**Aims and scope**

*BDJ Open* is a peer-reviewed, open-access, online-only journal publishing dental and oral health research from all disciplines. The journal is owned by the British Dental Association (BDA) and is the sister journal of the *British Dental Journal (BDJ)*.

The journal will publish:
- original primary research articles
- study protocols (including protocol design)
- short- and long-term clinical trials (including small studies).

Featured topics of the journal include, but are not limited to, dental materials science, dental public health, restorative dentistry, management of dental disease, periodontology, endodontology, oral surgery, paediatric dentistry, prostodontics, orthodontics, special care dentistry, clinically relevant oral biology and translational research.

**British Dental Association**
The British Dental Association (BDA) is the professional association and trade union for dentists in the United Kingdom and was founded in 1880. As an organisation that is owned entirely by its members and with no external shareholders, the BDA is able to focus solely on its mission to promote the interests of its members; advance the science, arts and ethics of dentistry; and improve the nation’s oral health.

Nature Publishing Group publishes *BDJ Open* on behalf of the BDA. As well as *BDJ Open*, Nature Publishing Group also publishes the *British Dental Journal*, *Evidence-Based Dentistry*, *BDJ Team*, *BDJ In Practice* and *BDJ Student* on behalf of the BDA.

For more information about the BDA, please visit the BDA website.

**Journal details**

**Editor-in-Chief:**
Stephen Hancocks, OBE MA BDS LDS DDPH MCCD FFGDP(UK) RCS
British Dental Association, 64 Wimpole St, London W1G 8YS, United Kingdom

**Editorial Office:** Nature Publishing Group, UK
Email: bdjopen@nature.com

**Manuscript submission website**
http://mts-bdjopen.nature.com/

Updated: 9th March 2015
### ARTICLE TYPE SPECIFICATIONS

<table>
<thead>
<tr>
<th>Article description</th>
<th>Abstract</th>
<th>Unsolicited considered?</th>
<th>Word limit.tables/figures</th>
<th>References</th>
</tr>
</thead>
<tbody>
<tr>
<td>Article</td>
<td>Structured abstract of no more than 200 words, using the following headings as a guideline: Objective/aim; Materials and Methods (including Design and Setting where applicable); Results; Discussion; Conclusions The abstract should contain no references.</td>
<td>Yes</td>
<td>There is no strict word limit imposed on in BDJ Open articles but we encourage authors to write concisely. We suggest that articles be about 5,000 words maximum (not including figures, tables and references). Lengthy papers or papers containing an excessive number of figures may be returned to authors for additional editing. The maximum title length is 20 words.</td>
<td>Max of 50. (as current as possible).</td>
</tr>
</tbody>
</table>

### HOW TO PREPARE YOUR MANUSCRIPT

**BDJ Open** requires electronic submission of manuscripts. Detailed instructions are at our [manuscript submission website](#). For questions regarding your submission, contact the Editorial Office via e-mail. Complete submissions contain all items below, and submissions are dated according to receipt of all items. No editorial decision will be communicated to the authors until the submission is complete.

**Authorship**
The main author (named as the corresponding author on the manuscript) should be prepared to communicate with the editorial office and with all other authors (where appropriate) regarding the submission and preparation of the paper (assuming acceptance). All authors of research papers should have some involvement in at least one of the following: intellectual content of the paper by involvement in the design of the study, the collection of data and/or the analysis and interpretation of data the drafting and editing of the manuscript the statistical analysis of the manuscript substantial involvement in obtaining funding, administrative and/or technical support or supervision of the study.
Cover letter
All submissions must include a cover letter stating:

1. The data in the manuscript is original and the manuscript is not under consideration elsewhere.
2. None of the manuscript contents has been previously published except in abstract form.
3. All authors have read and approved all versions of the manuscript, its content, and its submission to *BDJ Open*.
4. You agree to pay the article processing charge if your paper is accepted (£1300 or £1105 if the corresponding/senior author is a member of the British Dental Association, membership number required).
5. The corresponding author’s address, telephone, fax, and email (email address required).

General style
As the electronic submission will provide the basic material for typesetting, it is important that papers are prepared in the general editorial style of the journal.

