Welcome to Journal of Investigative Dermatology

The Journal of Investigative Dermatology’s 2016 Impact Factor is now 6.287*. Thank you to our authors, reviewers, readers, and editorial board members for your contributions in making us the premier Dermatology journal. (*Thomson Reuters 2017 Journal Citation Reports)

Keep up to date with the latest JID research and news! Follow us on: Facebook Twitter JID Jottings

Aims and scope of journal
The Journal of Investigative Dermatology (JID) publishes high impact reports describing original research related to all aspects of cutaneous biology and skin disease. Descriptions of important findings that result from basic, translational, or clinical research are appropriate for submission. Clinical research can include, but is not limited to, interventional trials, genetics studies, epidemiology, and health services research. For more information, see our Instructions for Authors

Impact factor
2016 Impact Factor 6.287*
Rank: 2/62 Dermatology
*2016 Journal Citation Reports Science Edition (Thomson Reuters, 2017)

IMPACT FACTOR

2016: 6.287 © Clarivate Analytics Journal Citation Reports 2017
ABSTRACTING AND INDEXING

Biological Abstracts
Current Contents / Clinical Medicine
Current Contents/Life Sciences
SciSearch/Science Citation Index Expanded
EMBASE/Excerpta Medica
Medline/Index Medicus
International Pharmaceutical Abstracts
Reference Update
Science Citation Index
Chemical Abstracts
CAB Abstracts
Global Health
EBSCOhost
ADONIS
Pascal
BIOSIS
Sociedad Iberoamericana de Informacion Cientifica (SIIC) Data Bases

EDITORIAL BOARD

Editor
Mark C. Udey, St. Louis, MO, USA

Principal Deputy Editor
Thomas Krieg, Cologne, Germany

Deputy Editors
Leena Bruckner-Tuderman, Freiburg, Germany
Kilian Eyerich, Munich, Germany
David E. Fisher, Boston, MA, USA
Joel Gelfand, Philadelphia, PA, USA
Valerie Horsley, New Haven, CT, USA
Sarah Millar, Philadelphia, PA, USA
Tony Oro, Stanford, CA, USA
Vincent Piguet, Toronto, Canada

Statistical Editor
Chao Xing, Dallas, TX, USA

JID Connector Editor
Lynn A. Cornelius, St. Louis, Missouri, USA

Cells to Surgery Quiz Editor
Keyvan Nouri, Miami, FL, USA

Meet the Investigator Editor
Ayman Grada, Boston, MA, USA

Meeting Reports Editor
Robert Dellavalle, Denver, Colorado, USA
Gerald S. Lazarus, Baltimore, Maryland, USA

Milestones Editor
Robert Dellavalle, Denver, Colorado, USA
Hensin Tsao, Boston, Massachusetts, USA

Podcast Editors
Abigail Baird, New Haven, CT, USA
Robert Dellavalle, Denver, Colorado, USA
Olivier Gaide, Lausanne, Switzerland
Research Techniques Made Simple
Jodi Lynn Johnson, Chicago, IL, USA (Coordinating Editor)
Brian Kim, St. Louis, Missouri, USA (Contributing Editor)

SnapshotDx Quiz Editor
Mariya Miteva, Miami, FL, USA

Section Editors
Martine Bagot, Paris, France
Isaac Brownell, Bethesda, MA, USA
Keith A. Choate, New Haven, CT, USA
Michael Detmar, Zurich, Switzerland
James T. Elder, Ann Arbor, MI, USA
John E. Harris, Worcester, MA, USA
Daniel Kaplan, Pittsburgh, PA, USA
Ethan A. Lerner, Boston, MA, USA
Carien M Niessen, Cologne, Germany
Aimee S. Payne, Philadelphia, PA, USA
Martin Roecken, Tübingen, Germany
Thomas Schwarz, Kiel, Germany
Phyllis I. Spuls, Amsterdam, The Netherlands
Marjana Tomić-Canic, Miami, FL, USA
Xiao-Jing Wang, Denver, CO, USA

Editors Emeriti
Barbara Gilchrest, 2012-2017
Marion B. Sulzberger, 1938-1949
Naomi M. Kanof, 1949-1967
Richard B. Stoughton, 1967-1972
Irwin M. Freedberg, 1972-1977
Ruth K. Freinkel, 1977-1982
Howard P. Baden, 1982-1987
David A. Norris, 1987-1992
Conrad Hauser, 1997-2002
Lowell A. Goldsmith, 2002-2007
Paul R. Bergstresser, 2007-2012

