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Guide for authors

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Asian Biomedicine — Guide for Authors 2022

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Asian Biomedicine is intended to serve the biomedical and health sciences community of the entire Asian region with an international audience and is published in cooperation with Sciendo (www.sciendo.com), a brand of De Gruyter—Poland, a subsidiary of its parent company Walter de Gruyter GmbH (www.degruyter.com) devoted to academic publication and services, with offices in Warsaw.

Aims and scope. *Asian Biomedicine* is an international, general medical and biomedical multidisciplinary journal that aims to publish original peer-reviewed contributions dealing with various topics in the biomedical and health sciences, ranging from basic experimental to clinical aspects. The work and authorship must either be strongly affiliated with a country in Asia or have specific importance for and relevance to the Asian region, or both. The Journal will publish reviews, original experimental studies, observational studies; technical and clinical (case) reports, practice guidelines, historical perspectives of Asian biomedicine, clinicopathological conferences (CPCs), and commentaries.

Innovative investigations, including basic research; clinical trials; studies of diagnostic accuracy; studies relating to behavioral, therapeutic, or epidemiological aspects of medicine; public health; clinical guidelines; standards of health care; and indigenous diseases, are welcomed. We invite guest editorials on occasion.

Audience. *Asian Biomedicine* is intended for a broad and international audience, primarily those in the health professions, including researchers, physician practitioners, basic medical scientists, dentists, educators, administrators; those in the assistive professions, such as nurses; and the many types of allied health professionals in research and in health care delivery systems, including those in training.

Abstracting and Indexing. *Asian Biomedicine* is covered by the following services:

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Quality Open Access Market (QOAM)
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WanFang Data
Web of Science—Clarivate Science Citation Index Expanded Core Collection (formerly the Institute for Scientific Information [ISI] Web of Knowledge]
WorldCat (Online Computer Library Center [OCLC])

This *Guide for Authors* includes our ethical and policy guidelines, and it is revised periodically by the Editors as needed. Authors should consult a recent issue of the Journal or visit www.asianbiomed.org for the latest version of these guidelines. Author(s) may be asked by the Editors to revise, without any peer review, any manuscript or submission not prepared according to these guidelines.

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1 Article categories

Reviews, Minireviews, Practice guidelines, Original articles, History of Asian biomedicine, Clinical (case) reports, Clinical vignettes, Technical reports, Brief communications (original), Controversies in biomedicine, Commentary, New developments, CPCs, and Letters to the Editor will be considered for publication (Table 1).

1.1 Reviews

Asian Biomedicine aims to provide narrative reviews as background for those in training, including graduate students and house officers/residents; for the continuing education of practitioners and researchers; and for others who wish to have an overview of the current status of a field. Authors are encouraged to submit reviews of various topics of relevance to Asia. Reviews should describe the current state of knowledge or practice, integrating recent advances with accepted principles and practice, or substantially summarizing and analyzing the consensus view of controversial issues in knowledge or practice. Reviews should aim to be critical and to provide the reader with a balanced overview of an important and topical subject in biomedicine or health sciences, emphasizing factors such as cause, diagnosis, prognosis, therapy, or prevention. They should cover aspects of a topic for which scientific consensus exists, in addition to aspects that remain controversial and are the subject of ongoing scientific research. All articles and data sources reviewed should include information about the specific type of study or analysis, population, intervention, exposure, and tests or outcomes.

The Editors require reviews to be an original synthesis of ideas. The preparation of a review must, by its very nature, rely heavily on the ideas, observations, and reports of others. Therefore, it is important that the authors exercise care in citing and quoting other articles. This precaution applies also to the use of one's own published writing. The following guidelines are intended primarily to protect our authors from inadvertent infringements of copyright, any appearance of plagiarism, or accidental bias in assembling bibliographies.

Extra vigilance is required of literature review authors, for whom the task of material assembly (today, often a software cut-and-paste operation) must be separated carefully from those of information synthesis and fresh expression.

Ideally, the Editors would like a narrative review to define the current state of scientific knowledge, focusing on the previous 5 years of published literature. Authors should

Table 1. Article categories

Article category	Typical length (words)†‡	Tables	Figures	Abstract	References‡
Review	6,000–10,000	NS	NS	Unstructured¶§	100
Minireview	4,000	NS	NS	Unstructured¶§	40
Practice guideline	10,000	NS	NS	Unstructured¶§	100
Original article	3,000–5,000	NS	NS	Structured§††	50
History of Asian biomedicine	4,000	NS	NS	Unstructured¶§	50
Clinical (case) report	6,000	NS	NS	Structured‖	40
Clinical vignette	2,000	NS	NS	Unstructured¶‖	20
Technical report	6,000	NS	NS	Structured§	40
Brief communication (original)	3,000	NS	NS	Structured§	20
Controversies in biomedicine	3,000	NS	NS	Unstructured¶§	20
Commentary	3,000	NS	NS	Unstructured¶§	20
Clinicopathological conference	6,000	NS	NS	None	50
New developments	1,000	NS	NS	None	5
Letter to the editor	1,000	NS	NS	None	5

NS indicates not specified.
†Excluding title, authors and their affiliations, Abstract, Tables, Figure legends, and references. Language is expected to be clear and concise.
‡Typical limit.
§Limit 250 words (see Section 8.3).
‖Limit 150 words preferred.
¶Structured or unstructured is optional.
††Clinical trial Abstracts must include items that the Consolidated Standards of Reporting Trials (CONSORT) group has identified as essential (www.consort-statement.org/resources/downloads/extensions/consort-extension-for-abstracts-2008pdf/), including the clinical trial registration number at the end of the Abstract.

strive to be fair, yet discriminating, in their selection of references, including only those papers considered to be genuinely important and not to clutter the bibliography with citations of marginal relevance to their topic merely for the sake of "completeness", without being so sparing with their references that they might appear to have minimized or disregarded the work of their competitors or newcomers to the field. Narrative reviews are based largely on unstructured expert opinion and should be identified as such; authors are encouraged to express their opinion rather than simply produce a review of the field with statements that are too general or miss important points. Authors should ensure that their chosen position is tenable.

Guidance is available from the following articles, among others:

> Gasparyan AY, Ayvazyan L, Blackmore H, Kitas GD. Writing a narrative biomedical review: considerations for authors, peer reviewers, and editors. Rheumatol Int. 2011; 31:1409–17;
>
> Squires BP. Biomedical review articles: what editors want from authors and peer reviewers. CMAJ. 1989; 141:195–7;
>
> Green BN, Johnson CD, Adams A. Writing narrative literature reviews for peer-reviewed journals: secrets of the trade. J Chiropr Med. 2006; 5:101–17.

By contrast, systematic reviews include articles or data sources selected systematically and critically evaluated. Systematic reviews use explicit and reproducible criteria to assemble, appraise, and combine articles with a minimum of bias.

Meta-analyses build upon systematic reviews by using statistical techniques to pool and summarize data. Please follow "Page MJ, McKenzie JE, Bossuyt PM, et al. The PRISMA 2020 statement: An updated guideline for reporting systematic reviews. J Clin Epidemiol. 2021; 134:178–89." and its extensions including PRISMA – Children (C), PRISMA-P, PRISMA ScR, and PRISMA-S, as appropriate, as detailed on the EQUATOR network (www.equator-network.org/home/) when reporting these types of reviews. We expect registration of systematic reviews in the PROSPERO registry described in Booth A, Clarke M, Dooley G, Ghersi D, Moher D, Petticrew M, Stewart L. The nuts and bolts of PROSPERO: an international prospective register of systematic reviews. Syst Rev. 2012; 1:2. doi: 10.1186/2046-4053-1-2.

Use the ENhancing Transparency in REporting the synthesis of Qualitative research (ENTREQ) guidelines for a review of studies that use descriptive data, such as unstructured interviews (qualitative data).

Use the Meta-analysis Of Observational Studies in Epidemiology (MOOSE) guidelines for a review of observational studies.

A review should include an Abstract of not more than 250 words to inform readers of the authors' reasons for reviewing the topic, their methods, their findings, and their conclusions.

Unsolicited review articles are welcomed and will be given due consideration. Typical length: 6,000–10,000 words, excluding references, Tables, and Figures; and not more than 100 references. Attention should be focused on articles published in the previous 5 years.

1.2 Minireviews

Review of special topics using the guidelines described for Reviews in Section 1.1. Minireviews are usually more focused systematic or narrative reviews, concentrating on advancements in a particular field in the previous 5 years and addressing a specific question or issue. Typical length: not more than 4,000 words, excluding references, Tables, and Figures; and not more than 40 references.

1.3 Practice guidelines

Deal with accepted medical, scientific, and social problem resolution. Clinical practice guidelines should follow the AGREE or RIGHT reporting tools for practice guidelines in health care, found at the EQUATOR Network (www.equator-network.org). Typical length: not more than 10,000 words, including Abstract and excluding references, Tables, and Figures; and not more than 100 references.

1.4 Original articles

Original articles are full-length reports of current research, which represent new and substantial contributions to the field.

1.4.1 Reporting guidelines

We strongly recommend that authors refer to the minimum reporting guidelines for health research hosted by the EQUATOR Network (www.equator-network.org/home/), as indicated for various types of articles in parentheses as follows, and the FAIRsharing portal (https://fairsharing.org/) for reporting checklists for biological and biomedical research, where applicable, when preparing their manuscript.

Original articles typically include clinical trials and intervention studies (CONSORT); studies of screening

and diagnostic tests (STARD); laboratory (FAIRsharing) and animal studies (ARRIVE 2.0); cohort, case–control, and cross-sectional observational studies in epidemiology (STROBE); studies conducted using observational routinely-collected health data (RECORD) multivariable prediction models for individual prognosis or diagnosis (TRIPOD); biospecimen reporting (BRISQ); reliability and agreement studies (GRRAS); cost-effectiveness analyses (CHEERS); and surveys with high response rates (see STROBE-RDS for respondent-driven sampling studies; and Kelley, Clark, Brown, Sitzia. Good practice in the conduct and reporting of survey research. Int J Qual Health Care. 2003; 15:261–6). Authors should adhere to these guidelines when drafting their manuscript, and peer reviewers will be asked to refer to these checklists when evaluating such studies. Authors are expected to submit the checklist that is most appropriate for their manuscript type. Authors may find it convenient to use the reporting checklist tool found at https://www.goodreports.org/. If none of the guidelines listed above are suitable for the manuscript, the author is requested to either search for the most relevant set of guidelines supplied by the EQUATOR Network and the more comprehensive list of guidelines for minimal reporting requirements found in the Research and Reporting Guidelines list maintained by the U.S. NLM (https://www.nlm.nih.gov/services/research_report_guide.html) or explain in the comments section during the submission process why none of the guidelines are appropriate for their study type.

1.4.2 Structured abstract

A structured Abstract is required to be based on the following headings:

- Background
- Objectives
- Methods
- Results
- Conclusions

1.4.3 Section headings

Section headings based on IMRAD structure should usually be used: Abstract, Introduction, Methods, Results, Discussion, Conclusion, Author contributions, Acknowledgments, Conflicts of interest statement, Data sharing statement, and References.

1.4.3.1 Introduction

The Introduction should provide a brief context or background to the subject of the manuscript, explain the importance or significance of the study, and clearly state the specific question, research objectives or purpose of, or hypothesis tested by, the study or observation. Avoid a detailed review of the literature in this section, but include sufficient background to explain the motivation for the study and then explain the approach. Cite only directly pertinent references and do not include data or conclusions from the work being reported.

1.4.3.2 Methods

The Methods section should describe the study design and methods. Describe the research methodology in sufficient detail so that others can duplicate the work. This section must specify the complete name of the institutional animal care and use committee (IACUC) or institutional human ethics review board (IRB) that approved the research protocols and the approval reference number as appropriate (or that the research was exempt from approval and why), and if appropriate, a statement that the included participants provided documented informed consent or that the requirement was specifically waived by the IRB, for example, because the study was retrospective. Manuscripts dealing with human studies should also declare that the study followed the principles of the contemporary revision of the Declaration of Helsinki and other declarations as appropriate (please see Section 4 Human and animal rights and other ethical considerations). Manuscripts regarding animal studies should indicate that relevant national, international, or local regulations were followed, and these should at least meet the standards of the National Institutes of Health Guide for the Care and Use of Laboratory Animals (Washington, DC: National Academy Press; 1996). All participants in human studies must provide documented informed consent, and this information must be stated in the manuscript. Documented informed consent including signed informed consent forms, witnessed and documented verbal consent, or tape recordings should be archived by the authors. The authors must provide a written statement that they have received and archived documented informed consent from all patients, as required (see Section 4). Copies of the letters of IRB or IACUC approval should be submitted with the manuscript and are required for acceptance. Include the study setting and dates, patients/participants with inclusion and exclusion criteria, relevant demographic details, patient samples or if animal specimens used, the essential features of any interventions, the main outcome measures, the laboratory methods followed (or data sources and how these were selected for the study), instrumentation, and key reagents, in addition to the statistical

procedures used in the research. Specify the statistical software package(s) and versions used.