1. Titles must be descriptive and concise.
2. The paper must stage all authors’ full names, departments, and institutions (indicate affiliations numerically with numbers placed after authors’ names and before the institutions; indicate the corresponding author using an * in the author list and the format “*Correspondence to: John Smith; Email: jsmith@university.edu* ”). The corresponding author’s email address is required.
3. Units must conform to the Système Internationale d’Unités (SI).
4. Manuscripts should be word processed.
5. Tables should be typed on pages separate from the text. Each should have a caption which will explain the table without reference to the text.

Authors may wish to consider presenting their tables in pie- or bar-chart form. Tables should be cited within the text. A table caption should be supplied where possible.

6. Figures should be submitted separately in TIFF, JPEG or EPS format. Captions must also be supplied. Figures should be cited within the text.

Introduction
The article should begin with a brief introductory statement that places the work to follow in perspective and explains its intent and significance. The Introduction should be as concise as possible.

Materials and methods
This section should contain sufficient detail, so that all experimental procedures can be reproduced, and include references. However, methods that have been published in detail elsewhere should not be described in detail. Authors should provide the name and location of the manufacturer for any specifically named medical equipment and instruments, and all drugs should be identified by their pharmaceutical names, and by their trade name if relevant. Section sub-headings should be used to aid clarity.

Articles involving clinical research should conform to the guidelines issued in the Declaration of Helsinki and manuscript must include a statement confirming the Declaration of Helsinki protocols were followed and that patients gave their written, informed consent, as well as the trial registration number of the study. Trials should have ethical committee approval. For further review of the subject see *Br Med J* 1991; 302: 338-341.

Reports of clinical trials must conform to the CONSORT statement and reports of systematic reviews of clinical trials must conform to the PRISMA statement. Further information can be obtained from [http://www.equator-network.org](http://www.equator-network.org).

*Updated: 9th March 2015*
ARRIVE reporting guidelines must be followed for primary research manuscripts documenting animal studies (*PLoS* Bio 2010; 8: e1000412).

**Discussion**
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. It should not repeat information in Results.

**Conclusions**
The final paragraph should highlight the main conclusion(s), and provide some indication of the direction future research should take.

**Declaration of interests**
Please ensure that you declare any possible conflicts of interest in your paper. This includes matters such as: funding from an organisation or company directly for the research; funding you have received (or payment in kind) for any work you have been involved in from an organisation or company that could be linked to the research; consultation or advisory positions you may hold in an organisation or company involved in the research or an organisation involved in similar research; any other situation that could be construed as a conflict of interest.

**Acknowledgments**
Acknowledgements should be grouped in a paragraph at the end of the text and before the references. Permission and approval of the wording must be obtained from the person thanked. Where the research project was supported by industry, this should be acknowledged in the covering letter to the Editor on submission of the manuscript.

**References**
Only articles that have been published or are in press should be included in the reference list. Unpublished results or personal communications should be cited as such in the text, in parentheses.

References must be in the Vancouver style. They should be numbered in the order in which they appear in the text, and these numbers should be inserted as superscripts (after punctuation). (eg Other studies have shown this to be true.4,5 Jones et al.6 demonstrated...).

At the end of the article the full list of references should give the names and initials of all authors unless there are more than six, in which case only the first three should be given followed by *et al*. The authors’ names are followed by the title of the article; the title of the journal abbreviated according to the style of PubMed; the year of publication; the volume number; and the first and last page numbers in full. Titles of books should be followed by the place of publication, the publisher, and the year.

**Example of reference styles:**


**Reference to a book**


**Reference to a book chapter**


**Reference to a report**


**Reference to a webpage:**


*Updated: 9th March 2015*
The author is responsible for the accuracy of the reference list at the end of the article.

**Figures**
Figures/images should be submitted separately in TIFF, JPEG or EPS format in either grayscale or colour. If a person is recognisable from a photograph, written consent of the patient to publication must be obtained by the author and a copy sent to the BDJ.

Colour figures are published in *BDJ Open* free of charge.

To avoid size reduction, authors should submit artwork of exact column measurements and crop out unnecessary areas (1 column = 87.50 mm; 2 columns = 180 mm). Most figures should be presented at 1 column width (or quarter page in size).

**Reporting of statistical information**

Adherence to these guidelines should not be viewed as a substitute for obtaining appropriate statistical advice. Authors are strongly advised to consult with a statistician when undertaking analytical research and to do so early in the process, preferably at the design stage of any investigation.

**Permissions**
If a table or figure has been published or copyrighted, the authors must obtain written permission from the copyright owner to reproduce the material in both print and electronic formats and submit the authorisation to the *BDJ Open* editorial office 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 in the figure or table caption.