Managing Editor
Elizabeth Nelson Blalock, Chapel Hill, NC, USA

Editorial Process Manager
Sarah Forgeng, Chapel Hill, NC, USA

Medical Writer
Heather Yarnall Schultz, Huntington, WV, USA

Editorial Consultants
Boris C. Bastian, San Diego, California, USA
Carola Berking, München, Germany
Wendy B. Bollag, Augusta, Georgia, USA
Jan Nico Bouwes Bavinck, Leiden, Netherlands
Joke Bouwstra, Leiden, Netherlands
Leena Bruckner-Tuderman, Freiburg, Germany
Julide T. Celebi, New York, New York, USA
Cheng-Ming Chuong, Los Angeles, California, USA
Thomas N. Darling, Bethesda, Maryland, USA
Jeffrey M. Davidson, Nashville, Tennessee, USA
Mitchell F. Denning, Chicago, Illinois, USA
Richard L. Eckert, College Park, Maryland, USA
Alexander H. Enk, Heidelberg, Germany
Kenneth Feingold, Washington D.C., USA
Gary Fisher, Ann Arbor, Michigan, USA
Carsten Flohr, London, England, UK
Mayumi Fujita, Aurora, Colorado, USA
Richard Gallo, San Diego, California, USA
Luis A. Garza, Baltimore, Maryland, USA
Spiro Getsios, Chicago, Illinois, USA
Michel F. Gilliet, Lausanne, Switzerland
Michael Girardi, New Haven, Connecticut, USA
Matthias Goebeler, Würzburg, Germany
Kathleen J. Green, Chicago, Illinois, USA
Emma Guttmann, New York, New York, USA
Michael Hertl, Marburg, Germany
Alain Hovnanian, Paris, France
Rivkah Isseroff, Davis, California, USA
Andrew Johnston, Ann Arbor, Michigan, USA
Kenji Kabashima, Kyoto, Japan
Veli-Matti Kähäri, Turku, Finland
Sarolta K. Karpati, Budapest, Hungary
Tatsuyoshi Kawamura, Yamanashi, Japan
Reinhard Kirnbauer, Vienna, Austria
Heidi H. Kong, Bethesda, Maryland, USA
Andrew P. Kowalczyk, Atlanta, Georgia, USA
Jo Lambert, Ghent, Belgium
Michelle Lowes, New York, New York, USA
David Margolis, Philadelphia, USA
Alexander Marneros, Boston, Massachusetts, USA
Alain Mauviel, Paris, France
Caterina Missero, Napoli, Italy
Akimichi Morita, Nagoya, Japan
Paul Nghiem, Seattle, Washington, USA
Manabu Ohyama, Tokyo, Japan
Amy S. Paller, Chicago, Illinois, USA
Andrey A. Panteleev, Dundee, Scotland, UK
Carlo Pincelli, Modena, Italy
Graça Raposo, Paris, France
Dennis Roop, Denver, Colorado, USA
Sarbjit S. Saini, Baltimore, Maryland, USA
Fernanda H. Sakamoto, Boston, Massachusetts, USA
Helmut Schaider, Queensland, Australia
Christoph Schlapbach, Bern, Switzerland
Martin Schmelz, Mannheim, Germany
Julia A. Segre, Bethesda, Maryland, USA
John T. Seykora, Philadelphia, Pennsylvania, USA
Eli Sprecher, Tel Aviv, Israel
Richard Spritz, Denver, Colorado, USA
Georg Stingl, Vienna, Austria
Makoto Sugaya, Tokyo, Japan
John P. Sundberg, Bar Harbor, Maine, USA
Sergey M. Troyanovsky, Evanston, Illinois, USA
Maurice A. van Steensel, Singapore, Malaysia
Baoxii Wang, Beijing, China
Nicole Ward, Cleveland, Ohio, USA
Stephan Weidinger, Kiel, Germany
Traci A. Wilgus, Columbus, Ohio, USA
Xuejun Zhang, Anhui, China
Detlef Zillikens, Lübeck, Germany
GUIDE FOR AUTHORS

INTRODUCTION

JID Scope
The Journal of Investigative Dermatology (JID) publishes high impact reports describing original research related to all aspects of cutaneous biology and skin disease. Descriptions of important findings that result from basic, translational, or clinical research are appropriate for submission. Clinical research can include, but is not limited to, interventional trials, genetic studies, epidemiology, and health services research.

Standard features of the Journal include Original Articles, Review Articles, and Letters to the Editor. Perspectives and Commentaries are invited by the Editorial Board. Online features enhance JID content, making it more relevant and accessible, especially to non-scientists, trainees, and clinician-educators.

The JID places a high priority on publication of new insights into basic cutaneous biology, disease pathogenesis and treatment. Reports that describe a new methodology, technique, or tool in combination with mechanistic insights into the problem that is being investigated are encouraged. It is possible that occasional descriptions of novel technology, methodology, or resources that are of special interest or utility to JID readers could be competitive for publication, even in the absence of new mechanistic insights. Reports describing novel mutations in known genes with no new mechanistic data will not be sent for review. Case reports or case series, unless they provide new biologic insights, are rarely appropriate for the Journal.

Initial submissions of Original Articles must adhere, in principal, to JID manuscript guidelines but they need to not be formatted specifically for the JID. The following sections should be included: Title page, Abstract, Introduction, Results, Discussion (Results and Discussion may be combined), Materials and Methods, Conflict of Interest Statement, Acknowledgements, References, Tables, Figure Legends, and Supplementary Material. Figures and figure legends may be inserted directly in the text where they are first referred to. Formatting requirements will be imposed at the time of first revision. Please note: Original Article manuscripts that are determined to significantly exceed these limits, or that do not include all of the elements listed below, may be returned to the authors for revision prior to review.

At the Editor’s discretion, submissions may be considered via a newly instituted fast track review process. This could lead to online publication of Original Articles within 30 days of the initial submission. It is anticipated that only a minority of Original Article submissions will undergo fast track review.

Queries regarding the submission appropriateness can be directed to the JID Editor at JIDEditor@sidnet.org.

BEFORE YOU BEGIN

Ethics in Publishing
For information on Ethics in publishing and Ethical guidelines for journal publication see https://www.elsevier.com/publishingethics and https://www.elsevier.com/journal-authors/ethics. When addressing issues of publication ethics, JID generally follows the flowcharts published by the Committee on Publication Ethics (COPE; http://www.publicationethics.org).

Scientific Integrity
All submissions to and publications in the JID are assumed to be the product of honest observations. By submission, the first and senior authors take full responsibility for the integrity of the work as a whole, from inception to the published article. If substantial doubts arise regarding the scientific integrity of any submission or publication it is the responsibility of the Editor to pursue these issues with the author(s). The first and senior authors are responsible for communicating with the editorial office on issues of scientific misconduct or the retraction of a published manuscript, should questions of this type arise. Issues of scientific integrity include but are not limited to duplicate submission and publication, falsification or fabrication of data, and plagiarism. If issues of scientific integrity cannot be resolved with the authors to the satisfaction of the Editor, they will be referred to the institution where the work was done and/or the author’s funding agency for further investigation. If the work is deemed to be fraudulent the JID will print a retraction, preferably signed by all authors of the work in
question. The editors reserve the right to initiate the retraction of a published manuscript, should it be deemed appropriate. Alternatively, the Editor may choose to print an expression of concern regarding the work, with an explanation.