The symbol ®, or the letters ™ or ℠, should not be used in scientific journal articles, but to comply with trademark law (U.S. Federal Trademark Dilution Act of 1996. Pub No. 104–98, 109 Stat 985), the initial letter of a trademarked word should be capitalized. The manufacturer of any drug, reagent, or equipment mentioned in the manuscript should be mentioned, with a catalog number as appropriate, such as for antibodies, enzymes, probes, or specialty reagents. Location details can usually be omitted because such information is now so freely available on the Internet that we consider that it is no longer necessary to continue to require this, as consistent with the American Medical Association (AMA) house style since October 4, 2011. We recommend that commercial suppliers of reagents or instrumentation be identified only when the source is critical to the outcome of the experiments. For example, it is usually not necessary to specify the source of common reagents such as buffer salts. However, do use a general statement, such as "all other chemicals used were analytical grade or higher", as appropriate. Nonproprietary names or descriptive phrasing is preferred to proprietary names for devices, equipment, and reagents, particularly in the context of general statements and interchangeable items (e.g., urinary catheters, intravenous catheters, and pumps). If the use of proprietary names is necessary for clarity or to replicate the study, proprietary names should be given at first mention along with the nonproprietary name. In such cases, information regarding the manufacturer or supplier is important (and sometimes their location, but see above), and authors should include this information in parentheses after the name or description. It is not necessary to identify the legal status of the supplier using a suffix, e.g., Ltd, Inc., GmbH, AG, and S.A., unless this forms part of the company name. Common usage is preferred (e.g., DuPont for the E. I. du Pont de Nemours and Company).

On occasion, trademark owners will request that their trademark or trade name appear in all capital letters or a combination of capital and lowercase letters—often with the trademark symbol. Authors and Editors are not required by law to follow such requests. It is preferable to use an initial capital letter followed by all lowercase letters (e.g., Canon, Ikea) unless the trademark name is an abbreviation (e.g., IBM, JAMA) or uses an intercapped construction (e.g., PubMed, TaKaRa). Online databases, if trademarked, can be listed in all capital letters (e.g., MEDLINE, Cumulative Index to Nursing & Allied Health Literature [CINAHL]). Use only an initial capital letter, not all capitals, for company names that are not acronyms, because company names are not trademarks and are not protected by law.

1.4.3.3 Results

The Results section should comprise the study results presented in a logical sequence, supplemented by Tables or Figures, or both, giving the main or most important findings first. Take care that the text does not simply repeat data that are presented in Tables or Figures. Emphasize and summarize only the essential features of the main measurement outcomes and observations, in addition to the main results. Where appropriate, findings should be quantified and presented using appropriate indicators of measurement error or uncertainty (e.g., confidence intervals). Data should be presented with an appropriate degree of precision, and statistical data should be provided for all tested differences. See Section 8.4.17 Statistical requirements.

1.4.3.4 Discussion and conclusion

The Discussion section should be used to emphasize the new and important aspects of the study, placing the results in context with the entire published literature, the implications of the findings, their limitations, and the conclusions that follow from the study results. You may begin with a description of what your study found in relation to the purpose or objectives as stated in the Introduction. To avoid redundancy and for conciseness, do not repeat in detail data or other information given in other parts of the manuscript, such as in the Introduction or the Results section. Describe, rather than repeat, results given earlier. Although some degree of speculation as to the importance of the observations is permissible if identified as such, avoid making conclusions unrelated to the data presented. For experimental studies, it is useful to begin the Discussion section by briefly summarizing the main findings and, then, proceed to describe the possible mechanisms or explanations for these findings, compare and contrast the results with other relevant studies, clearly state the limitations of the study, and describe the implications of the findings for future research and for clinical practice. Link the conclusions with the goals of the study but avoid overstating them by making unqualified statements or presenting conclusions not adequately supported by the data. In particular, distinguish between clinical importance and statistical significance and, in addition, avoid making statements on economic benefits and costs unless the manuscript includes appropriate economic data and analyses (and if so, follow CHEERS reporting guidelines). Please avoid unsupported claims of primacy or priority purporting that your study is the first (or largest) of its type or alluding to work that has not been completed. For example, avoid statements such as, "This article is the first to report..." because even the most thorough searches may fail to reveal all instances of similar work. Although specific topics that require future research can

be mentioned, it is meaningless to state that "further research is needed". State new hypotheses when warranted, but clearly identify them as such. A final summary is not necessary because this information should be provided in the Abstract and the first paragraph of the Discussion. Instead provide Conclusions that can be drawn specifically from the results of the current work; do not overstate your conclusions or make conclusions related to other studies.

We prefer that manuscripts be organized with separate Results and Discussion sections, followed by a Conclusion section, as detailed above. However, exceptions for combined Results and Discussion sections, typically, only in Brief communications of original work, can be made if this is justified in the additional comments you would like to send to the publication office during the submission process in Editorial Manager.

Typical length: 3,000–5,000 words, excluding references, Tables and Figures; and not more than 50 references.

1.5 History of Asian biomedicine

Articles concerning the history and development of biomedicine in the Asian region. Includes articles regarding early medical efforts, specific milestones, and biographies of biomedical pioneers and past biomedical "giants" affiliated with the Asian region. All contributions should be thoughtful and documented by the proper citation of original works or secondary sources. Typical length: not more than 4,000 words, excluding references, Tables, and Figures; and not more than 50 references.

1.6 Clinical reports

Clinical reports include reports of one or more cases, although generally no more than 3 cases should be presented in the report. We want to publish cases providing clinically valuable lessons and documenting the state of current practice. Therefore, common cases that present a diagnostic, ethical, or management challenge, or that highlight aspects of mechanisms of injury, pharmacology, or histopathology, are deemed to be of educational value. In addition, we encourage reports of global health cases and medicine practiced in Asian settings. We will publish cases worthy of discussion, particularly around aspects of differential diagnosis, decision-making, management, clinical guidelines, and pathology. Cases will be judged on clinical interest and educational value, not necessarily novelty or rarity. Please follow CAse REporting (CARE) guidelines available from the EQUATOR network and https://www.care-statement.org/ and supply a reporting guideline checklist with your submission. Authors may find it convenient to use the reporting checklist tool found at https://www.goodreports.org/care. For case series, please follow appropriate reporting guidelines including The Joanna Briggs Institute Critical Appraisal tools for use in JBI Systematic Reviews Checklist for Case Series available from: http://joannabriggs.org/research/critical-appraisal-tools.html and Kempen JH. Appropriate use and reporting of uncontrolled case series in the medical literature. Am J Ophthalmol. 2011; 151:7-10.e1. doi: 10.1016/j.ajo.2010.08.047. Please avoid claims that your case report is the "first" to describe a particular phenomenon (see Section 1.4.3.4 Discussion and conclusion).

You must have documented informed consent from patients (or parents, or legally authorized guardians or representatives in the case of minors or incapacitated adults), whether identifiable or not, before submitting case reports or a case series to *Asian Biomedicine*. Please anonymize the patients' details as much as possible, e.g., specific ages, ethnicity, and occupations, without omitting details essential to the clinical message or scientific purpose of the article. We will not send your manuscript for review without explicit consent from the patient, or legally authorized guardian or representative, on our "Patient privacy and confidentiality form" available at the Home (welcome) page of *Asian Biomedicine* (please see Section 5 for more details). If the patient is dead, the authors must seek permission from a relative (ideally, the next of kin). If you do not have signed consent from a deceased patient, guardian, or family, the head of your medical team/hospital or legal team must take responsibility that *exhaustive* attempts have been made to contact the family and that the paper has been sufficiently anonymized so as not to cause distress to their family. You will need to provide a signed document to this effect.

Please limit the Abstract to 150 words; the structure should be Background, Case report, Discussion, and Conclusions. Submissions should conform to the following organization: 1. Introduction, typically describing the context of the case and explaining its relevance and importance. 2. Case report, comprising the case presentation. Include a history of the present illness, pertinent positives, negatives, key past medical history/social history (personal habits, living situation, and job)/family history/medications, key physical examination details, diagnostic studies, and interventions. Highlight key elements from the clinical course. Be complete without obscuring the essence of the case with irrelevant details. 3. Discussion, containing a concise discussion and a review of the literature. 4. Conclusions, highlighting the important facts or teaching points, as well as recommendations stating what

practitioners should be able to do with the case information gleaned from the case. Typical length: not more than 6,000 words, excluding references, Tables, and Figures; and containing not more than 40 references (see also Section 1.7).

1.7 Clinical vignettes

A clinical vignette is a short report of one or more (not more than 3) patient-related cases/technical issues and scenarios that have educational value for a wider audience, for instance, by illustrating a new disease entity or a prominent or unusual clinical feature of an established disease, which highlights an area of clinical controversy, describes a technical improvement, or illustrates a unique patient safety issue.

Clinical vignettes should be based on patients for whom at least one of the author(s) had cared during the course of the patient's illness. Clinical vignettes should describe clinical conditions that illustrate unique or important teaching points; provide insight into clinical practice, education, or research in either outpatient or hospital settings; illustrate important clinical problems commonly encountered by internists, such as diagnostic, therapeutic, or management dilemmas, including those complicated by factors such as low health literacy or language barriers. Practical or unique technical procedures or instrumentation may also be appropriate. Clinical vignettes should include a brief discussion of relevant literature.

Consider presenting a case if it increases awareness of a condition, suggests a proper diagnostic strategy, or demonstrates a more cost-effective approach to management. Alternatively, a case can be presented because it represents an unusual presentation of a relatively common condition. Other aspects include an unusual complication of a disease and its management.

Please limit the Abstract to 150 words; the structure should be Background, Case report, Discussion, and Conclusions, or optionally unstructured. Submissions should conform to the following organization: 1. Introduction, typically describing the context of the case and explaining its relevance and importance. 2. Case report, briefly summarizing the case presentation. Include a history of the present illness, pertinent positives, negatives, key past medical history/social history (personal habits, living situation, job)/family history/medications, key physical examination details, diagnostic studies, and interventions. Highlight key elements from the clinical course. Be complete without obscuring the essence of the case with irrelevant details. 3. Discussion, presenting a concise discussion, highlighting important facts or teaching points stating what practitioners should be able to do with the case information gleaned from the case and/or review of the literature. Please also follow the CARE reporting guidelines available from the EQUATOR network and https://www.care-statement.org/ as far as they apply and supply a reporting guideline checklist with your submission. Authors may find it convenient to use the reporting checklist tool found at https://www.goodreports.org/care. Please avoid claims that your case report is the "first" to describe a particular phenomenon (see Section 1.4.3.4 Discussion and conclusion).

You must have documented informed consent from patients (or parents, or legally authorized guardians or representatives in the case of minors or incapacitated adults), whether identifiable or not, before submitting case reports to *Asian Biomedicine*. Please see Section 1.6 for further details). Typical length: not more than 2,000 words, excluding references, Tables, and Figures; and not more than 20 references.

1.8 Technical reports

Technical reports are detailed reports of innovative techniques. Please follow the general guidelines specified in Section 1.4. Typical length: not more than 6,000 words, excluding references, Tables, and Figures; and not more than 40 references.

1.9 Brief communications (original)

Brief communications are short research reports of original work. Please see the requirements for Original articles (Section 1.4), and note that we strongly recommend that authors refer to the minimum reporting guidelines for health research hosted by the EQUATOR Network as indicated for various types of articles in parentheses as follows, and the FAIRsharing portal (https://fairsharing.org/) for reporting checklists for biological and biomedical research, where applicable, when preparing their manuscript. Peer reviewers will be asked to refer to these checklists when evaluating such studies. Authors are expected to submit a reporting guideline checklist that is most appropriate for their manuscript type along with their manuscript; they may find it convenient to use the reporting checklist tool found at https://www.goodreports.org/. Typical length: not more than 3,000 words, excluding references, Tables, and Figures; and not more than 20 references.