**Supplementary material**
Supplementary material is peer-reviewed material directly relevant to the conclusion of an article that cannot be included in main article version owing to space or format constraints. It is posted on the journal’s web site and linked to the article when the article is published and may consist of data files or extensive tables. The article must be complete and self-explanatory without the supplementary material. Supplementary material enhances a reader's understanding of the paper but is not essential to that understanding.

Supplementary 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," and each individually should contain legends including a title and description.

Supplementary material must be supplied in its FINAL format, via eJP. It is not subedited and will appear online exactly as originally submitted. Supplementary material must be submitted as a single combined PDF (file size should not exceed 25 MB in total including supplemental files; for individual files, 1 MB each), except for files that cannot be in PDF form (such as movies and extensive tables), which can be submitted separately.

**Non-native English speakers/language preparation**
Researchers who are not native speakers of English who submit manuscripts to international journals sometimes receive negative comments from referees or editors about the English-language usage in their manuscripts, and these problems can contribute to a decision to reject a paper. To help reduce the possibility of such
problems, we strongly encourage such authors to take at least one of the following steps:

- Have your manuscript reviewed for clarity by a colleague whose native language is English.
- Use an English language editing service such as one of those listed below. An editor will improve the English to ensure that your meaning is clear and to identify problems that require your review.

Suggestions of English language editing services
- Nature Publishing Group Language Editing
- American Journal Experts

Please note that the use of an editing service, including Nature Publishing Group Language Editing, is at the author's own expense and in no way implies that the article will be selected for peer review or accepted by BDJ Open. The decisions that the editors of the Journal make are based on the quality and suitability of a manuscript and are entirely independent of whether that manuscript has been language-edited by a recommended service.

HOW TO SUBMIT

Pre-submission enquiries
Please send any pre-submission enquiries via email to our editorial office at: bdjopen@nature.com

Online submission
We only accept manuscript submission via the BDJ Open online manuscript submission system. For technical questions with the submission site, please contact the Helpdesk. Before submitting a manuscript, authors are encouraged to consult our Editorial Policies section of this document (see below). If you have not already done so, please register for an account with our online manuscript system. You will be able to monitor the status of your manuscript online throughout the editorial process.

If you need additional help, you can click on help signs available throughout the system and a box will appear with context sensitive help. If further assistance is required, then please contact the MTS helpdesk.

Acknowledgement of receipt is sent for all articles, letters or comment, with a reference number for future correspondence.

Submission of revised papers
Authors submitting a revised manuscript after review are asked to include the following:

- A rebuttal letter, indicating point-by-point how you have addressed the comments raised by the reviewers. If you disagree with any of the points raised, please provide adequate justification in your letter. Please do not submit a cover letter with your resubmission and rebuttal letter.
- A marked-up version of the manuscript that highlights changes made in response to the reviewers' comments in order to aid the Editors and reviewers.
- A 'clean' (non-highlighted) version of the manuscript.

Updated: 9th March 2015
All papers undergo initial screening for suitability for the BDJ by the Editors. Suitable papers are then peer reviewed by two or more referees. Additional specialist advice may be sought if necessary, for example from a statistician, before a final decision is made by the Editor-in-Chief.

BDJ Open operates a single-blind peer review system i.e. the identity of the referees is kept confidential, the identity of the authors is not kept confidential. The existence and content of a manuscript under review is kept confidential within the offices of the BDJ and the referees. All referees are requested to respect that confidentiality.

Once a manuscript is accepted, the corresponding author must complete and sign a Creative Commons licence and Article Processing Charge Payment form on behalf of all authors and return it to the editorial office. Failure to promptly return the form will result in delay of publication.

Publication
Publishing Open Access will mean the paper is freely accessible online immediately upon publication. By paying this charge authors are permitted to post the final, published PDF of their article on a website, institutional repository or other free public server, immediately on publication.

Open access licences
Open access articles are published under a CC BY licence (Creative Commons Attribution 4.0 International Licence). The CC BY licence is preferred by many research funding bodies. It allows for maximum dissemination and re-use of open access materials: users are free to share (copy, distribute and transmit) and remix (adapt) the contribution including for commercial purposes, providing they attribute the contribution in the manner specified by the author or licensor (read the full legal code).