**Human Studies**
The authors' Institutional Review Board must have approved human in vivo studies. This should be stated in the Methods section of the manuscript. All patients referred to in human studies should be identified by number, not by name. Identifying information should not be published in written descriptions, photographs, or pedigrees unless the information is essential for scientific purposes and the patient (or parent or guardian) has given written informed consent for publication. All clinical investigation must have been approved by the author's Institutional Review Board or Research Ethics Committee, and written informed consent must have been obtained from all patients. In addition, retrospective studies must have Institutional Review Board approval. This should be stated in the Methods section of the manuscript. The editors reserve the right to reject manuscripts that fail to meet these criteria, and to ask for proof of Institutional Review Board approval.

Include a statement affirming that patients consented to publication, if their image or case history is used. For images, this statement should be included at the end of the figure legend.

*JID* ascribes to NIH's policy on "Consideration of Sex as a Biological Variable in NIH-funded Research." Therefore, as stated in the NIH guidance document, authors should "provide the sex of research subjects and/or materials, when possible. Report when sex differences are, or are not, detected in analyses, as this may be valuable for future research and meta-analysis."

Include a statement affirming that patients consented to publication, if their image or case history is used. For images, this statement should be included at the end of the figure legend.

**Animal Studies**
All animal studies must be approved by the author's institutional animal care and use committee and conducted according to the NIH Guide for the Care and Use of Laboratory Animals or equivalent guidelines. This should be stated in the Methods section of the manuscript. The editors reserve the right to reject manuscripts that fail to meet these criteria.

*JID* ascribes to NIH's policy on "Consideration of Sex as a Biological Variable in NIH-funded Research." Therefore, as stated in the NIH guidance document, authors should "provide the sex of research subjects and/or materials, when possible. Report when sex differences are, or are not, detected in analyses, as this may be valuable for future research and meta-analysis."

**Conflict of Interest**
Each author must indicate on the Conflict of Interest Disclosure Form whether they have financial, equity, patenting, or other relevant relationships or arrangements with a product or sponsor of research that might constitute a conflict of interest. More information on conflict of interest can be found on the form and in the Uniform Requirements for Manuscripts Submitted to Biomedical Journals, by the International Committee of Medical Journal Editors. Sources of support or declared conflicts should be stated in the manuscript. If the authors have no conflict of interest to declare, this should be noted using the standard phrase, "The authors state no conflict of interest." For more information on Conflict of Interest, see also https://www.elsevier.com/conflictofinterest.

**Submission Declaration**
Submission of an article implies that the work described has not been published previously (except in the form of an abstract or as part of a published lecture or academic thesis, see the 'Prior Publication' section below 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 including electronically in the same form, in English or in any other language, without the written consent of the copyright-holder.

**Prior Publication**
*JID* considers results to have already been published if they have appeared in sufficient detail to allow replication, are publicly accessible with a fixed content, and have been validated by peer review. A summary of work in a review, a perspective, a commentary, a newspaper, or magazine article does not constitute prior publication, nor does presentation of data in a Master's or Doctoral thesis.
Presentation at a national scientific meeting or a webcast of such a meeting, where the data are not published in full, does not constitute prior publication. In cases where data have been presented in an abstract or thesis, this should be stated in the Acknowledgments. Our guiding principle is that journals should interfere minimally in such exchanges.

**Authorship Conditions**

*JID* ascribes to the authorship guidelines described in the The Uniform Requirements for Manuscripts Submitted to Biomedical Journals, by the International Committee of Medical Journal Editors. Briefly, each author should have participated sufficiently in the intellectual content of the work to take public responsibility for appropriate portions of its content. Authorship credit should be based on: 1) conception and design, or acquisition of data, or analysis and interpretation of data; 2) drafting or revising the manuscript critically for important intellectual content; 3) final approval of the version to be published; 4) agreement to be accountable for all aspects of the work in ensuring the questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved. All conditions must be met. In addition, any revisions and the final version of any accepted manuscript must be approved by all authors.

The contributions of those who do not meet these authorship requirements may be noted in the Acknowledgments section of the manuscript.

**Corresponding Author Responsibilities**

Our submission system allows one author to complete the submission process (i.e., submitting author), while designating another to receive correspondence concerning the submission (i.e., corresponding author). Upon submission, the corresponding author must complete a License to Publish form. This will be presented within the online submission system. Prior to publication, a Declaration of Conflict of Interest form must be completed by every author. Upon acceptance, the Corresponding Author will be asked to provide the editorial office with the text of the final, accepted manuscript in a Word (.doc) or other document file and one complete set of digital publication-quality figures. Failure to provide these materials will result in a delay in publication. Author proofs and queries will be sent to the Corresponding Author by email; these will require a 48-hour turnaround. No substantive changes may be made in the proof stage without the written approval of the Editor. Journal policy allows ONE corresponding author for published articles. If specific authors are to be addressed concerning particular aspects of the published work, this may be indicated in the Acknowledgments section.

**Changes to Authorship**

Changes in authorship at any point in the review or publication process must be explained to the Editor in a letter signed by all authors, including by any author being added or deleted. The letter must include the original and the revised authorship lists and the reason for the requested change. Approved author changes requested after publication will result in an erratum.

**Authorship Disputes**

Authorship disputes will not be handled by the journal; instead, these will be referred to the authors to resolve. If the authors cannot resolve the issue themselves, the journal will recommend that the authors bring the matter to the attention of their institutions. Any article with a known authorship dispute will be suspended from review or publication, depending on its status.

**Registering & Reporting Clinical Trials**

The *JID* welcomes submissions of high quality, well-designed clinical trials that have the potential to change clinical practice. *JID* is particularly interested in clinical research that elucidates disease mechanisms or the mechanisms of action for new therapies. A clinical trial is "any research project that prospectively assigns human subjects to intervention and comparison groups to study the cause-and-effect relationship between a medical intervention and a health outcome" (ICMJE definition).

All trials submitted to the *JID* must be 1) prospectively registered and 2) fully reported.