1.10 Controversies in biomedicine

This category includes articles concerning various controversial medical topics. Two authors should write on opposing

sides of an issue of relevance to the Asian region, each weighing the pros and cons of their argument. A brief introductory paragraph should be included to explain what the controversial issue is and what the two arguable sides are. Typical length: not more than 3,000 words, excluding references, Tables, and Figures; and not more than 20 references.

1.11 Commentaries

Comments dealing with scientific and social issues. Typical length: not more than 3,000 words, excluding references, Tables, and Figures; and not more than 20 references.

1.12 New developments

Biomedical science developments of interest to the Asian region, summaries of important publications and books from Asia, and summaries of doctoral theses from the region.

1.13 Clinicopathological conferences

CPCs emphasize new ideas in medical science that shed light on the approach to diagnosis, disease management, or an emerging aspect of pathophysiology. The Editors welcome enquiries about cases that might be appropriate subjects for CPCs and invite submissions of CPCs. No Abstract is necessary. On the second page, begin the case presentation using the following headings (as applicable): Case presentation (history of the present illness, past medical history, social and family history, review of systems, physical examination, and laboratory evaluation), Case summary, Differential diagnosis, Discussion, the Patient's course, and Final diagnosis. CPCs may be published twice per year at the discretion of the Editors. You must have signed informed consent from patients (or parents, or legally authorized guardian or representative in the case of minors or incapacitated adults) before submitting to *Asian Biomedicine* (for details, see Section 1.6). Typical length: not more than 6,000 words, excluding references, Tables, and Figures; and not more than 50 references.

1.14 Letters to the Editor

Letters are welcome in response to articles, or other brief technical or clinical notes of general interest, previously published in *Asian Biomedicine*. Letters should have a title, no more than 4 authors, and include appropriate references and the corresponding author's mailing and e-mail addresses. Letters are edited, sometimes extensively, so that they are concise. They must not contain unpublished data and may be sent for peer review at the discretion of the Editors. Letters are selected based on clarity, impact, and space. Typical length: not more than 1,000 words, excluding references and 1 Table/Figure; and not more than 5 references.

2 Ethical policies

The ethical guidelines for publication in *Asian Biomedicine* are formulated to ensure that the *Asian Biomedicine* review process selects for publication manuscripts that satisfy high quality standards and prevents unethical exploitation of humans and animals for research. The *Asian Biomedicine* process is thorough, objective, and fair and conforms to international ethical standards specified in the Introduction section and elsewhere in these instructions. The following text summarizes some key considerations that must be satisfied for publication in *Asian Biomedicine*.

The Editors of *Asian Biomedicine* require authors to be in compliance with the recommendations of the International Committee of Medical Journal Editors (ICMJE) for the conduct and reporting of scholarly work in medical journals. *Asian Biomedicine* has been listed since October 21, 2015, as a journal that follows ICMJE recommendations. The current recommendations are available at http://www.icmje.org. The Editors of *Asian Biomedicine* adhere to principles of research integrity and aim to avoid any type of scientific misconduct, such as fabrication, falsification, plagiarism, redundant publication, or authorship problems. All submitted manuscripts are checked for potential plagiarism of all types, including patchwork plagiarism and text recycling, using specialist services including those from iThenticate, Crossref, and ProQuest, and are reviewed by an editor responsible for publication integrity. In resolving any potential scientific misconduct, *Asian Biomedicine* follows international standards, guidelines, and flowcharts provided by the Committee on Publication Ethics (COPE) (available at: http://publicationethics.org/resources), the Council for International Organizations of Medical Sciences (CIOMS), the World Association of Medical Editors (WAME) (http://www.wame.org/about/recommendations-on-publication-ethics-policie), and the Council of Science Editors (http://www.councilscienceeditors.org/resource-library/editorial-policies/). We follow the Principles of Transparency and Best Practice in Scholarly Publishing (a joint statement by COPE, the Directory of Open Access Journals [DOAJ], WAME, and the Open Access Scholarly Publishers

Association [OASPA]; https://doaj.org/bestpractice). *Asian Biomedicine* gives equal consideration to every carefully performed study investigating an important question within the scope of the Journal, whether the results are negative or positive.

3 Disclosure of any potential or actual conflicts of interest

A conflict of interest (also known as a dual commitment, competing interest, or competing loyalty) occurs when an individual's objectivity is potentially compromised, or could reasonably be perceived as compromised by a desire for financial gain, prominence, professional advancement, or a successful outcome.

The Editors of *Asian Biomedicine* endeavor to ensure that what they publish is as transparent, balanced, objective, and evidence based as possible. The potential for a conflict of interest can exist whether or not an individual believes the relationship affects their judgment. Because it is difficult to distinguish between an actual conflict of interest and a perceived conflict of interest, *Asian Biomedicine* requires authors to disclose all and any potential conflicts of interest. The policy also applies to peer review, editorial decision-making, or publication of research or nonresearch articles submitted to *Asian Biomedicine*.

Everyone involved in the peer review process, including authors, editors, and reviewers, must declare all potential conflicts of interest that could reasonably be perceived as affecting either the objectivity of the conduct of the research under consideration or preparing the article for publication.

Conflicts of interest may be financial or nonfinancial, professional or personal; these can arise in relationship to an institution, organization, or another person.

Financial conflicts are the most easily identifiable and include, but are not limited to, the following:

- Ownership of stocks or shares, or other equity interest (excluding mutual funds)
- Paid employment or consultancy (other than with those affiliations listed on the title page of the manuscript, but if commercial must be declared)
- Board membership
- Patent applications or patent-licensing arrangements (pending or actual), including individual applications or those belonging to the institution to which the authors are affiliated and from which the authors may benefit
- Research grants (from any source, restricted or unrestricted)
- Travel grants and honoraria for attendance, speaking, or participation at meetings
- Payments for participation in speakers' bureaus
- Educational grants
- Gifts
- Payments for expert testimony

Nonfinancial conflicts are more nebulous and include, but are not limited to, the following:

- Academic competition
- Acting as an expert witness
- Membership of a government or other advisory board
- Relationship (paid or unpaid) with organizations and funding bodies, including nongovernmental organizations, research institutions, or charities
- Affiliations (other than those affiliations listed on the title page of the manuscript; but must be declared if commercial)
- Membership of lobbying or advocacy organizations
- Writing or consulting for an educational company
- Personal or professional relationships (e.g., friend, spouse, family member, current or previous mentor, adversary) with individuals involved in the submission or evaluation of a paper, such as authors, reviewers, editors, or members of the editorial board of *Asian Biomedicine*.
- Personal convictions (intellectual passion; political, religious, ideological, or knowledge or beliefs; or others) related to the topic of a manuscript, which might interfere with an unbiased or objective publication process (at the stage of authorship, peer review, editorial decision-making, or publication)

The conflicts can vary, ranging from those with negligible potential to those with great potential to influence objectivity and judgment. However, not all relationships represent a true conflict of interest.

Authors must disclose any financial interests or other conflicts that might, or might be perceived, to influence the reported conclusions or outcome of the studies.

Financial support from a commercial source, or support for travel to conferences by industry, must be stated. If a study is funded by an agency with a proprietary or financial interest in the outcome of the study, the corresponding author must include the following statement in the submitted manuscript: "I had full access to all of the data in this study and I take complete responsibility for the integrity of the data and the accuracy of the data analysis." Authors from pharmaceutical companies, or other commercial organizations that sponsor clinical trials, should declare this in the *Conflicts of interest statement* as a competing interest. To ensure that publications

are produced in a responsible and ethical manner, please follow the Good Publication Practice guidelines for pharmaceutical companies (GPP2, 2009) described in "Graf, Battisti, Bridges, et al. for the International Society of Medical Publication Professionals. Good publication practice for communicating company sponsored medical research: the GPP2 guidelines. BMJ 2009; 339:b4330" and found at http://www.ismpp.org/gpp2.

Asian Biomedicine will not publish advertorial content.

As with all potential conflicts of interest, it is not possible to reliably judge our own biases. Not all relationships represent a true competing interest—conflicts can be potential or actual. Declaring them allows others to make informed judgments about whether the potential conflicts of interest are relevant or not. In particular, the role of sponsors must be made clear. According to the U.S. Office of Research Integrity, having a conflict of interest, or competing interest—as this organization calls it, *is not in itself unethical*, and there are some that are unavoidable (https://ori.hhs.gov/plagiarism-35). Full transparency is always the best course of action, and, if in doubt, disclose. To paraphrase, there is nothing wrong in having conflicts of interest. The problem is not declaring them.

The ICMJE has developed a "Disclosure Form" for potential conflicts of interest, to facilitate and standardize authors' disclosures. The form is available for download at the Home (welcome) page of Editorial Manager for *Asian Biomedicine* or from http://icmje.org. Please follow the instructions to complete the form. The corresponding author should collect the conflict of interest disclosure forms completed according to the ICMJE instructions from all authors. In author collaborations where formal agreements for representation allow it, such as written agreement from other authors, and where the rules of their institutions allow, it is sufficient for the corresponding author to complete a form on behalf of other authors, but we must have a completed form for each author. A *Conflicts of interest statement* will be generated for the accepted version of the manuscript, identifying whether any potential conflict of interest exists or not, but authors should also include conflicts of interest disclosures in the submitted manuscript. For accepted manuscripts, the corresponding author will be asked to confirm that each of the author's disclosures or declarations of no potential conflicts of interest are accurate, up to date, and consistent with those reported in the manuscript.

If an undisclosed competing interest comes to light after publication, *Asian Biomedicine* will take action in accordance with COPE guidelines and issue a public notification.

Who must declare competing interests?

Authors

At the time of submission, authors must list all competing interests relevant to the submitted research. Examples may include, but are not limited to, the following:

- Names of all funding sources (please present in the Acknowledgments section)
- Description of funder's role in the study design; collection, analysis, and interpretation of data; writing of the paper; and/or decision to submit the paper for publication
- Whether they have served or currently serve on the editorial board of the journal to which they are submitting
- Whether they have acted as an expert witness in relevant legal proceedings
- Whether they have sat or currently sit on a committee for an organization that may benefit from publication of the paper

Editors and reviewers

Editors and reviewers must declare their own competing interests and, if necessary, disqualify or recuse themselves from involvement in the assessment of a manuscript (e.g., decline invitations for peer review).

Common reasons for editors and reviewers to recuse themselves from the peer review process may include, but are not limited to, the following:

- They work at the same institution or organization as an author, currently or recently
- They collaborate with an author, currently or recently
- They have published with an author
- They have held grants with an author, currently or recently
- They have a financial relationship with the company that funded the research
- They have a personal relationship with an author, which does not allow them to evaluate the manuscript objectively

Readers

Anyone who publically comments on articles published in *Asian Biomedicine* (e.g., Letters to the Editor) must declare all competing interests (financial or nonfinancial) at the time of posting the comment.

Editorial actions and decisions

Asian Biomedicine editors must take all competing interests into account during the review process and ensure that any relevant interests are declared in the published article.

Asian Biomedicine editors will not publish commissioned or any other nonresearch articles if they are aware of a

competing interest that, in their judgment, could introduce bias or a reasonable perception of bias.

Asian Biomedicine editors must not consult reviewers who have competing interests that, in the editors' judgment, could prevent an objective and unbiased review.

4 Human and animal rights and other ethical considerations

This section deals with ethical approval of studies and informed consent to be included in studies. In general, *Asian Biomedicine* will not accept or publish submissions from authors based at institutions about which there are credible reports of ethical violations relevant to the field of the submission and who have failed to remedy that conduct, for example, but not limited to, transplantation of organs. Nor will it accept or publish submissions from authors who have had publications retracted for ethical breaches.