The CC BY-NC-ND and CC BY-NC-SA licences are available on request: please contact the editorial office on acceptance of your article to discuss these options.

Under Creative Commons licences, authors retain copyright in their work. Authors should note that some funders require papers to be published under a specific licence and so should check the funder mandate to ensure compliance.

With regards to payment, usual credit terms are 30 days from receipt of invoice. Failure to pay your invoice within the stated credit term may result in such penalties as restrictions on your ability to publish with Nature Publishing Group in the future, involvement of a third-party debt collection agency and legal proceedings. For further information on Open Access please see the FAQs page.

Open access waiver
Please note that some institutions have enacted Open Access policies that conflict with our own. If any corresponding or contributing authors are from these institutions, you will need to provide a waiver from the institution of every affected author, which can be obtained from the institution. This waiver should be submitted at the same time as the Open Access Licence to Publish form.

Proofs
The corresponding author will receive an e-mail containing a URL linking to the proofing site. Proof corrections must be returned within 48 hours of receipt. Failure to do so may result in delayed publication. Extensive changes cannot be made at this stage.

Updated: 9th March 2015
Final publication
The final version of the manuscript is published online and represents the official version of the manuscript.

Self-archiving
Authors are encouraged to submit the final version of the accepted, peer-reviewed manuscript to their funding body's archive for public release immediately upon publication and to deposit the final version on their institution's repository. 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 NPG website.

This policy complements the policies of the US National Institutes of Health, the Wellcome Trust and other research funding bodies around the world. NPG recognises the efforts of funding bodies to increase access of the research they fund, and strongly encourages authors to participate in such effort.

## PUBLICATION CHARGES

### Article Processing Charge
Authors whose papers are accepted for publication in *BDJ Open* are required to pay an Article Processing Charge (APC). The following charges will apply for all articles published in *BDJ Open* (plus VAT where applicable):

<table>
<thead>
<tr>
<th></th>
<th>US</th>
<th>UK &amp; RoW</th>
<th>Europe</th>
</tr>
</thead>
<tbody>
<tr>
<td>Article</td>
<td>$2,185</td>
<td>£1,300</td>
<td>€1,605</td>
</tr>
<tr>
<td>Article where corresponding author is a current member of the British Dental Association (15% discount)</td>
<td>$1,860</td>
<td>£1,105</td>
<td>€1,365</td>
</tr>
</tbody>
</table>

Upon acceptance of their manuscript it is mandatory for authors of articles and reports to complete the Article Processing Charge payment form and licence to publish form and return them to NPG's production department (email included on form); processing of an accepted manuscript can only proceed once these forms have been signed and returned.

Please note in regards to payment that usual credit terms are 30 days from receipt of invoice. Failure to pay your invoice within the stated credit term may result in such penalties as restrictions on your ability to publish with Nature Publishing Group or in the Journal in the future, involvement of a third-party debt collection agency and legal proceedings.

### Open access funding
Visit Nature Publishing Group's open access funding page for information about research funders and institutions that provide funding for open access. NPG also offers an APC support service to make it easier for NPG authors to discover and apply for open access funding. For advice on what funding is available to you and help in approaching funders and institutions, please contact us at openaccess@nature.com.

Nature Publishing Group is a partner of AGORA, HINARI, INASP - you can find more information here: http://www.nature.com/info/partners.html

For more information about NPG's open access publishing options and policies, please see our open access homepage.

*Updated: 9th March 2015*
There are a number of possibilities for promoting your article once it is published in the Journal. You are encouraged to discuss your article as much as possible to help it reach a wide readership and distribution.

**Publicising the weblink**
As your article will be published open access, there is no limit to its reach. Why not send the weblink to your colleagues and peers who might be interested or post the link to your website, your institution’s website, on relevant databases, online forums or blogs. You could add the paper to your list of publications on sites such as ResearchGate or register for an ORCID author identifier and add details of the article to your profile. Another option to consider would be adding a link to the paper to your own email signature for a period of time after it is published to maximise the number of readers you reach. Other options include adding a reference to your paper to a relevant Wikipedia page on the topic, if appropriate.

**Social media**
Another option for reaching more people with your article is to use social media outlets like Twitter, Facebook, LinkedIn, Digg, Reddit and other social media platforms. The share link at the top of your article allows you to easily share the article via these social media outlets and more. Note: why not tag your tweets with the *British Dental Journal*’s Twitter handle @The_BDJ when tweeting about your article to reach an even larger number of followers.