1. **Prospective trial registration.** The purpose of prospective trial registration is to overcome selective reporting bias. The *JID* adheres to the principles set out by the International Committee of Medical Journal Editors (ICMJE) that all clinical trials need to be registered in an approved publicly accessible clinical trial register before patient recruitment begins. A list of ICMJE approved registries can be found here. Studies that register after recruitment has started or after recruitment has been completed will not be considered. The Clinical Trial registration number should be included at the end of the abstract.
2. **Full reporting.** The purpose of complete reporting is to allow our readers to see exactly what was done in the trial so that if needed, the study could be replicated. Many forms of bias can occur within trials, and how these have been dealt with need to be clearly reported. The *JID* endorses the Consolidated Standards of Reporting Trial (CONSORT) Statement and requires authors to report their clinical trials fully according to the latest revision (currently 2010). Authors are required to indicate using this form where in their manuscript submission the 25 items included in CONSORT 2010 are located, along with a participant flow diagram.

To support full reporting of Clinical Trials, a structured abstract is required.

For details on preparing your RCT for submission, see the CONSORT website.

**Copyright**

Authors publishing in *JID* retain copyright in their articles and grant the Society for Investigative Dermatology an exclusive license to publish their work. In return, authors can reuse their own articles in any future published work and post them on their own website. Upon submission of an article, the corresponding author will be asked to complete a 'License to Publish' form.

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 (please consult https://www.elsevier.com/permissions). 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: please consult https://www.elsevier.com/permissions.

For open access articles: Authors will be asked to complete an 'Exclusive License Agreement' (for more information see https://www.elsevier.com/OAauthoragreement). Permitted third party reuse of open access articles is determined by the author’s choice of user license (see https://www.elsevier.com/openaccesslicenses).

**Author Rights**

As an author you (or your employer or institution) have certain rights to reuse your work. For more information see https://www.elsevier.com/copyright. Authors publishing in *JID* retain copyright in their articles and grant the Society for Investigative Dermatology an exclusive license to publish their work. In return, authors can re-use their own articles in any future published work, provided the work is properly referenced.

To obtain formal permission for re-use, click on the "Request Permissions" link associated with the article online.

**Self-Archiving**

Authors of original research articles are encouraged to submit the accepted, peer-reviewed manuscript to their funding body’s archive for public release twelve months after publication. For manuscripts funded by certain funding bodies, the publisher will automatically export to the appropriate deposition service those accepted articles whose authors have indicated relevant support. In addition, authors are encouraged to archive this version in their institution’s repositories and on their personal web sites, also twelve months after the original publication. Authors should cite the publication reference and doi number on any deposited version, and provide a link from it to the published article on the *JID* website.

*Elsevier supports responsible sharing*

Find out how you can share your research published in Elsevier journals.

**Role of the Funding Source**

Authors should identify who provided financial support for the conduct of the research and/or preparation of the article and 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. For studies funded by federal agencies or their peer-reviewed equivalent (Wellcome Trust, Howard Hughes Medical Institutes, etc) it is assumed there was no such involvement, but the sources of all other funding should be explicitly stated not to have involvement, provided that is the case.
**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 (OA)**
Authors of research articles can choose to pay an article processing charge to publish their accepted articles open access (i.e., free to all readers, regardless of whether they have a subscription) online immediately upon publication. Please note that the open access article processing charge is in addition to any standard publication charges. By paying this charge authors are also permitted to post the final, published PDF of their article on a website, institutional repository, or other free public server immediately upon publication.

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

The publisher will contact the corresponding author about Open Access options after manuscript acceptance.

**Open Access Fee**
The Open Access publication fee for this journal is **$3,200**, excluding taxes. Learn more about Elsevier's pricing policy: [https://www.elsevier.com/openaccesspricing](https://www.elsevier.com/openaccesspricing).

**Society Member Open Access Discount**
The Open Access publication fee for corresponding authors who are individual members of the Society for Investigative Dermatology and European Society for Dermatological Research will be discounted to **$2,600**.

**Open Access Creative Commons Licenses**
For open access articles, how others may use or re-use your work is defined by which of the following Creative Commons licenses you select:

- **Creative Commons Attribution-NonCommercial-NoDerivs (CC BY-NC-ND)**
  For non-commercial purposes, allows others to distribute and copy the article, and to include it 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.

- **CC BY License**
  This license allows others to distribute and copy the article, create extracts, abstracts, and other revised versions, adaptations or derivative works of or from an article (such as a translation), include it in a collective work (such as an anthology), and text or data mine the article, even for commercial purposes, as long as they credit the author(s), do not represent the author as endorsing their adaptation of the article, and do not modify the article in such a way as to damage the author's honor or reputation.

*Creative Commons Attribution (CC BY) licenses are available only for authors whose funding body requires it for publication and/or reimbursement of the Open Access fee.*

**Language (Usage and Editing Services)**
Please write your text in good English (American or British usage is accepted, but not a mixture of these). Authors who feel their 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/](http://webshop.elsevier.com/languageediting/)) or visit the customer support site ([http://support.elsevier.com](http://support.elsevier.com)) for more information.

Authors may receive criticism from referees or editors about English-language usage in their manuscripts. Grammatical errors may distract readers from your scientific message and may lead to less favorable reviews. To reduce the likelihood of this possibility, we encourage authors who are not native speakers of English to enlist a native English speaking colleague to review their manuscript for clarity. When this is not possible, authors may wish to use an editing service such as one of those listed below. The use of such services is at the authors’ expense and does not guarantee that articles will be accepted. While the services listed below have been vetted, other commercial editing services may be employed instead. *JID* cannot accept responsibility for the interaction between authors and
service providers or for the quality of the work performed. **American Journal Experts BioScience WritersDerMEDITInter-Biotech** also provides a free online writing course for researchers whose first language is not English, to help them write for and publish papers in English-language journals **SPI Professional Editing Services Write Science Right**

**Manuscript Preparation**

Authors are encouraged to read **JID**'s Editorial Policies before submitting their work. All submissions must comply with these policies. **JID** requires electronic submission of manuscripts. For assistance with the site, contact ScholarOne Manuscripts at +1 434-964-4100. For questions regarding your submission, contact the Editorial Office at JIDOffice@sidnet.org. You will need the information below to complete your online submission. Submissions are dated according to receipt of all items listed below. No editorial decision will be communicated to the authors until the submission is complete.