4.1 Institutional review boards and informed consent to participate

For investigations involving human participants or data, or human material samples, or animal studies or samples, approval of the appropriate institutional ethics review board (IRB) or ethics committee is required, and such approval must be stated in the Methods section of the manuscript naming the ethics review board/committee and the approval number. Research involving human subjects, identifiable human samples (such as urine, blood, serum, or tissue), and personal and health record data must be reviewed by a formally constituted IRB or ethics committee. Studies must, in any case, be in accordance with the principles outlined in the contemporary revision of the Declaration of Helsinki of 1964 (World Medical Association [WMA]) incorporating the most recent (2013) and earlier amendments. The Declaration of Helsinki: ethical principles for medical research involving human subjects, is available at: http://jama.jamanetwork.com/article.aspx?articleid=1760318 and https://www.wma.net/policies-post/wma-declaration-of-helsinki-ethical-principles-for-medical-research-involving-human-subjects/). Any doubtful aspects of compliance with the principles of the contemporary revision of the Declaration of Helsinki must be explained and explicitly approved by the investigators' IRB or ethics committee. For those investigators who do not have a formal IRB or ethics committee, the contemporary revision of the Declaration of Helsinki and recommendations of the ICMJE must be followed.

For investigations in humans, indicate in the manuscript whether the procedures followed were in accordance with the contemporary (current) revision of the Declaration of Helsinki, state explicitly in the Methods section of the manuscript that informed consent was obtained from all participating adults, or from the parents or legally authorized guardians or representatives of children (minors or less than 18 years old) or incapacitated adults, together with the way the informed consent was obtained (explicitly, verbal or written) and documented. Evidence of informed consent by participants and respect for the privacy of the study subjects is important. The authors must be able to produce documented evidence of informed consent and respect for privacy of the study subjects if required. Because patient confidentiality is better guarded, we request that authors archive the documented informed consent and provide *Asian Biomedicine* with a written statement that attests that they have received and archived documented patient consent. An archive period of 5 years after publication is considered standard, and perpetual archiving is desirable. Please note that manuscripts regarding humans who may be identified must be accompanied by a documented (preferably signed) statement of informed consent to publish (in print and online) the descriptions, photographs, or pedigrees from each subject who may be able to be identified (please see Section 6). Please note that this is required for all case reports and series, whether or not the patient may be considered identifiable.

If minors are old enough to understand the proposed research, its potential risks and possible benefits, and the role expected of them as participants, then, it is also desirable to obtain their assent. Assent means expressing willingness to participate in research by individuals who are, by legal definition, too young to give informed consent. However, assent by itself is not sufficient. Even if assent is given, informed consent must still be obtained from the participant's parent or legal guardian. Legal definitions of who constitutes a "minor" dictate whether or not a person can consent to participate in a protocol. The State of Maryland, USA, considers a person 18 years and older to be an adult and, therefore, one who can provide consent without parental permission. In the absence of a local older age requirement, we elect to follow Maryland law. Assent may be obtained by talking with the child and supporting that talk with a written assent document (e.g., Form NIH-2514-2) appropriate to the child's age and level of comprehension. The parents or legal guardian of a child participant should be fully informed and given a protocol consent document to read and sign before their child participates in the protocol. If the child cannot read and oral assent is obtained from the child, this should be documented on the consent document. A prewritten statement on the signature page of the consent document should read, "The

information in the above consent was described to my child and my child agrees to participate in the study." The parent's or guardian's signature indicating consent is in addition to the one confirming the statement of assent.

4.2 Clinical isolates and biobank samples

The consent of participants is sometimes, but not always, required before biobank samples and clinical isolates can be used in research. The use of samples must at least conform to the regulations of the U.S. Office for Human Research Protections (OHRP; Rockville, MD, USA) in the U.S. Department of Health and Human Services (DHHS) for the protection of human subjects (45 Code of Federal Regulations [CFR] Part 46) and the additional ethical principles in the WMA Declaration of Taipei on Ethical Considerations regarding Health Databases and Biobanks, adopted by the 53rd WMA General Assembly, Washington, DC, USA, October 2002, and revised by the 67th WMA General Assembly, Taipei, Taiwan, October 2016. These regulations and principles require consent to use samples and/or data that are identifiable and so exclude those samples that have been coded. The Declaration of Helsinki specifies that "Medical research involving human subjects includes research on identifiable human material or identifiable data" and must be approved by an IRB or a research ethics committee (WMA, 2013). Any research using nonidentifiable samples is allowed without the need to obtain informed consent and approval of the protocol from an IRB or a research ethics committee. Nonidentifiable or anonymized biological material is that stored alongside associated information, e.g., the type of tumor, medical treatment, donor's, and so forth, but all information that would allow identification of the research participant or patient is stripped, either irreversibly (unlinked anonymized) or reversibly (linked anonymized). In the case of linked anonymized samples, identification is still possible by a code, to which researchers or other users of the material—as part of the definition of the term reversibly/linked anonymized—do not have access. Coded samples have the same characteristics as linked (reversibly) anonymized samples, the only difference being that researchers and users have access to the code. Samples are considered to be identified if the information that allows identification—name, address, etc.—is associated directly with the tissue, such as when the patient's nametag is attached to the sample. For instance, this is how pathology departments usually store clinical samples. The matters are complex and further guidance can be obtained from "Elger and Caplan. Consent and anonymization in research involving biobanks. European Molecular Biology Organization (EMBO) Reports. 2006; 7:661–6".

Clinical isolates, any bacterial/fungal subcultures, and virus isolates, which are obtained from clinical specimens, are not part of the specimen themselves and are considered not to belong to the patient from whom they were obtained. According to Subpart A of the DHHS regulations, also called the Common Rule, if the study did not involve an investigator interacting or intervening with living individuals for research purposes to obtain the isolates, and the investigator does not obtain identifiable private information about those living individuals, then it is our view that the investigator is not conducting research on human subjects under the U.S. DHHS regulations for the protection of human subjects 45 CFR Part 46.102(f), and thus the study would not require IRB review (see http://www.hhs.gov/ohrp/humansubjects/guidance/45cfr46.html#46.102).

4.3 Transplants

Asian Biomedicine will not accept manuscripts whose data are derived from transplants involving organs obtained from executed prisoners. *Asian Biomedicine* requires all procedures and studies involving human participants to have been conducted according to the ethical guidelines outlined by The Transplantation Society at http://www.tts.org and to have not involved (1) the use of organs (or other material) from executed prisoners or (2) other unethical practices in obtaining donor organs. It is a fundamental principle of The Transplantation Society that organs and tissues are given freely and without coercion. As a consequence, presentations of studies involving patient data or samples from recipients of organs or tissues from executed prisoners cannot be accepted. A prerequisite for accepting a manuscript is that the authors' work complies with the current Declarations of Helsinki and Istanbul (www.declarationofistanbul.org).

In addition, scientific studies and clinical activities should be performed in keeping with the ethical principles delineated in the following policy documents:

> For Live Donation of Extrarenal Organs—The consensus Statement of the Vancouver Forum. Transplantation. 2006; 81:1373–85.
>
> For Studies of Xenotransplantation—The International Xenotransplantation Association Ethics Committee Position Paper. The ethics of xenotransplantation. Xenotransplantation. 2003; 10:194–203.

4.4 Animals

For work involving animals, including vertebrates or any regulated invertebrates, full compliance with local, national,

and international regulations is necessary, and the protocols must be reviewed in advance by the relevant IRB for the care and use of laboratory animals. Procedures involving any animal are to be undertaken only with the goal of advancing scientific knowledge and with the explicit approval of an Institutional Animal Care and Use Committee (IACUC) before they begin. When reporting experiments involving animals, indicate in the manuscript whether the procedures followed were in accordance with the relevant regulations for the care and use of animals. The guidelines for their care and use that were followed, as well as any relevant licenses, should be stated in the Methods section of the manuscript. At least U.S. guidelines must be followed. All animal experiments must conform to the revised guidelines of the Institute of Laboratory Animal Resources, Commission on Life Sciences, National Research Council "Guide for the Care and Use of Laboratory Animals", Washington, DC: National Academy Press; 1996. These documents can be obtained at: https://olaw.nih.gov/; and the same should be stated in the Methods section of the manuscript. The European Commission Directive 2010/63/EU revising Directive 86/609/EEC for animal experiments (available at https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32010L0063), the revised Animals (Scientific Procedures) Act (ASPA) 1986 in the UK (https://www.gov.uk/guidance/guidance-on-the-operation-of-the-animals-scientific-procedures-act-1986), or The Animals for Scientific Purposes Act, BE 2558 (AD 2015) in Thailand (Government Gazette, Vol. 132, Part 18a, March 13, 2015), which regulate the use of both vertebrates and invertebrates without exception, must be followed for all studies conducted in Thailand. The International Association of Veterinary Editors' Consensus Author Guidelines on Animal Ethics and Welfare provide further guidance.

Use of animals in research should be compliant with all subsequent revisions of the U.S. Health Research Extension Act (Public Law 99–158, 1985 "Animals in Research"). Any deviation from the *Guide*, Public Health Service policy, or the U.S. Animal Welfare Act must be scientifically justified and approved by the investigators' IACUC. Animals used in research and education should receive every consideration for their comfort and care, and discomfort and pain must be minimized. Descriptions of surgical procedures and experiments on animals must include the name, dose, and route of administration of the anesthetic agent. Paralyzing agents such as neuromuscular blockers are not acceptable alternatives to anesthesia and should be used only in conjunction with appropriate anesthetic agents (see Marsch and Studer. Guidelines to the use of laboratory animals: what about neuromuscular blocking agents? Cardiovasc Res. 1999; 42:565–6). Chloral hydrate is not acceptable for anesthesia or euthanasia of small animals (see Baxter et al. Anesthesiology. 2009; 111:209). Terminal studies that require the death of an animal must use the most humane euthanasia method that is consistent with the goal of the study and the recommendations of the "American Veterinary Medicine Association Guidelines for the Euthanasia of Animals: 2020 Edition" AVMA; Schaumberg, IL. Lery S, Underwood W, ANthony R, et al.; and members of the Panel on Euthanasia, Staff consultants, and other contributors. The Editors reserve the right to reject any manuscript containing studies that do not or appear not to conform to these recommendations for the use of animals in research or for which procedure approval, documentation cannot be provided. Please provide a manuscript prepared according to the ARRIVE guidelines 2.0 checklist, available at https://arriveguidelines.org/.

Any field studies and other nonexperimental research on animals must comply with institutional, national, or international guidelines and, where available, should have been approved by an appropriate ethics committee, which is a requirement in Thailand since the Animals for Scientific Purposes Act, BE 2558 (AD 2015), and the manuscript should include a statement specifying the appropriate permissions and/or licenses. We require that authors comply with the Convention on Biological Diversity (http://www.cbd.int/convention/) and the Convention on the Trade in Endangered Species of Wild Fauna and Flora (http://www.cites.org/).

5 Reporting clinical trials

5.1 Registration

In strict accordance with ICMJE recommendations and the Declaration of Helsinki, *Asian Biomedicine* requires, as a condition of consideration for publication, that all clinical trials be registered with a suitable database that is readily available to the public before enrollment of the first participant. Public trials registries include http://www.clinicaltrials.gov/ and other registries acceptable to the ICMJE (for a list, see http://www.icmje.org/about-icmje/faqs/clinical-trials-registration/), such as the Thai Clinical Trials Registry (TCTR) (http://www.clinicaltrials.in.th), and any other of the primary registries in the WHO Registry Network that participate in the WHO International Clinical Trials Registry Platform (for a list, see https://www.who.int/clinical-trials-registry-platform/network/primary-registries). Please include the Clinical Trial Registration number and registry name in the Abstract and the Methods section. In the Methods section, include a statement that the study followed the current principles of the

Declaration of Helsinki; that subjects gave their documented, informed consent; and that the study was approved by an IRB. Please note that the date of registration must precede or be concurrent with the date of selection of the first participant. Trials without a verifiable registration number will not be considered for peer review or publication. Please see http://www.icmje.org/recommendations/browse/publishing-and-editorial-issues/clinical-trial-registration.html for further detail.

The purpose of clinical trial registration is to prevent selective publication and selective reporting of research outcomes, to prevent unnecessary duplication of research effort, to help patients and the public know what trials are planned or ongoing into which they might want to enroll, and to help give ethics review boards considering approval of new studies a view of similar work and data relevant to the research they are considering. Retrospective registration, for instance, at the time of manuscript submission, meets none of these purposes.