**Article metrics - how to find out how your article is doing**
You can monitor the extent to which your article is being used via article metrics tools. You can access these by going to the article metrics link on the article’s homepage. Altmetric is a handy tool which can be used to track what people are saying about your article online. The Altmetric score of your article is also provided in the article metrics section on your article’s webpage. More information about Altmetric can be found at www.altmetric.com.

For any queries regarding the promotion of your article once it is published, contact the *BDJ Open editorial office.*

---

**EDITORIAL POLICIES**

**Review policies**
*BDJ Open* is committed to maintaining high standards for the integrity of the published scientific record. Authors should take note and adhere to the journal editorial policies noted in the guidelines above (regarding clinical trials, animal studies and conflict of interest) and those discussed below. The journal will investigate any instances of suspected scientific fraud, image manipulation, plagiarism, duplicate publication, undocumented sources of funding or conflicts of interest, and other cases that compromise research ethics or the journal’s scientific integrity. Depending on the investigation, the journal may opt to publish corrections, or in serious cases of scientific misconduct, request that the authors retract their paper or impose a retraction on the paper. The Journal is a member of, and subscribes to the principles of, the Committee on Publication Ethics (COPE) www.publicationethics.org.

**Review process**
All contributions that are selected for peer review are sent to two or more independent reviewers. The identity of reviewers is confidential and manuscripts are considered private information.

*Updated: 9th March 2015*
Papers may be rejected without external review at the discretion of the editorial board following internal review. Authors are encouraged to suggest or recommend for exclusion reviewers at the time of submissions, as this can help speed the review process.

Anonymity
Reviewers' identities are not released to authors, except when reviewers specifically ask to be identified. If reviewers wish to reveal their identities while the manuscript is under consideration, this should be done through the Editor. Should a reviewer contact an author directly, we ask authors to inform the Editor as soon as possible. We prohibit any attempt by authors to confront reviewers or determine their identities. Our own policy is to neither confirm nor deny any speculation about reviewers' identities, and we encourage reviewers to adopt a similar policy.

Clinical trials
As defined by the International Committee of Medical Journal Editors (ICMJE), 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. A medical intervention is any intervention used to modify a health outcome and includes but is not limited to drugs, surgical procedures, devices, behavioural treatments, and process-of-care changes. A trial must have at least one prospectively assigned concurrent control or comparison group in order to trigger the requirement for registration. Nonrandomised trials are not exempt from the registration requirement if they meet the above criteria.

When reporting experiments on human subjects, it must be indicated whether the procedures were in accordance with the ethical standards of the responsible committee on human experimentation (institutional or regional) or with the Helsinki Declaration of 1975 (as revised in 1983). Include Institutional Review Board or Animal Care and Use Committee approvals.

BDJ Open subscribes to the standards set by the International Committee of Medical Journal Editors in *The Lancet* (2004; 364: 911-912), requiring that all trials that start enrolling participants after July 1, 2005 must be registered in a suitable publicly accessible register before that date in order to be considered for publication in the Journal. Those trials that started enrolment before July 1, 2005 must register before September 13, 2005 to be considered for publication. Suggested registers include: Clinical Trials.Gov and Current Controlled Trials.

NPG endorses the toolkits and guidelines produced by the following bodies:
- Committee on Publication Ethics: http://publicationethics.org
- Good Publication Practice: http://www.gpp-guidelines.org

Conflict of interest
The Conflict of interest section is mandatory. All authors must disclose all funding sources - institutional and corporate – as well as any commercial affiliations or consultancies, stock, or equity interests, or patent-licensing arrangements that could be considered to pose a financial conflict of interest related to the submitted manuscript. This information will be published as part of the paper.

When submitting a manuscript, the author is responsible for disclosing their own relevant interests in the work. If no potential conflict of interest exists, please note that the authors have nothing to disclose.

The statement must contain an explicit and unambiguous statement describing any potential conflict of interest, or lack thereof, for any of the authors. Examples include "Jane Smith (Emory University) receives compensation as a consultant for XYZ Company," "Bill Jones and Jane Smith have financial holdings in ABC Company," or "Bill Jones owns a patent on the diagnostic device described in this report." These statements regarding conflicts of interest must be included in

Updated: 9th March 2015
the manuscript under the heading “Conflict of interest.”