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

Please submit your article via [https://mc.manuscriptcentral.com/jid](https://mc.manuscriptcentral.com/jid).

**Peer Review**

**JID** employs ScholarOne Manuscripts to conduct single-blinded peer review (the identity of peer reviewers is kept confidential), as detailed in the graphic below. Authors may suggest the invitation or exclusion of up to four reviewers at the time of submission. The journal will take these recommendations into consideration; however, the final decision regarding reviewers lies with the Editor. Submissions that will not be fully peer reviewed generally receive a decision within 5 days. Fully peer-reviewed submissions are evaluated by at least two reviewers, one of whom will be a **JID** Editorial Board member; most will receive a decision within an average of 30 days.

Manuscripts are considered privileged information. Reviewers and editors are instructed to declare any personal or financial conflict of interest on the review forms, and they are expected to maintain confidentiality of a manuscript's contents. Further information about reviewing for **JID** can be found in our **Reviewer Guidelines**.

You may submit the names and institutional email addresses of potential referees. You may also request the exclusion of a limited number of referees. Note that the editor retains the sole right to decide whether the suggested reviewers are used or excluded.

**Revisions**

Revised manuscripts are due within 60 days of receipt of the decision letter. Manuscripts not received within this time will be dated and treated as new submissions. Revisions will be returned to the original reviewers, and new reviewers will be enlisted at the discretion of the editor. Not all revised manuscripts will be accepted. Any extension must be requested in writing to JIDEditor@sidnet.org and may be granted at the discretion of the editor. All revised submissions are run through the iThenticate plagiarism checking software. For more information about plagiarism and the use of iThenticate, see the editorial. If, after reconsideration, the manuscript is not suitable for publication with only minor editorial changes, it must be resubmitted as a new manuscript to be reconsidered.

**Submitting a Revision**

**Underline Changes.** All changes made in a revised manuscript must be underlined. This will help reviewers locate the changes that correspond with your point-by-point response. Please note in your cover letter if the changes are so extensive (i.e., more than 75% of the document) that it would be unreasonable to underline the changes.

**Responses to Editors and Reviewers.** Responses to reviewers and editors should be included as a text (.doc or .docx) file with the manuscript files and named response to reviewers. When uploading to the submission system, designate the file type as cover letter. Your responses should also be included in the spaces provided in the online system.
Rebuttals
Editorial decisions are rarely reversed. Authors with serious concerns about potential scientific errors in the review process may send a rebuttal letter to the editor at JIDEditor@sidnet.org. Only written appeals will be considered.

Rejected manuscripts may be resubmitted for consideration only with explicit permission of the Editor and if significant new data are presented. In such cases, the submission will be given a new manuscript number and date of receipt, and it will be treated as a new manuscript.

ORCID Identifiers
In 2014, the JID began accepting author Open Researcher and Contributor IDs (ORCID). ORCID is a non-profit organization dedicated to solving the long-standing name ambiguity problem in scholarly communication by creating a central registry of unique identifiers for individual researchers and an open, transparent linking mechanism between ORCID and other current author identifier schemes. To learn more about ORCID, please visit http://www.orcid.org.

Medical Writers
The journal allows the participation of medical writers in the preparation of manuscripts. The role of the medical writer and the identity of the entity that paid for this assistance should be disclosed in the Acknowledgments section of the manuscript.

Statistical Guidelines
The standard error of the mean should be presented only when the intent is to quantify the precision of the sample mean as an estimate of the population mean. The standard deviation should be presented when the intent is to present a descriptive statistic about the sample or an estimate of the population standard deviation. As much as possible, summaries in tables and figures should indicate the sample sizes upon which they are based. For more guidance on statistical methods, refer to the New England Journal of Medicine Instructions to Authors.

Archiving
The Editorial Office will retain an electronic file of each manuscript and related correspondence for 12 months following the final editorial decision, or, in the case of accepted manuscripts, publication.

Announcements
Brief announcements of scientific meetings, availability of fellowship grants, and awards for research relevant to the readership will be published at the discretion of the Editor. Announcements much reach the editorial office at least 8 weeks before their anticipated publication. In general, announcements will be published only once.

PREPARATION
General
Manuscripts should be concise, economical of references, figures and tables, and formatted as described below. Reports of investigative studies should be organized as follows, within the stated word limits. Details about each section are provided in the instructions that follow. The text should be submitted as a .doc or .docx file (not a .pdf). Manuscripts that do not conform to these specifications will be returned to the authors for correction.

1 Element Description
Language English (US spelling preferred) Font 12-point, Times New Roman Line spacing Double-spaced throughout Margins One inch (2.5 cm) on all sides Page numbers Yes; start with the title page as page 1

Begin a new page for References, Tables, and Figure Legends Line numbers Do not number lines of text Order of sections Title page, Abstract, Introduction, Results, Discussion (Results and Discussion may be combined into one section), Materials & Methods, Conflict of Interest, Acknowledgements, References, Tables, Figure Legends, Supplementary Material Heading style First level: ALL CAPS, BOLD; Second level: Sentence Case, Bold Underline; Third level: Sentence Case, Bold Italic Figure legends Provide both a brief, overall title and a detailed legend of 125 words or fewer. File type Text: Word (.doc or .docx file)
Separate image files How to Format Your Manuscript for Submission to JID

Article Types and Word Limits
Below please find word limits, figure limits, and reference limits for Original Articles, Letters to the Editor, and Review articles.
**1 Article Type Description Word limit**

Abstract word limit Reference limit Figures and tables Total printed pages

Original Article Present original research. Investigative studies should be organized as follows: Title page, Abstract, Introduction, Results, Discussion, Materials & Methods, Conflict of Interest, Acknowledgments, References, Tables, Figure Legends. 3,500 200 No limit 6 9 Letter to the Editor Report original research, or discuss published articles. Letters should be organized as follows: Title page, Letter, Conflict of Interest, Acknowledgments, References, Tables, Figure Legends. 1,000 Enter a brief summary of the major findings in the required abstract space in the submission system 15 2 3 Randomized, Clinical Trial Submissions must comply with the CONSORT requirements (http://www.consort-statement.org), including the CONSORT checklist and flow diagram 3,500 200

A structured abstract is required. See the CONSORT guidelines for details. No limit 6 7 Review Comprehensive, scholarly, and balanced, presenting an expert curation of the literature in the topic of interest. Consult the Editor a JIDEEditor@sidnet.org before submission. Include a list of your relevant publications to support your proposal 3,000 100 No limit 2 No limit

**Types of Articles Considered by JID and Associated Word Limits**

*Submissions that do not comply with these guidelines will be returned to the authors for revision.