All randomized controlled trials submitted for publication must upload a completed CONSORT flow chart (please go to http://www.consort-statement.org for more information), which provides a standard way for researchers to report trials, allowing reviewers and readers to evaluate their validity more appropriately. Other sources of reporting guidelines are the EQUATOR Network (www.equator-network.org/home/) and the NLM's Research Reporting Guidelines and Initiatives (www.nlm.nih.gov/services/research_report_guide.html).

The ICMJE uses the following definition of a clinical trial: "*any research project that prospectively assigns people or a group of people to an intervention, with or without concurrent comparison or control groups, to study the cause-and-effect relationship between a health-related intervention and a health outcome. Medical interventions include drugs, surgical procedures, devices, behavioral treatments, process-of-care changes, and the like*." This definition includes Phase I–Phase IV trials. The ICMJE defines health-related interventions as "*any intervention used to modify a biomedical or health-related outcome*" and health-related outcomes as "*any biomedical or health-related measures obtained in patients or participants*". If you are unsure whether your trial needs registering, see the ICMJE frequently asked questions (FAQs) for further information. Purely observational studies (those in which the assignment of the medical intervention is not at the discretion of the investigator) do not require registration, but should be reported following the STROBE statement and its extension, as appropriate, for observational studies in conjunction with the explanatory article (see von Elm, Altman, Egger, Pocock, Gøtzsche, Vandenbroucke; the STROBE Initiative. The Strengthening the Reporting of Observational Studies in Epidemiology (STROBE) statement: guidelines for reporting observational studies. Bull World Health Organ. 2007; 85:867–72 or http://strobe-statement.org).

5.2 Data sharing statement

Asian Biomedicine requires authors to comply with the ICMJE data sharing statement policy, as detailed in their editorial in June 2017 (http://www.icmje.org/news-and-editorials/data_sharing_june_2017.pdf).

As of July 1, 2018, manuscripts submitted to *Asian Biomedicine*, which report the results of clinical trials, must contain a data sharing statement, as follows.

As specified by the ICMJE, data sharing statements must indicate the following: whether individual deidentified participant data (including data dictionaries) will be shared ("undecided" is not an acceptable answer); what data, in particular, will be shared; whether additional, related documents will be available (e.g., study protocol, statistical analysis plan, etc.); when the data will become available and for how long; by what access criteria will the data be shared (including with whom, for what types of analyses, and by what mechanism). Illustrative examples of data sharing statements that would meet these requirements are provided in the Table in the editorial published in Ann Intern Med. doi: 10.7326/M17-1028 (please see Section 8.8 Data sharing statement).

6 Informed consent for publication of identifying details of patients in descriptions, photographs, and pedigrees

"Patients have a right to privacy that should not be violated without informed consent" (ICMJE recommendations, December 2021; and earlier versions). It is necessary for authors to ensure that the anonymity of patients is carefully protected. The names, initials, hospital or national identity numbers, or dates of birth of patients and research subjects should not be used. Other personal or identifying information should not be used unless it is essential to the clinical message or scientific purpose of the article and after the patient (or parent, or legally authorized guardian or representative for minors or incapacitated adults) gives written informed consent for publication. A signed statement of informed consent to publish (in print and online) patient descriptions, photographs, or pedigrees should be obtained from all persons (or parents, or legally authorized guardians or representatives) who can be identified in such

written descriptions, photographs, or pedigrees (including by the patients themselves). Informed consent for this purpose requires that such persons should be shown the manuscript before its submission or they should have waived the opportunity to do so in writing.

Even in cases where consent has been given, identifying details should be omitted if they are not essential. At the discretion of the Editors, omitting data or making data less specific to deidentify patients may be acceptable if alterations do not distort the scientific meaning, but changing any such data is not acceptable. Previously used measures to attempt to conceal the identity of an individual in a photograph, such as placing black bars over the person's eyes or blurring the face of the individual concerned, are not effective. Individuals can be identified in photographs that show minimal body parts, usually from identifying features (e.g., a tattoo, jewelry, clothing, personalized nail polish, scars, a nevus, or a mole). To avoid identifiability in such cases, photographs should be cropped. Complete anonymity is difficult to achieve, and informed consent should be obtained if there is any doubt whatsoever. Please note that informed consent is required for all clinical (case) reports and series, whether or not the patient may be identifiable. On submission, please use the Patient privacy and confidentiality form available at the Home (welcome) page of *Asian Biomedicine*. Please note that a completed form is mandatory and must be supplied before peer review. In the Methods section, please state "(Each/The) patient was given an opportunity to review the manuscript and has provided documented consent for its publication."

Nonidentifiable images

At the discretion of the Editors, formal consent is not usually required for the use of entirely anonymized images from which the individual cannot be identified, e.g., X-ray images, ultrasonography images, intraoperative images, pathology slides, or laparoscopic images, provided that these do not contain any identifying marks and are not accompanied by text that might identify the individual concerned. Nevertheless, consent on our Patient privacy and confidentiality form available at the Home (welcome) page of *Asian Biomedicine* is required for all clinical (case) reports and series regardless of whether the patients can be identified or not.

7 Previous publication or duplicate submission

Submitted manuscripts are considered with the understanding that they have not been published previously in print or electronic format (except as a preprint and clearly identified as such in accordance with recent ICMJE recommendations, or in Abstract or poster form) and are not under consideration in totality or in part by another publication or electronic medium. Such a statement of originality will be required as part of the corresponding author questionnaire to be completed during online submission of work through the Editorial Manager system. Published preprints, Abstracts or presentations at conferences should be noted in the Acknowledgments section of the manuscript. *Asian Biomedicine* follows the recommendations of the ICMJE with regard to overlapping publications and acceptable secondary publication, including translations of work published in a language other than English or multiple publications based on the same database.

Authors should be aware that replication of text from their own previous publications is text recycling (also referred to as self-plagiarism) and is mostly considered unacceptable. Where similarity of text with authors' own previous publications is necessary or unavoidable, duplication must always be reported transparently, be properly attributed, and be compliant with copyright requirements. If a manuscript contains text that has been published elsewhere, authors can avoid later problems by highlighting this to the Journal on submission.

It may help reduce the level of similarity if authors omit details of methods/procedures that are common knowledge to those in the field. Brief highlights of published methods may be included, but details must be left to the references, and verbatim repeat of previously published methods, even if published by the authors, will not be permitted unless a quotation from a published work is included and placed in quotation marks, with the reference to the source included at the end of the quotation. Describe pertinent and critical factors involved so the method can be reproduced but avoid excessive description.

8 Manuscript preparation

Text formatting

- Present text in a single column.
- Double-space text on A4-sized (297 mm × 210 mm) pages, with outer margins of 2.54 cm (1 inch) and left-align text without justification on the right (allow a ragged right side to provide even word spacing and facilitate reading).
- Use a typeface or font with high legibility, preferably, Times New Roman, 12 point.

- Please set the typeface upright (roman) and use italics only for emphasis. Use bold, as appropriate, for headings or for highlighting references to Figures and Tables.
- Use a sans serif typeface, preferably, Arial or Helvetica, in Figure labels.
- A manuscript must include a title page, Abstract and keywords, text, author contributions, acknowledgments, conflicts of interest statement, data sharing statement, references, and list of Figure legends as appropriate. Tables and Figures should be uploaded separately, each in a separate file.
- Number manuscript pages consecutively, beginning with the title page as "1". You may use automatic page numbering, but do NOT use other kinds of automatic formatting, such as for footnotes, headers and footers, or reference lists. Please remove the field codes from text and reference lists prepared using bibliographic reference manager software, such as EndNote (select all (ctrl+a) and then use ctrl+shift+f9 on the keyboard).
- Line numbers are not necessary, as they can be added automatically for peer review. Please do not use them.
- Please submit an MS Word file incorporating each section as described, including the title page, the Abstract and keywords page, the main text, and each of the other sections.
- Start the References on a new page in the same file.
- Figure legends should be grouped on a separate page placed at the end of the manuscript following the References section.
- Upload each Table and each Figure (without legend) in separate files through the Editorial Manager system (see Section 10.2).

Language and writing style

- Manuscripts must be written in acceptable U.S. American English. *Stedman's Medical Dictionary* (27th edition or later), the *AMA Manual of Style* (9th edition or later), and *Merriam-Webster's Collegiate* (10th edition or later) or *Unabridged Dictionary* should be used as standard references. While writing a manuscript, authors should consider those readers for whom English is a second language. *Asian Biomedicine* is read mainly by professional clinicians and scientists, so authors can avoid unnecessary simplification or didactic definitions. However, many readers are outside the immediate discipline of the author(s), so simple and direct expression is needed to achieve the goal of clarity. The Editors prefer authors to write in the active voice (e.g., "we conducted the study..." preferred to the passive voice, e.g., "the study was conducted...") as readers will find concepts and results conveyed more clearly if written directly. Please note that use of several adjectives (known as stacked modifiers and noun clusters) to qualify one noun in highly technical language can be confusing. We encourage authors to "unpackage" concepts and to present their findings and conclusions in simply constructed sentences.

If English is not your native language, or substantial English language and style editing is required, we normally ask that you have your manuscript checked by a native English speaker, preferably with knowledge of your field. Clear and concise expression, as well as appropriate grammar and word choice, will help the Editors and reviewers concentrate on the scientific content of your manuscript so that it can be judged fairly on its merits and facilitate the peer review process. If the use of English language is poor, particularly in the Abstract, the manuscript is unlikely to attract a dispassionate or unbiased, or indeed any, peer review. If you do not know a native English speaker with knowledge of your field, please consider using a professional English language editing service to help prepare your manuscript before submission, but note that the use of such services is no guarantee of acceptance.

Manuscripts that are accepted for publication will be checked by our editors and copyeditors and edited according to the Journal's house style, to ensure that they are grammatically correct, logical, clear, and concise. The editors also ensure that manuscripts use search terms and terminology that are consistent with those used in previous articles published in the Journal and with medical subject headings (MeSH), the NLM-controlled vocabulary thesaurus used for indexing articles for PubMed, available at https://www.nlm.nih.gov/mesh/meshhome.html. This editing process is assisted greatly if the authors have written the manuscript in a simple and accessible style, as the author is the best person to convey the message of the paper and to persuade readers, including reviewers, that their manuscript is important enough to spend time on. Editors hold the right to make any changes to the language and style of the original manuscript to adhere to the uniform standards of *Asian Biomedicine*, and authors may review these changes in proof.

8.1 Title page

The title page (see Section 10.2) should contain the following information:

- Article category.
- Short title not exceeding 50 characters (including letters and spaces) to be used as a running head.
- Article title (see Section 8.2).
- Author names (full first name, middle names or initials (optional), and family name last) and the institutions with which they are affiliated; indicate all affiliations with a superscripted number (and not a letter, to avoid confusion as being part of the author's name) after the author's name and in front of the matching affiliation. If an author's affiliation has changed during the course of the work, the author should list the affiliation at the time that the research (or most significant portion of the research) was conducted. Their current affiliation may be given in the Acknowledgments section, where the change of affiliation can be explained if considered necessary. The corresponding author should use their current address for correspondence, but their affiliation should be that of the time when the work was conducted. Affiliations should include the department, faculty, institution, city, postcode, country. Street address and telephone numbers are unnecessary.
- Author(s) to whom correspondence should be addressed after publication of the article (indicate with *).
- Address including postcode and institutional e-mail address of author(s) to whom correspondence should be addressed after publication of the article.

8.2 Article title

The title should be informative and provide a concise description of the complete article and it should include information that, along with the Abstract and keywords, will make electronic retrieval of the article sensitive and specific. Please include information about the study design as a part of the title (particularly important for case reports, randomized trials, systematic reviews, and meta-analyses). Avoid the use of causal language in titles of articles reporting the results of observational research; cause-and-effect wording is best reserved for reports of randomized trials and laboratory-based controlled experiments. For observational studies in which causation cannot be demonstrated, titles should not include cause-and-effect terms. Other phrases, such as "association of", are preferred. Only in reports of randomized clinical trials, in which causality can be demonstrated, is the use of such phrases as "effects of" appropriate. Phrases such as "Role of", "Effects of", "Treatment of", "Use of", and "Report of a Case of" are often best avoided in both titles and subtitles.