For the purposes of this statement, competing interests are defined as those of a financial nature that, through their potential influence on behaviour or content, or from perception of such potential influences, could undermine the objectivity, integrity or perceived value of a publication. They can include any of the following:

- Funding: Research support (including salaries, equipment, supplies, reimbursement for attending symposia, and other expenses) by organisations that may gain or lose financially through this publication. The role of the funding body in the design of the study, collection, and analysis of data and decision to publish should be stated.
- Employment: Recent (while engaged in the research project), present or anticipated employment by any organisation that may gain or lose financially through this publication.
- Personal financial interests: Stocks or shares in companies that may gain or lose financially through publication; consultation fees or other forms of remuneration from organisations that may gain or lose financially; patents or patent applications whose value may be affected by publication.

Neither the precise amount received from each entity nor the aggregate income from these sources needs to be provided.

If subsequent to publication it is learned that relevant information was not disclosed, a corrigendum describing the infraction will be published in the journal and linked to the article in PubMed. Additional actions may be taken, including restrictions from publishing in the journal in the future and issuing a notice of concern to the author’s institution, depending on the outcome of journal investigation.

When there is uncertainty about what should be listed, it is best to disclose all holdings or affiliations to ensure that there is no question about intent to withhold information. Authors should communicate with the editorial office if they have questions about this policy.

Acknowledgments
These should be brief, and should include sources of support or funding including sponsorship (eg university, charity, governmental organisation) and sources of material (eg novel drugs) not available commercially. These can also include personal thanks and author contributions. Work done by a contributor or medical writer that does not qualify him/her for authorship, but which warrants acknowledgment, should be noted here.

Authorship
Requirements for all categories of articles largely conform to the ‘Uniform Requirements for Manuscripts Submitted to Biomedical Journals,’ developed by the ICMJE. A manuscript will be considered for publication with the understanding that:

1. All named authors have agreed to its submission
2. It is not currently being considered for publication by another journal
3. If the paper is accepted, it will not subsequently be published in the same or similar form in any language without the consent of publisher.

Each author must have contributed sufficiently to the intellectual content of the submission. The corresponding author should list all authors and their contributions to the work. Any changes to the author list after submission, such as a change in the order of the authors, or the deletion or addition of authors, must be approved by a signed letter from every author. The corresponding author must confirm that he or she has had full access to the data in the study and final responsibility for the decision to submit for publication. To qualify as a contributing author, one must meet all of the following criteria:

Updated: 9th March 2015
Plagiarism and fabrication

Plagiarism is when an author attempts to pass off someone else's work as his or her own. Duplicate publication, sometimes called self-plagiarism, occurs when an author reuses substantial parts of his or her own published work without providing the appropriate references. Minor plagiarism without dishonest intent is relatively frequent, for example, when an author reuses parts of an introduction from an earlier paper.

NPG Journals use CrossCheck, a plagiarism detection software tool, to identify instances of overlapping and similar text in submitted manuscripts. CrossCheck is a multi-publisher initiative to screen published and submitted content for originality. To find out more about CrossCheck visit www.crossref.org/crosscheck.html.

If a case of plagiarism comes to light after a paper is published, the Journal will conduct a preliminary investigation, utilising the guidelines of the Committee on Publication Ethics. If plagiarism is proven, the Journal will contact the author's institute and funding agencies as appropriate. The paper containing the plagiarism may also be formally retracted or subject to correction.

Duplicate publication

Papers must be original and not previously published or submitted for publication elsewhere. This rule also applies to non-English language publications. NPG allows and encourages prior publication on recognised community preprint servers for review by other scientists before formal submission to a journal. The details of the preprint server concerned and any accession numbers should be included in the cover letter accompanying manuscript submission. This policy does not extend to preprints available to the media or that are otherwise publicised outside the scientific community before or during the submission and consideration process.

Image manipulation

Images submitted with a manuscript for review should be minimally processed. Authors should retain their unprocessed data and metafiles, as Editors may require them to aid in manuscript evaluation. If unprocessed data is available, manuscript evaluation may be stalled until the issue is resolved.

A certain degree of image processing is acceptable for publication (and for some experiments, fields and techniques is unavoidable), but the final image must correctly represent the original data and conform to community standards. The guidelines below will aid in accurate data presentation at the image processing level.