**The manuscript word limit excludes the abstract, references, figure legends, tables, and supplemental data. It includes in-text citations.

***500 words of text may be substituted for a ¼-page figure.


**Cover Letter**
The cover letter must include: A summary of the research being reported and a description of its importance; The data in the manuscript is original and the manuscript is not under consideration elsewhere; None of the manuscript contents have been previously published except in abstract form; All authors have read and approved all versions of the manuscript, its content, and its submission to the JID; Willingness to pay page charges ($150/page, inclusive of color), should the manuscript be accepted for publication; If the submission contains supplemental files, willingness to pay online fees ($125/file); A single corresponding author's address, telephone, fax, email (email address required).

**Submission Checklist**
Submissions must include:
One-page cover letter. License to Publish form, signed by the corresponding author. (This form will be presented within the submission system.) Declaration of Conflict of Interest form, signed by all authors. (This form will be presented within the submission system, and an email will be sent to all authors requesting they complete it.) Manuscript Submission Fee of $50 (payable at time of submission; credit card, check number, or purchase order number required). Text file (.doc or .docx). Figure files (.tif, .eps, or .ppt), if the submission includes figures. You will be asked to enter an email address for every author; have this information ready.

**Title Page**
The title page should include the following:
Brief, informative title of 120 characters or fewer (brand names may not be used in the title) Authors' full names, ORCID, (if any), departments, and institutions (indicate affiliations numerically with numbers placed after authors' names and before the institutions) All authors' emails are required by our electronic submission system. Have these ready at the time of submission. City, state and country in which the work was done Corresponding author's address, telephone, fax, and email (email address required) Short title of 45 characters or fewer, including spaces Abbreviations used (see below for detail on abbreviations)

**Abstract**
Do not exceed the stated word limit Briefly summarize the background, purpose, results and conclusions of the study, in that order, without headings Do not include nonstandard abbreviations, acknowledgments of support, or refer to footnotes or references Write with a general scientific audience in mind Brand names may not be used in the abstract For Letters to the Editor, enter a brief summary of the major findings in the required abstract space in the submission system. For Randomized Clinical Trials, a structured abstract is required. For details, refer to the CONSORT guidelines for abstracts.

**Introduction**
Begin with a brief introductory statement that places the work to follow in historical perspective and explains its intent and significance.
Results and Discussion

In the Results section, briefly present the experimental data in text, tables, or figures. The Discussion should focus on the interpretation and significance of the findings with concise, objective comments that describe their relation to other work in the area. Do not repeat information from the Results. Results and Discussion may be presented separately or combined into a single section.

Materials and Methods

Readers should be able to fully understand and reproduce the experiments described from the information in the Materials and Methods section, Figure Legends, Table footnotes, and References, in conjunction with the Supplementary Material. The Materials and Methods section may be abbreviated if details are provided in the Supplementary Material. However, the print version of the article must stand on its own as a comprehensive document without the Supplemental Material. The manufacturer's name and location (city, state if within the US; city, country if outside the US) should be provided for materials that were purchased. This would normally include the identity (chemical formula) of all reagents employed. Unique non-proprietary reagents that are utilized (e.g., cells, DNA, antibodies) and instruments created for surveys of accepted articles must be made freely available to qualified scientists. Only under this condition is the information useful to the scientific community, and only in this way can results be reproduced by other scientists.

Manuscripts reporting human studies must include a statement that all human studies were approved by the authors' Institutional Review Board and affirming that patients gave their written, informed consent. Reports of Clinical Trials must conform to the Editorial Policies concerning the registration and reporting of Clinical Trials. Submissions that do not comply with these specifications will be returned to the authors for correction prior to review.

Manuscripts reporting animal studies must include a statement that the authors' institution approved the studies and that they were conducted according to the NIH Guide for the Care and Use of Laboratory Animals or equivalent guidelines.

Conflict of Interest

Financial or personal involvements that pose a potential duality of interest for authors should be clearly disclosed in the manuscript under the heading "Conflict of Interest." If no conflicts exist, please use the standard phrase, "The authors state no conflict of interest." Upon submission, all authors will be asked to complete and sign a Conflict of Interest Disclosure Form.

Acknowledgments

A note of acknowledgment is appropriate recognition for contributors who provided help during the research but whose contributions do not qualify them as authors. For details on authorship, see the Authorship section.

References

The journal's EndNote page can be found here: http://endnote.com/downloads/style/journal-investigative-dermatology.

References should be listed alphabetically on a separate page at the end of the manuscript. List the first 6 authors, followed by et al if there are more. If necessary, further sort the list chronologically. More than one reference from the same author(s) in the same year must be identified by the letters "a," "b," "c," etc. placed after the year of publication. To save space, the citation of appropriate recent review articles is encouraged. Only published articles, published abstracts, and manuscripts in press should be cited in the references. Any references listed as "in press" should be submitted with the manuscript for the reviewers' reference. See the examples below for details for presenting the references.

Footnotes

Any citations to unpublished works must be shown as footnotes, not in the reference list. Footnotes should be presented in parentheses in the text.

Tables

Create tables in an editable format. Include them in your text file. Tables should be self-explanatory and not duplicate content from the text. Present one table per page. Number tables sequentially (1, 2, 3) and cite them in chronological order in the text. Each table should include an informative title. Provide the description of the experiment, definition of columns or abbreviations, etc. in footnotes to the title and table contents. Label footnotes 1, 2, 3, etc. Define errors in the table by a footnote,
e.g., "mean +/- SD" or "mean +/-SEM". Check that the data in the tables are consistent with those cited in the relevant papers in the text, totals add up correctly, and percentages have been calculated correctly. If possible, limit each table to a maximum of one page. (The editor reserves the right to move large tables to supplementary material.) JID_GfA_Sample_Table.jpgSample table

**Figures**

Figures should be intelligible without reference to the text and should complement the text. Figures should be labeled sequentially (1, 2, 3) and cited in the text, but not embedded within the text. Figures should be submitted as individual image (.eps, .tif, .ppt) files, not as .pdfs.