8.3 Abstract and keywords

8.3.1 Abstract

Please provide an Abstract (ideally of no more than 250 words for brevity and to avoid automatic truncation by electronic indexing systems, although we can accept Abstracts of 300 words in submissions for revision to our 250-word limit at the discretion of the Editors) structured as appropriate under 5 headings: (1) Background (context for the study), (2) Objectives (study's purpose or aims; please avoid using verbs such as "explore" or "examine" in the objectives because it is later difficult to determine whether the investigators were successful), (3) Methods (basic procedures: selection of study participants, settings, measurements, analytical methods), (4) Results (main findings; giving specific effect sizes and their statistical significance (please report exact values for $P < 0.001$, see Section 8.4.17 Statistical requirements) and clinical importance, as appropriate), and (5) Conclusions. For *Clinical reports* and *Clinical vignettes,* please limit the Abstract to 150 words and use the structure Background, Case report, and Conclusions or, optionally, submit unstructured Abstract for *Clinical vignettes*. An unstructured Abstract may be used optionally for *Reviews*, *History of Asian biomedicine*, *Controversies*, and *Commentaries*. No Abstract is required for *CPCs*, *New developments*, or *Letters to the Editor*. Please avoid the use of abbreviations in the Abstract unless they are absolutely necessary and used more than once. Please do not cite references in the Abstract unless provided according to our specified style (see Section 8.9) as part of the word count.

Clinical trial Abstracts should include items that the CONSORT group has identified as essential (www.consort-statement.org/resources/downloads/extensions/consort-extension-for-abstracts-2008pdf/), including the clinical trial registration number at the end of the Abstract.

8.3.2 Keywords

Please provide 5–10 keywords or short phrases in alphabetical order separated by semicolons (;). The use of keywords taken in the MeSH list of the U.S. NLM at the following uniform resource locator (URL) is preferred (http://www.nlm.nih.gov/mesh/meshhome.html), as this will facilitate searching and retrieval of published articles.

8.4 Main Text

The text for most articles should be organized into the following sections: Introduction, Methods, Results, Discussion

(IMRAD), Conclusion, Author contributions, Acknowledgments, Conflicts of interest statement, Data sharing statement, References, and Figure legends. For *Clinical reports*, other headings may be used: Introduction, Case report, Discussion, and Conclusions might be used as appropriate. See individual article types in Section 1 for further details. Please refer to the *AMA Manual of Style* (9th edition or later) for matters of style.

8.4.1 Abbreviations

Asian Biomedicine discourages the use of abbreviations and acronyms and asks that authors avoid the use of abbreviations in the Abstract and title entirely unless they are widely known, absolutely necessary, and used more than once. Abbreviations impose a burden on a reader because the reader must first decipher the author's code. This task distracts the reader from concentrating on the content of an article. A reader should not need a specialized cipher key to understand an article. An article should not be "alphabet soup". It is acceptable to substitute a standard abbreviation for an unwieldy word or phrase appearing more than, say 5 times in a manuscript. An abbreviation should never replace one short word. A simple way of avoiding abbreviations is to use a substitute word. For example, instead of writing "IRL" for "inspiratory resistive load", simply write "load" or "the load" where the context is clear after first stating what type. This will facilitate the "flow" of the text. If an abbreviation refers to a plural, add an "s" to make it plural.

Please limit the use of nonstandard abbreviations. Where a term/definition will be continually referred to, it must be written in full when it first appears in the text, followed by the abbreviation in parentheses immediately after it. Any abbreviations must be defined at first mention in the Abstract, in the text, and in each Table and Figure (which must be understood on its own without reference to the main text). Thereafter, the abbreviation must be used consistently. Avoid first defining abbreviations in any section heading; if an abbreviation has previously been defined in the text, then the abbreviation may be used in a subsequent section heading. Restrict the number of abbreviations to those that are absolutely necessary. For lists of standard abbreviations, please consult the *Council of Biology Editors Style Guide* or other standard sources such as the *AMA Manual of Style* (9th edition or later). Similarly, define acronyms, or words formed from the initial letter or letters of each of the successive parts or major parts of a compound term (such as, radar or laser), which may be familiar to the author, but not to the reader, who may have to refer to the original definition throughout the paper whenever the acronym is used.

Do not define standard scientific symbols, e.g., write "Na" and not "sodium (Na)". Use abbreviations for measurements after numbers, even on the first appearance, e.g., write "3 mg" not "3 milligram (mg)". Please see Section 8.4.4 Units.

Avoid using terms such as Group 1 or Group A; readers should not have to remember what Group 1 or Group A stands for. Instead, write the "treated patients" or the "control group" or something else as appropriate.

8.4.2 Jargon, slang, colloquialisms, idioms, homonyms, euphemisms, and clichés

Specialized medical jargon and medical slang should be avoided. Colloquialisms, idioms, and vulgarisms should also be avoided in formal scientific writing. "When these words appear in medical manuscripts or in medical conversation, they are unintelligible to other scientists, particularly those of foreign countries; they are not translatable…" (Words and phrases. In: Fishbein. Medical writing: the technic and the art. Chicago: American Medical Association; 1938: p. 46).

Carefully check homonyms that sound alike, but are spelled differently and have different meanings. Euphemisms are indirect terms used to express something unpleasant. Directness is better in scientific writing (e.g., "The patient died.", not "The patient passed away."). Avoid "sacrificed" when referring to animals (note *carcass* not *cadaver*); use "killed", or better, "humanely killed" instead. Avoid clichés "like the plague".

Please find more detailed discussion of correct and preferred language and grammar in the *AMA Manual of Style* (9th edition or later).

8.4.3 Numbers

Laboratory parameters, and all quantities with units of measure, time, temperature, number of subjects, length, area, mass, and volume, should be expressed using Arabic numerals. Please use an en rule (–) and not a hyphen (-) to indicate minus signs and for spans of numbers, e.g., patients aged 6–64 years. Numbers that begin a sentence should be spelled out as words. The use of "one" in the running text—or other numbers, such as "zero" or "two"—should usually be in the form of words where use of a numeral would place unintended emphasis on a precise quantity or would be confusing.

8.4.4 Units

In general, the International System of Units (French: *Système International* [SI] *d'Unités*) must be used (updated [2019] 9th edition of the SI Brochure, which defines and presents the SI units; available at http://www.bipm.org/en/publications/si-brochure/). However, see the *AMA Manual of Style* for guidance on use and exceptions, e.g., blood pressure values (which should be reported in mmHg), temperatures (to be given in degrees Celsius [°C]), and enzyme activity (may be reported in International Units). Use abbreviations for measurements after numbers, even on the first appearance, e.g., write "3 mg", not "3 milligram (mg)". Other non-SI units used informally in health care and biomedical fields may be used at the discretion of the Editors, but these may require definition.

- Do not add an "s" to pluralize abbreviations of units.
- Use the metric system for the expression of length, area, mass, and volume.
- Use a space between numbers and symbols (e.g., 25 kg). The percentage and degree symbols are exceptions; the degree symbol is written without spaces for angles, but not for temperatures (e.g., 12°; but 37 °C) as consistent with the AMA Manual of Style (11th edition).
- Use a degree symbol and not a superscripted "o" or other variations.
- The correct abbreviations of hours and seconds are "h" and "s", respectively, and not "hr" and "sec".
- The symbol used for liter should be an uppercase "L", consistent with the recommendations of the AMA Manual of Style and the U.S. National Institute of Standards and Technology (NIST).
- Do not repeat symbols when an en dash is used to indicate a span of numbers unless the symbol is closed up, in which case the unit should be repeated for each number, e.g., 10%–20%, but 20–30 mmHg.

8.4.5 Names of drugs, devices, and other products

Use the recommended International Nonproprietary Name (rINN) for medicinal substances, unless the specific trade name of a drug is directly relevant to the discussion. Generic or chemical drug names should appear in lowercase letters in the text and should not be abbreviated. If a specific proprietary drug needs to be identified, the copyright or brand name with an initial capital may appear only once in the manuscript in parentheses following the generic or chemical name the first time the drug is mentioned in the text. The use of trademark names should not be used with trademark symbols, e.g., ® or ™, but the trademarked word should have an initial capital (see Section 1.4). For devices and other products (chemicals, reagents, or equipment), the specific brand or trade name, as well as the manufacturer name, should be provided the first time the device or product is mentioned in the text. Thereafter, the generic term (if appropriate) should be used.

When the administration of drugs is described, intra-articular, intracardiac, intramuscular, intrathecal, intravenous, intraventricular, intravitreal, oral, parenteral, rectal, subconjunctival, subcutaneous, sublingual, topical, and transdermal are acceptable terms when these are the usual or intended routes of administration.

8.4.6 Gene nomenclature

Current standard international nomenclature for genes should be adhered to. For human genes, use genetic notation and symbols approved by the Human Genome Organization (HUGO) Gene Nomenclature Committee (http://www.genenames.org). You may also refer to the resources available on PubMed at http://www.ncbi.nlm.nih.gov/guide/genes-expression. The Human Genome Variation Society has a useful site that provides guidance in naming mutations at http://www.hgvs.org/. In your manuscript, genes should be typed in italic typeface and should include the accession number at first mention as appropriate.

8.4.7 Genomic and other data repositories

Where there is a community-established norm for data sharing, authors are required to deposit their genomic or other relevant data sets into publicly available databases on the date of publication. For the purposes of evaluating the manuscript, authors should provide the editors and reviewers with access to the data sets when the manuscript is submitted to the *Asian Biomedicine*; information about accessing the data sets can be included in the Methods section. Original or raw data must be available for audit. A data accessibility or data sharing statement is required. We expect that you will archive all of the data from which published results or statistical summaries are derived in a public repository. The repository you choose should offer you guaranteed preservation (see a registry of research data repositories at https://www.re3data.org) and should help you make it findable, accessible, interoperable, and reusable, according to FAIR Data Principles (https://www.force11.org/group/fairgroup/fairprinciples). Recommended repositories and standards are indexed by the FAIRsharing collection.

1. Microarray data: It is the authors' responsibility to ensure that all data collected and analyzed in their experiments adhere to the Minimal information about a microarray experiment (MIAME) guidelines (Brazma A, Hingamp P, Quackenbush J, et al. Minimum information about a microarray experiment (MIAME)-toward standards for microarray data. Nat Genet. 2001; 29:365-71. doi: 10.1038/ng1201-365.). Review the MIAME checklist at the following URL: https://fairsharing.org/MIBBI.
   Appropriate public databases include, but are not limited to, ArrayExpress, Gene Expression Omnibus (GEO), or CIBEX.
2. Nucleotide and protein sequences: DNA sequences, RNA sequences, and protein sequences. Sequences should be deposited according to Minimum information about any (x) sequence (MIxS) guidelines, available at http://www.ebi.ac.uk/ena/submit/mixs-checklists.
   Simple genetic polymorphisms or structural variations should be submitted to database of single-nucleotide polymorphisms (dbSNP) or database of genomic structural variation (dbVar); the National Center for Biotechnology Information (NCBI) Trace Archive may be used for capillary electrophoresis data, while Sequence Read Archive (SRA) accepts next-generation sequencing (NGS) data only.
   Appropriate public databases include, but are not limited to, the following: European Molecular Biology Laboratory (EMBL/EBI), European Nucleotide Archive (ENA), GenBank, DNA Data Bank of Japan (DDBJ), EBI Metagenomics, UniProtKB, NCBI, NCBI Trace Archive, NCBI SRA, NCBI Assembly, European Variation Archive (EVA), dbVar (genetic polymorphisms), and ClinVar (https://www.ncbi.nlm.nih.gov/clinvar/).
3. Crystallographic data for small molecules, peptides, and proteins (all), as well as for larger assemblies (Electron Microscopy Data Bank [EMDB]): Manuscripts reporting new 3-dimensional (3D) structures of small molecules from crystallographic analysis should include a *.cif file and a structural figure with probability ellipsoids checked using the International Union of Crystallography (IUCr)'s checkCIF routine (http://checkcif.iucr.org/), and a portable document format (PDF) copy of the output must be included with the submission, together with a justification for any alerts reported. Crystallographic data for small molecules should be submitted to the Cambridge Structural Database (https://www.ccdc.cam.ac.uk/), and the deposition number should be referenced appropriately in the manuscript. Full access must be provided on publication. Models can be deposited at BioModels repository of mathematical models of biological and biomedical systems, found at https://www.ebi.ac.uk/biomodels/.
   Other repositories include the following: Protein Circular Dichroism Data Bank (PCDDB), Crystallography Open Database (COD), Coherent X-ray Imaging Data Bank (CXIDB), Biological Magnetic Resonance Data Bank (BMRB), EMDB, Worldwide Protein Data Bank (wwPDB), and Structural Biology Data Grid.
4. Neuroscience: The following data repositories accept human-derived data (NeuroMorpho.org and G-Node accept data from other organisms also): NeuroMorpho.org, Functional Connectomes Project International Neuroimaging Data-Sharing Initiative (FCP/INDI), OpenNeuro (formerly OpenfMRI), and G-Node. Please note that human-subject data submitted to OpenfMRI must be deidentified, while FCP/INDI can handle sensitive patient data.
5. Omics: Functional genomics is a broad experimental category. Data should be deposited following the relevant community requirements where possible.
   Please refer to the MIAME standard for microarray data. Molecular interaction data should be deposited with a member of the International Molecular Exchange (IMEx) Consortium, following the Minimum Information about a Molecular Interaction Experiment (MIMIx) recommendations (see Subsection 1. Microarray data).
   For data linking genotyping and phenotyping information in human subjects, we strongly recommend submission to the database of Genotypes and Phenotypes (dbGAP), the European Genome–phenome Archive (EGA), or the Japanese Genotype–phenotype Archive (JGA), which have mechanisms in place to handle sensitive data.
   ArrayExpress, GEO, GenomeRNAi, the dbGAP, the EGA, the Database of Interacting Proteins (DIP), IntAct, the JGA, the Biological General Repository for Interaction Datasets (BioGRID; curated resource, which may not accept direct submission of data. Contact the database directly for further information), NCBI PubChem BioAssay, and the Genomic Expression Archive (GEA) are also other repositories.
   Metabolomics and proteomics: Metabolomics data should be submitted following the Metabolomics Standards Initiative (MSI) guidelines. We ask authors to submit proteomics data to members of the ProteomeXchange Consortium (MassIVE, MetaboLights, PeptideAtlas, and PRIDE), following the Minimum Information About a Proteomics Experiment (MIAPE) recommendations.
6. Imaging: The Image Data Resource, the Cancer Imaging Archive, the SICAS Medical Image Repository, and the Coherent X-ray Imaging Data Bank (CXIDB).

