, so be certain you have made all edits before closing the proof. The journal reserves final editorial approval for style, format, and grammar.
Reprints
A reprint order form will be emailed to the corresponding author and must be returned whether or
not you order reprints. For an extra charge, paper reprints can be ordered via the offprint order form
which is sent once the article is accepted for publication.

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. 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.

In Press/Online Release
Articles appear online soon after acceptance in Pre-Proof form, which has not yet been copyedited,
typeset, or proofread. A Digital Object Identifier (DOI) is allocated, thereby making it fully citable
and searchable by title, author name(s), and the full text. The article's PDF also carries a disclaimer
stating that it is an unedited article. Any transcription errors introduced by the transmittal process
or author edits should be held until the Proof is sent to the Corresponding Author. After Proof edits
have been approved, the temporary version will be replaced. The "in press" designation is removed
as soon as the monthly issue is available online.

It is the corresponding author’s responsibility that all editing be done at the time the original proofs
are received from the publisher and that the publisher is notified immediately if the authors do not
wish to have the "in press" article released online. The Publisher employs copyeditors that format the
manuscript to AJO style but do not perform extensive editorial copyediting.

Article Alerts and Access
The AJO Table of Contents and Abstracts are available at https://www.ajo.com. To receive email
alerts for new issues or articles in press, click here. To receive alerts based on subject matter, click
here. Forthcoming issue line-ups can also be received through e-mail by signing up for ScienceDirect.
Members of the AAO can access the full text of the AJO through their membership by logging in through
the AAO Journal Gateway. The full text of AJO is available online and to recipients of ScienceDirect
if they are subscribers or if an article has been made open access by the author or funder. Authors
may track future citations to their AJO printed manuscripts at https://www.ajo.com/.

Preprint references
Where a preprint has subsequently become available as a peer-reviewed publication, the formal
publication should be used as the reference. If there are preprints that are central to your work or that
cover crucial developments in the topic, but are not yet formally published, these may be referenced.
Preprints should be clearly marked as such, for example by including the word preprint, or the name
of the preprint server, as part of the reference. The preprint DOI should also be provided.

Research Elements
This journal enables you to publish research objects related to your original research – such as data,
methods, protocols, software and hardware – as an additional paper in a Research Elements journal.

Research Elements is a suite of peer-reviewed, open access journals which make your research objects
findable, accessible and reusable. Articles place research objects into context by providing detailed
descriptions of objects and their application, and linking to the associated original research articles.
Research Elements articles can be prepared by you, or by one of your collaborators.

During submission, you will be alerted to the opportunity to prepare and submit a manuscript to one
of the Research Elements journals.

More information can be found on the Research Elements page.

AUTHOR INQUIRIES
If you have questions about the submission process or are unable to access the system, please contact
the editorial office by email at ajo@elsevier.com You can also 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.