**Artwork Guidelines**

Detailed guidelines for submitting artwork for publication can be found in the artwork instructions. Submit production quality artwork with your initial submission. Please note: file size limitations may require that publication-quality figures be compressed for submission and peer review purposes.

**Appropriate Conduct Concerning Images**

No specific feature within an image may be enhanced, obscured, moved, removed, or introduced. Adjustments of brightness, contrast, or color balance are acceptable if they are applied to the whole image, and as long as they do not obscure or eliminate any information present in the original. The grouping of images from different parts of the same gel, or from different gels, fields, or exposures must be made explicit by arrangement of the figure (i.e., using dividing lines) and in the text of the figure legend. If the original data cannot be supplied by the author upon request, the acceptance of the manuscript may be revoked. Refer to the article "What's in a picture? The temptation of image manipulation" by Rossner and Yamada (J Cell Biol 166:11-15, 2004) for details.

**Figure Titles & Legends**

Present the figure title (a brief, overall description of the figure) in the legend that is included in the text. Do not put the title on the figure. Legends should explain how an experiment was done and identify parts of the figure (i.e., a, b, c); they should not interpret the figure. Indicate the meaning of all symbols, keys and abbreviations used in the figure. Error bars should be defined in the legend as "mean +/- SD" or "mean+/-SEM." If you use SEM give n for each point.

**Figure Sizing**

Figures must be supplied at a minimum resolution of 300 dpi. Submit artwork of exact column measurements and crop out unnecessary areas (1 column = 87.50mm; 2 columns = 180mm). Most figures should be presented at 1 column width (or quarter page in size). Illustrative elements (figure/tables) are limited to ¼ page each (approx 87.5 mm x 115 mm). Authors may supply fewer, larger elements (i.e., for an original article three ½-page figures may be presented rather than six 1/4-page figures — or any combination that results in no more than 1 ½ pages of figures and tables). In addition, 500 words of text may be substituted for one figure, or vice versa.

**Figure Labeling**

Figure parts should be noted as a, b, c, etc., in lower case Ariel font. Place labels in the white space above or beside the image. Use uniform lettering and sizing to ensure that labels are legible if figures must be re-sized.

**Line Drawings**

Line drawings should be supplied at 600 dpi. Drawings should have clear, uniform lines of thickness. Curves should be smooth. Use 3-dimensional graphs only to present a third dimension of data. Label axes parallel to the axis. Labels must be clearly legible. Color may be used in charts and graphs. If using black and white, bar graphs should use a patterned print (not shades of gray). Photomicrographs

A scale bar (not magnification) must be placed on micrographs. Indicate the scale in the legend only, e.g., "scale bar = mm". Place labels in the white space above or beside the image.

**Figure Formats**

For help with electronic artwork, go to https://www.elsevier.com/artworkinstructions. Some highlights are provided below. Artwork created in a Microsoft Office application (Word, PowerPoint, Excel) should be supplied "as-is" in its native document format. For all other applications, "save as" or convert images to one of the following formats (note resolution requirements):EPS (or PDF): Vector drawings, embed all used fonts TIFF (or JPEG): Color or grayscale photographs (halftones), keep to a minimum of 300 dpi TIFF (or JPEG): Bitmapped (pure black & white pixels), line drawings, keep to a minimum of 1000 dpi TIFF (or JPEG): Combinations bitmapped line/half-tone (color or grayscale), keep to a
minimum of 500 dpi **DO NOT** Optimize for screen use (e.g., GIF, BMP, PICT, WPG); these have a low number of pixels and a limited set of colors. Embed the used fonts if the application provides that option.

**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 email to create an AudioSlides presentation after acceptance of their paper.

**Permissions**
If you include previously published or copyrighted material in your manuscript, obtain written permission from the copyright owner to reproduce the material in both print and electronic formats and submit this authorization with the manuscript. This applies to quotes, illustrations, and other materials taken from previously published works not in the public domain. The original source should be cited (if reprinting a figure or table, the citation should appear in the figure legend or table footnote).

**Abbreviations**
Abbreviations Define abbreviations that are not standard in this field in a footnote placed on the title page. Ensure consistency of abbreviations throughout the article. Terms used more than five times may be abbreviated and listed with their abbreviations on the title page. Abbreviations not listed in the Standard or Recommended Abbreviations should conform to those listed in Scientific Style & Format, 8th ed. (University of Chicago Press, Chicago, IL USA, 2014). Capitalize trade names, but use generic names if possible. Trade names may not be used in the title or abstract. The trivial names of chemicals may be used if the formal chemical name is given with the first use of the trivial name.

**Deposition of DNA & RNA Sequences, Microarray Data**
DNA & RNA sequences must have an EMBL or Genbank database accession number, and this number should be given in the legend to the figure showing the sequence.

Authors submitting manuscripts containing microarray data may be asked to supply these data as supplementary information at the request of the reviewers. Microarray data should be presented in a MIAME-compliant standard format and deposited in an approved database; an accession number should be included in the submission. Approved databases include Gene Expression Omnibus and ArrayExpress.

**Reporting on Cell Line Use**
*JID* ascribes to the guidelines provided by the American Association for Cancer Research (AACR; http://www.aacrpjournals.org/site/AuthServCtr/cell_line_auth.xhtml), which state that if cell lines were used in research, a statement addressing the following points must be included in the Materials & Methods section of the manuscript: From where and when the cells were obtained Whether the cell lines have been tested and authenticated The method by which the cells were tested for mycobacterial or other contamination and for DNA mutations How and when the cells were last tested If cells were obtained directly from a cell bank that performs cell line characterizations and passaged in the user's laboratory for fewer than 6 months after receipt or resuscitation, re-authentication is not required. In these cases, the author should include the method of characterization used by the cell bank.