7. Organism-focused resources: These resources provide information specific to a particular organism or disease pathogen. They may accept phenotype information, sequences, genome annotations, and gene expression patterns, among other types of data. Incorporating data into these resources can be valuable for promoting reuse within these specific communities; however, where applicable, we ask that data records be submitted both to a community repository and to one suitable for the type of data (e.g., transcriptome profiling; please see above). Eukaryotic Pathogen Database Resources (EuPathDB), FlyBase, Influenza Research Database, Mouse Genome Informatics (MGI), Rat Genome Database (RGD), VectorBase, Xenbase, and Zebrafish Model Organism Database (ZFIN).
8. Chemistry and chemical biology: caNanoLab†, ChEMBL†, NCBI PubChem BioAssay, NCBI PubChem Substance, and Beilstein-Institut Standards for Reporting Enzymology Data (STRENDA).
   †Curated resources that may not accept direct submission of data. Contact the database directly for further information.
9. General repositories. Where a data-type-specific repository is not available, we recommend the following generalist repositories, which can handle a wide variety of data. Generalist repositories may also be appropriate for archiving associated analyses, or experimental–control data, supplementing the primary data in a data-type-specific repository. Some have associated fees or costs or size-associated limitations.
   - Dryad Digital (associated fees)
   - figshare (size-associated free deposit. Additional fees may apply for larger data sets)
   - Harvard Dataverse (contact repository for data sets over 1 TB)
   - Open Science Framework (free of charge, size-associated limitations)
   - Zenodo (donations toward sustainability encouraged, size-associated limitations)
   - Mendeley Data (contact repository for data sets over 10 GB)

Prospective authors may wish to explore the repositories listed at FAIRsharing.org or re3data.org.

8.4.8 Plant (or other) extracts

Asian Biomedicine does not accept data for crude extracts that have not been characterized by analysis of their major constituents (e.g., by high-performance liquid chromatography [HPLC], nuclear magnetic resonance [NMR], and mass spectroscopy [MS]). Identification of extracts should be supported by at least an HPLC or gas chromatography (GC) trace, which should be included with the manuscript. Extraction and isolation of compounds should be described in detail. The type and amount of material, solvents, and extraction methods must be indicated. Please consider standardizing your various extracts by means of HPLC, HPLC-MS, or HPLC-NMR—fingerprinting inclusive of the identification and quantitation of the typical constituents, secondary metabolites, and main bioactive compounds, which are, or might be, responsible for the pharmacological effects or activity studied. HPLC or GC, followed by a suitable detection method, such as enzyme-linked immunosorbent assays (ELISAs), radioimmunoassays (RIAs), ligand-binding assays, various sensors, or fluorometric assays, to name a few, might be appropriate. The methods should be described in detail, including apparatus, columns, solvent systems, gradient, flow rate, and detection. If you do not possess the required analytical equipment or expertise, please consider seeking cooperation with a phytochemical laboratory. Without standardization of the plant (or other) extracts, the results presented cannot be reproduced pharmacologically, and we cannot accept them for publication. We would like to see evidence at a molecular level supportive of any speculation regarding the mechanism of action of putatively active components, e.g., levels of components (that might be responsible for the activity). This allows a better comparison against positive controls that might include putatively active components. A negative control is also necessary. It is usually desirable to demonstrate dose–activity dependence. This would require at least 3 dose–response assessments. Please also see Sections 8.4.14 Gas chromatographic methods, 8.4.15 Spectroscopic data, and 8.4.16 Characterization of chemical and biological materials.

Collecting or research on plants or other specimens (either cultivated or wild) from botanical gardens, national parks, or research forests and the like, must comply with institutional, national, or international guidelines, and this needs to be explicitly reported in the Methods section of manuscripts. Some statement should be made that the collection was approved, did not require any specific permits (which should be specified if required), and did not violate any law related to endangered or protected species. The requirement for specific permits may be waived for field studies in locations that are not privately owned or protected. The month and year when the plants were collected should be stated, and ideally, the exact collection location should be provided using a global positioning system (GPS) navigation tool. We require that authors comply with the Convention on Biological Diversity and the Convention on

International Trade in Endangered Species of Wild Fauna and Flora (see Section 2).

Investigators who purchase dried "herbal remedies" or other materials from companies need to specify the name of the supplier and their location and, ideally, deposit samples in a herbarium.

Manuscripts must report the presence of specimen plants in a specified major regional herbarium, for access by future workers, and include the reference number of the voucher specimen of the plant specimen. The part of the plant used, as well as the full name, highest academic degree, and affiliation of the expert botanist who examined it, should be reported. Please provide complete information for the correct nomenclature, the scientific name (in italics), the author of this name, and the family under the heading "Plant Material". If this is in doubt, please consult resources available at the Royal Botanic Gardens, Kew, UK: https://www.kew.org/science/collections-and-resources/data-and-digital) and/or the International Code of Botanical Nomenclature (www.bgbm.fu-berlin.de/iapt/nomenclature/code/tokyo-e/default.htm) should be followed. It is also helpful to mention the commonly used name for the plant that is the focus of your study.

For Chinese or ethnic traditional medicine (e.g., Kampo, Ayurvedic, or Korean traditional medicine), please use a recognized source for plant names. Herbal names in traditional Chinese medicine have been a problem in terms of capitalization and italicization, because using italicization can get names confused with formal Linnaean classification. A helpful and authoritative online resource is from the World Health Organization: http://apps.who.int/medicinedocs/en/d/Js2200e/20.html (and related pages). Please ensure common herb names are in plain text and the formal species names in italics. For example, Radix Glycyrrhizae consists of the dried roots and rhizomes of *Glycyrrhiza glabra* L. and its varieties (1–7) or of *Glycyrrhiza uralensis* Fisch. (6, 7) (Fabaceae). Other useful sources are Chan et al. Good practice in reviewing and publishing studies on herbal medicine, with special emphasis on traditional Chinese medicine and *Chinese Materia Medica*. J Ethnopharmacol. 2012; 140:469–75; and Ho-Dzun, Knüpffer, and Hammer. Additional notes to the checklist of Korean cultivated plants (5). Consolidated summary and indexes. Genet Resour Crop Evol. 1997; 44:349–91.

The structural analysis of new plant substances is now such a routine procedure that papers reporting a single novel compound of expected structure (e.g., a new triterpene fatty acid ester) are rarely acceptable, unless other novel information regarding the plant is included.

Manuscripts describing routine bioactivity screening (e.g., antimicrobial, antioxidant, antifeedant, etc.) of crude extracts or predictable and/or unexceptional bioactivity (e.g., antioxidant activity of polyphenolics, antimicrobial activity of essential oils) are not acceptable.

Uncritical ethnopharmacological investigations, where a list of plants and their uses are simply recorded, will not be accepted.

8.4.9 Cell lines

If human cell lines are used, authors are strongly encouraged to include the following information in their manuscript:

- The source of the cell line, including when and from where it was obtained.
- Whether the cell line has recently been authenticated and by what method. Cell line authentication is recommended by techniques such as karyotyping, isozyme analysis, or short tandem repeat (STR) analysis—and may be required during peer review or before publication.
- Whether the cell line has recently been tested for mycoplasma contamination.
- For established cell lines, the Methods section should include the following: a reference to the published article that first described the cell line; and/or the cell line repository or company that the cell line was obtained from, the catalog number, and whether the cell line was obtained directly from the repository/company or from another laboratory.
- For de novo (new) cell lines, including those given to the investigators as a gift, authors must follow our policies for research involving human subjects or animals, as appropriate. The ethics statement must include details of IRB or ethics committee approval and, for human cells, confirmation of written informed consent from the donor, guardian, or closest living relative.

Further information is available from the International Cell Line Authentication Committee at: https://standards.atcc.org/kwspub/home/the_international_cell_line_authentication_committee-iclac_/. We recommend that authors check the NCBI database for misidentification and contamination of human cell lines. https://www.ncbi.nlm.nih.gov/biosample/?term=cell%20line%20status%20misidentified[Attribute].

8.4.10 Blots and gels

Manuscripts reporting results from blots (including western blots) and electrophoretic gels should follow the following guidelines:

- In methods reporting electrophoresis experiments, please indicate the type of gel and monomer concentrations, specific buffers used, the electrophoresis equipment used (be specific with catalog/model number so that size can be defined), running voltage, length and thickness of the gel (so that V/cm can be calculated), and run time as appropriate. In the Figure legends and Methods section, please specify the source and catalog number or specific name of the markers used.
- In accordance with our policy on image manipulation (see Section 8.11), the image should not be adjusted in any way that could affect the scientific information displayed, e.g., by selectively modifying the background or contrast.
- Images of all blots and gels that support results reported in the manuscript should be provided.
- Original uncropped and unadjusted images of blots and gels, including molecular size markers, may be requested if not provided in the Figures.
- The display of cropped gels and blots is encouraged if it improves the clarity and conciseness of the presentation. In such cases, the cropping must be mentioned in the Figure legend. Lanes should not be overcropped around the bands; the image should show most or all of the blot or gel. As a guide, all important bands must be retained and at least 6 band widths of space above and below the bands of interest should be presented.
- Any nonspecific bands should be shown, and an explanation of their nature should be given.
- The image should include all relevant controls, e.g., loading controls (e.g., actin, glyceraldehyde 3-phosphate dehydrogenase [GAPDH]) and controls should be run on the same blot or gel as the samples. Sample-processing controls run on different gels should be identified as such.
- A Figure panel should not include composite images of bands originating from different blots or gels. If the Figure shows nonadjacent bands from the same blot or gel, this should be clearly denoted by vertical black lines, and the Figure legend should provide details of how the Figure was made.
- Quantitative comparisons between samples on different gels/blots are discouraged; if this is unavoidable, the samples must originate from the same experiment and the gels/blots must have been processed in parallel; the Figure legend must clearly state these details. Appropriate reagents, controls, and imaging methods with linear signal ranges must be used.