- Authors should list all image acquisition tools and image processing software packages used. Authors should document key image-gathering settings and processing manipulations in the Materials and Methods section.
- Images gathered at different times or from different locations should not be combined into a single image, unless it is stated that the resultant image is a product of time-averaged data or a time-

Updated: 9th March 2015
lapse sequence. If juxtaposing images is essential, the borders should be clearly demarcated in the figure and described in the legend.

- Touch-up tools, such as cloning and healing tools in Photoshop, or any feature that deliberately obscures manipulations are to be avoided.
- Processing (such as changing brightness and contrast) is appropriate only when it is applied equally across the entire image and is applied equally to controls. Contrast should not be adjusted so that data disappear. Excessive manipulations, such as processing to emphasise one region in the image at the expense of others (for example, through the use of a biased choice of threshold settings), is inappropriate, as is emphasising experimental data relative to the control.

Correction and retraction policy
We recognise our responsibility to correct errors. Content published online is final and cannot be amended without formal notice.

Please note the following policy for making corrections to BDJ Open peer-reviewed content:

- **Erratum.** Notification of an important error made by the journal or publisher that affects the publication record or the scientific integrity of the paper or the reputation of the authors, or of the journal.
- **Corrigendum.** Notification of an important error made by the author that affects the publication record or the scientific integrity of the paper or the reputation of the authors or the journal.
- **Retraction.** Notification of invalid results. All co-authors must sign a retraction specifying the error and stating briefly how the conclusions are affected.

Decisions about corrections are made by the Editor (sometimes with advice of peer reviewers) and this sometimes involves author consultation. Requests to make corrections that do not affect the paper in a significant way or impair the reader's understanding of the contribution (a spelling mistake or grammatical error, for example) are not considered.

In cases where co-authors disagree about a correction, the Editor will take advice from independent peer reviewers and impose the appropriate correction, noting the dissenting author(s) in the text of the published version.

**Research Data Policy**
We strongly encourage that all datasets on which the conclusions of the paper rely should be available to readers. We encourage authors to ensure that their datasets are either deposited in publicly available repositories (where available and appropriate) or presented in the main manuscript or additional supporting files whenever possible. Where one does not exist, the information must be made available to referees at submission and to readers promptly upon request. Any restrictions on material availability or other relevant information must be disclosed in the manuscript's Methods section and should include details of how materials and information may be obtained.

Please see the journals guidelines on Research Data policy [here](#).

The Editors reserve the right, when they believe it is justified, to require authors to submit original data for confidential reanalysis by a statistician on behalf of the journal.

**Bioethics**
**Human and other animal experiments**
For primary research manuscripts reporting experiments on live vertebrates and/or higher invertebrates, the corresponding author must confirm that all experiments were performed in accordance with relevant guidelines and regulations. The manuscript must include a statement identifying the institutional and/or licensing committee approving the experiments, including any relevant details regarding animal welfare, patient anonymity, drug side effects, and informed consent.
For experiments involving human subjects, authors must identify the committee approving the experiments and include with their submission a statement confirming that informed consent was obtained from all subjects. See Clinical Trials section for more information.

Biosecurity policy
The Editor may also seek advice about submitted papers that raise concerns. These may include, for example, ethical issues or issues of data or materials access. Very occasionally, concerns may also relate to the implications of publishing a paper to the society, including threats to security. In such circumstances, advice will usually be sought simultaneously with the technical peer-review process. As in all publishing decisions, the decision whether to publish is at the discretion of the Editor.

Communication with the media
Material submitted must not be discussed with the media. We reserve the right to halt the consideration or publication of a paper if this condition is broken. If a paper is particularly newsworthy, NPG or the BDA may send a press release to our list of journalists in advance of publication with an embargo that forbids any coverage of the manuscript, or the findings of the manuscript, until the time and date clearly stated, which will coincide with when the paper is publishing online. Authors whose papers are scheduled for publication may also arrange their own publicity (for instance, through their institution’s press offices), but they must strictly adhere to the online publication press embargo and are advised to coordinate their own publicity with NPG’s press office.

Communication between scientists
BDJ Open does not wish to hinder communication between scientists. You are free to communicate with other researchers as much as you wish, whether on a recognised community preprint server by discussion at scientific meetings or by online collaborative sites such as wikis, but we do not encourage premature publication by discussion with the press (beyond a formal presentation, if at a conference).

FURTHER INFORMATION

If further information is required, please contact the BDJ Open editorial office at bdjopen@nature.com.