**Provide the Sex of Research Subjects/Animals**
*JID* ascribes to NIH's policy on "Consideration of Sex as a Biological Variable in NIH-funded Research.” Therefore, as stated in the NIH guidance document, authors should "provide the sex of research subjects and/or materials, when possible. Report when sex differences are, or are not, detected in analyses, as this may be valuable for future research and meta-analysis.”

**Supplementary Material**
*JID* accepts electronic supplementary material to support and enhance scientific publication. Supplementary files offer the author opportunities to publish supporting applications, high-resolution images, background datasets, sound clips, and more. At the Editor's discretion, large tables, data sets, etc. may be published as supplementary material. Supplementary files will be published online alongside the electronic version of articles. The print version must be complete and self-explanatory without the supplementary information. Supplemental Material must be supplied to the editorial office in its final form for peer review. Supplementary material should be cited in the text as "Figure S1,
S2, etc.," "Table S1, S2, etc." or "Supplementary Materials and Methods," etc. Please use one of the recommended file formats described below. Supply a concise and descriptive caption for each file. The charge for publishing supplemental data is $125 for the first file and $75 per file thereafter.

Guidelines for preparing supplementary material
All supplemental figures, tables, and text should be compiled into a single .pdf. Exceptions to this include Excel files, videos, audio files, and any other items that cannot be reduced to a flat file .pdf format. Provide titles for each component and include a figure title and legend for each figure and a title for each table. Please check the file carefully, as supplementary information cannot be modified after acceptance. Supplementary information is not copyedited by the journal, so please ensure that it is clearly and succinctly presented, and that the terminology conforms to the rest of the report. Publication may be delayed if these guidelines are not followed. For more detailed information, refer to the artwork instruction pages at https://www.elsevier.com/artworkinstructions.

AFTER ACCEPTANCE
Embargo Policy
All articles accepted for publication in JID are embargoed until the date of online publication.

For Original Articles and Letters to the Editor, both of which are published online before copyediting and typesetting, the following guidelines apply. The publication of the accepted manuscript online is an official publication of a JID article. It is a .pdf of the accepted version of an article, before copyediting, typesetting, or proofing. Original Articles and Letters to the Editor are only embargoed until the accepted manuscript version is published online. In general, this will be 2-4 business days following export of the accepted article to the publisher, although this may vary.

Reviews and Perspectives are embargoed until the date of online publication (of the copyedited, typeset, and proofed version of the article), and editorial material (commentaries, editorials, etc.) is embargoed until the day of online release of the issue in which it is published.

Availability of Accepted Article
JID makes original articles and letters to the editor available online as soon as possible after acceptance by publishing the accepted article (both in HTML and PDF format), which has not yet been copyedited, typeset or proofread. A Digital Object Identifier (DOI) is assigned, thereby making the articles fully citable and searchable by title, author name(s) and the full text. The article carries a disclaimer stating that it is an unedited article. Subsequent production stages will replace this version. The same DOI will be used for all versions.

Use of the Digital Object Identifier
The Digital Object Identifier (DOI) may be used to cite and link to electronic documents. The DOI consists of a unique alpha-numeric character string which is assigned to a document by the publisher upon the initial electronic publication. The assigned DOI never changes. Therefore, it is an ideal medium for citing a document, particularly 'Articles in press' because they have not yet received their full bibliographic information. Example of a correctly given DOI (in URL format): http://dx.doi.org/10.1038/JID.2015.386.

When you use a DOI to create links to documents on the web, the DOIs are guaranteed never to change.

Proofs
One set of page proofs (as PDF files) will be sent by email to the corresponding author, or a link will be provided in the email so that authors can download the files themselves. Elsevier now provides authors with PDF proofs which can be annotated; for this you will need to download the free Adobe Reader, version 9 (or higher). Instructions on how to annotate PDF files will accompany the proofs (also given online). The exact system requirements are given at the Adobe site.

If you do not wish to use the PDF annotations function, you may list the corrections (including replies to the Query Form) and return them to Elsevier in an email. Please list your corrections quoting line number. If, for any reason, this is not possible, then mark the corrections and any other comments (including replies to the Query Form) on a printout of your proof and scan the pages and return via email. Please use this proof only for checking the typesetting, editing, completeness and correctness of the text, tables and figures. Significant changes to the article as accepted for publication will only be considered at this stage with permission from the Editor. We will do everything possible to get your
article published quickly and accurately. It is important to ensure that all corrections are sent back to us in one communication: please check carefully before replying, as inclusion of any subsequent corrections cannot be guaranteed. Proofreading is solely your responsibility.

**Offprints**
The corresponding author, at no cost, will be provided with a personalized link providing 50 days' free access to the final published version of the article on ScienceDirect. This link can also be used for sharing via email and social networks. Both corresponding and co-authors may order offprints at any time via Elsevier's WebShop (http://webshop.elsevier.com/myarticleservices/offprints). Authors requiring printed copies of multiple articles may use Elsevier WebShop's 'Create Your Own Book' service to collate multiple articles within a single cover (http://webshop.elsevier.com/myarticleservices/booklets).

**Publication Charges**
Pages are billed at $150 per printed page, and there are no additional fees for color. Supplemental data files are charged at $125 for the first file and $75 per file thereafter. Authors are invoiced upon final print/online publication. JID does not make the payment of page charges a condition for acceptance of a manuscript for publication. In extraordinary cases, upon appeal by the author before submission of the article, the Editor may waive page charges. Requests should be made in writing to JIDEditor@sidnet.org.

**Author Inquiries**
You can track your submitted article at https://mc.manuscriptcentral.com/jid. You can track your accepted article at https://www.elsevier.com/trackarticle. Or, contact the Editorial Office at JIDOffice@sidnet.org (Phone: 919-932-0140). You are also welcome to contact Customer Support via http://support.elsevier.com.

**Instructions for Authors - PDF Download**
Click here to download a PDF of the JID Instructions for Authors.

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