8.4.11 Antibodies

Manuscripts reporting experiments using antibodies should include the following information:

- The name of each antibody, a description of whether it is monoclonal or polyclonal, and the host species.
- The commercial supplier or source laboratory, the catalog or clone number, and if known, the batch number.
- The antigen(s) used to raise the antibody.
- For established antibodies, a stable public identifier from the Antibody Registry (http://antibodyregistry.org/).

The manuscript should also report the following experimental details.

- The final antibody concentration or dilution.
- A reference to the validation study if the antibody was previously validated. If not, provide details of how the authors validated the antibody for the applications and species used.

We encourage authors to consider adding information on new validations to a publicly available database such as Antibodypedia or CiteAb.

8.4.12 Flow cytometry

Manuscripts that present data from flow cytometry are expected to conform to the reporting standard recommended by the International Society for Analytical Cytology, described by Lee JA, Spidlen J, Boyce K, et al. MIFlowCyt: the minimum information about a flow cytometry experiment. Cytometry A. 2008; 73:926–30. doi: 10.1002/cyto.a.20623, a standard for outlining the minimum information required to report the experimental details of flow cytometry experiments.

For plots, confirm that the following:

- The axis labels state the marker and the fluorochrome used (e.g., CD4–fluorescein isothiocyanate [FITC]).
- The axis scales are clearly visible. Include numbers along axes only for the bottom left plot of the group (a "group" is an analysis of identical markers).
- All plots are contour plots with outliers or pseudocolor plots.
- A numerical value for number of cells or percentage (with statistics) is provided.

In the Methods section, ensure the following:

- Sample preparation: describe the sample preparation, including the source of the cells and any tissue processing.

- Instrument: specify the make and model number.
- Software: describe the software used for collection and analysis, e.g., name and version. If custom-made code has been used, name the repository and accession details.
- Cell population abundance: describe the abundance of the relevant cell populations within postsort fractions, giving details of the purity of the samples and how the purity was determined.
- Gating strategy: specify the preliminary forward-scattered light/side-scattered light (FSC/SSC) gates of the starting cell population, indicating where boundaries between "positive"- and "negative"-staining cell populations are defined.

8.4.13 Polymerase chain reaction

A set of guidelines covering key parameters of every quantitative polymerase chain reaction (qPCR) assay, which are essential for allowing reviewers, editors, and readers to evaluate the technical merits of scientific publications using qPCR technology are found in the MIQE précis: practical implementation of minimum standard guidelines for fluorescence based quantitative real-time PCR experiments (see Bustin et al. BMC Molecular Biology 2010; 11:74. doi: 10.1186/1471-2199-11-74).

8.4.14 Tumor cell lines and anticancer activity

In manuscripts that present results of biological studies with tumor cell lines, authors should pay special attention to the U.S. National Cancer Institute (NIH) guidelines for cancer drug discovery studies. Compounds that suppress the growth of, or kill, isolated tumor cell lines grown in culture should be referred to as either "cytostatic", or "cytotoxic", as appropriate. The term "anticancer" should be reserved for compounds that show specific activity in human-based clinical studies (see Suffness M, Douros JJ. Nat Prod. 1982; 45:1–14). Some flexibility in this system is afforded in the description of compounds that show activity in molecular-targeted antitumor assays.

Compounds should be compared against a suitable positive control substance and follow accepted guidelines when represented as "active". For example, a cytotoxic pure substance when tested against a cancer cell line would exhibit a half-maximal inhibitory concentration (IC_{50}) value of <10 mM (or 4–5 mg/mL). Only sufficiently potent or exceptional activities will be considered. Report the biological activities by listing IC_{50} values and minimal inhibitory concentrations (MICs) for the active substance being studied, as well as for a positive control or reference material. A negative control should also be used. Results must be based on adequate statistics. Positive controls (reference/standard compounds) and at least 3 dose–response assessments for conventional pharmacological experiments should be included.

8.4.15 Gas chromatographic methods

For manuscripts in which gas chromatographic methods are used, see Beroza M, Hornstein I. Reporting of gas chromatographic methods. J Agric Food Chem. 1973, 21, 7A.

8.4.16 Spectroscopic data

This is a guide only; in certain cases, different methods of data presentation may be more suitable. Authors are encouraged to consult examples of data presentation published in recent issues of American Chemical Society (ACS) publications for appropriate style and format. The *ACS Style Guide* (Coghill AM, Garson LR, editors. 3rd ed. New York: Oxford University Press; 2006) provides further advice. Complete NMR, MS, or other spectral data will be published only if novel or necessary to substantiate points are made under the Results or Discussion section. Such presentations take up space, and essentially the same information can frequently be put into a much more concise form by simply listing the position and intensity of the maxima. It is usually not necessary to list all of the maxima in the spectra to provide an adequate description. Report the type of instrument used (e.g., in MS, whether magnetic, quadrupole, time-of-flight, etc.) and also the type of cell, the solvent (if any), and the state of the sample (whether liquid, gas, solution, etc.).

- Mass spectra. List the molecular ion and about 10 of the major ions with their intensities in parentheses, or, more preferably, use the method outlined by Hertz HS, Hites RA, Biemann K. Anal Chem. 1971; 43:681–91. This method involves dividing the spectrum into consecutive regions of 14 mass units starting at *m*/*z* 6 (i.e., 6–19, 20–33, 34–47, 48–61, etc.). The 2 most intense ions in each region are then listed. Intensities, relative to the most intense ion—the intensity of which is taken as 100, are shown in parentheses immediately following the *m*/*z* value; e.g.: hexanal, mass spectrum found (70 eV, 2 most intense ions, each 14 mass units above *m*/*z* 34): 43 (86), 44 (100), 56 (86), 57 (65), 71 (28), 72 (33), 82 (18), 85 (5), 97 (2), and 100 (2). If the molecular ion does not appear in this presentation, the author should indicate it separately.
- Nuclear magnetic resonance (^{1}H-NMR or ^{13}C-NMR) spectra. See a document providing detailed information

for the presentation of NMR data at J Agric Food Chem. 1973; 21: 7A.

The frequency, the solvent, and also the temperature (if other than ambient) used are first specified. The type of unit used (δ or τ) is then stated, followed by the position of the center of gravity of the sharp line, broad line, or spin–spin multiplet in these units. This is then followed by information in parentheses, which (1) describes the type of splitting, i.e., singlet as s, doublet as d, triplet as t, quadruplet as qd, multiplet as m; (2) gives the value of the number of protons the area represents; (3) gives the coupling constant J; and (4) gives the part of the molecule connected with the particular absorption, with the protons involved underlined.

For example, ^{1}H-NMR for ethanol (60 MHz, CCl_4): δ 1.22 (t, 3, J = 7 Hz, $CH_2\underline{CH_3}$), 2.58 (s, 1, OH), 3.70 (qd, 2, *J* = 7 Hz, $OC\underline{H_2}CH_3$).

- Other spectra. In general, list the position and the intensity of the maxima. In some cases, it may be desirable to list points of inflection.

Examples:
Reporting liquid chromatography (HPLC) and HPLC/MS: Ma J, Yang H, Basile MJ, Kennelly EJ. Analysis of polyphenolic antioxidants from the fruits of three *Pouteria* species by selected ion monitoring liquid chromatography–mass spectrometry. J Agric Food Chem. 2004; 52:5873–8.

Reporting data in detail, including UV shifts and IR spectra: Wu Z, Rodgers RP, Marshall AG. Characterization of vegetable oils: detailed compositional fingerprints derived from electrospray ionization Fourier transform ion cyclotron resonance mass spectrometry. J Agric Food Chem. 2004; 52:5322–8.

8.4.17 Characterization of chemical and biological materials

Manuscripts submitted to the Journal will be held to rigorous standards with respect to experimental methods and characterization of new compounds. It is essential that newly discovered compounds, either synthetic or isolated from natural sources, be characterized rigorously and unequivocally. Authors must provide adequate data to support their assignment of identity and purity for each new compound described in the manuscript. Authors should provide a statement confirming the source, identity, and purity of known compounds that are central to the scientific study, even if they are purchased or resynthesized using published methods.

Supporting data normally include physical form; melting point ranges may be provided for crystalline materials. Ultraviolet (UV) or infrared (IR) spectral data may be reported for characteristic functional group identification (when appropriate), ^{1}H- and ^{13}C-NMR, and MS data to support molecular weight identity. High-resolution mass spectral (HRMS) data are preferred. Optical rotation may also be reported when compounds have chiral centers.

Evidence of sample purity is requested for each new compound. Methods for purity analysis depend on the compound class. For most organic and organometallic compounds, purity may be demonstrated by high-field ^{1}H-NMR or ^{13}C-NMR data, although elemental analysis (±0.4%) is encouraged for small molecules. Quantitative analytical methods—including chromatographic (GC, HPLC, etc.) or electrophoretic analyses—may be used to demonstrate purity for small molecules and biopolymeric materials.

Chemical structures should be included for uncommon chemicals, particularly when the systematic or common name is too complex or unclear to readily denote the structure. Such structures should be produced using ChemDraw or a similar software and included as a Figure. Authors are encouraged to use systematic names similar to those used by the Chemical Abstracts Service, the International Union of Pure and Applied Chemistry (IUPAC), the International Union of Biochemistry and Molecular Biology, and NCBI PubChem Substance.

For new biopolymeric materials (oligosaccharides, peptides, nucleic acids, etc.), direct structural analysis by NMR spectroscopic methods may not be possible. In these cases, authors must provide evidence of identity based on sequence (when appropriate) and MS characterization. Detailed characterization of standard oligonucleotide reagents (e.g., primers) for molecular biology experiments is not required.

8.4.18 Statistical requirements

Conclusions reported in *Asian Biomedicine* should be based on adequate statistics that incorporate appropriate tests of significance, account for the type of data distribution, and are based on the number of experimental observations required for the application of the respective statistical method.

Use correct nomenclature for statistical methods. Descriptive statistics should follow the scales used in data description. Inferential statistics are important for interpreting results and should be described in detail.

The Methods must include a statistics section, wherein you describe and justify the statistical approaches and the statistical tests selected. For tests involving 1 degree of freedom (e.g., a Student t test), state whether a directional

nondirectional test was conducted, that is whether they were one- or two-tailed tests.

Justify the use of parametric and nonparametric tests.

Describe and justify data transformation procedures (e.g., normalization to a control).

Define all within-subject and between subject factors.

Define planned comparisons.

For multiple comparisons and multiple correlations, define measures used to reduce Type 1 errors (e.g., Bonferroni adjusted α levels).

Please ensure that the error bars are defined throughout the Figures. For all statistics (including error bars), provide the EXACT n values used to calculate the statistics (reporting individual values rather than a range if n varied among experiments). For representative results, report the number of times that the measurements were repeated and specifically define any replicates, e.g., experiments were repeated 3 times and conducted in triplicate (for a discussion please see Casadevall A, Fang FC. Reproducible science. Infect Immun. 2010; 78:4972-5. doi: 10.1128/IAI.00908-10.). Where relevant, provide exact values for both significant and nonsignificant *P* values, unless $P < 0.001$. For repeated measures analyses of variance (ANOVAs), define measures taken to control for violation of sphericity assumption; describe how you report results of corrected degrees of freedom statistics. For analysis of variance (ANOVA), provide *F* values and degrees of freedom (e.g., $F_{1,32} = 22.32$, $P = 0.08$). For *t* tests, provide *t* values and degrees of freedom (e.g., $t_{27} = 7.85$, $P = 0.17$).

Describe the methods used to determine adequate statistical power, describe how sample size was determined, detailing any statistical methods used to predetermine the sample size; or if no sample-size calculation was performed, describe how sample sizes were chosen and provide a rationale for why the sample sizes are sufficient. Please note Altman DG, Bland JM. Absence of evidence is not evidence of absence. BMJ. 1995; 311(7003):485. doi:10.1136/bmj.311.7003.485

All statistical variables must be set in italics (*F*, *t*, *P*) and an uppercase statistical *P* symbol is preferred. All *P* values must be presented to an appropriate degree of precision. In brief, *P* values must be expressed to 2 digits to the right of the decimal point (regardless of whether the *P* value is significant), unless $P < 0.01$, in which case the *P* value should be expressed to 3 digits to the right of the decimal point. (One exception to this rule is when rounding the *P* from 3 digits to 2 digits would result in *P* appearing nonsignificant, such as $P = 0.046$. In this case, expressing the *P* value to 3 places may be preferred. The same holds true for rounding those confidence intervals [CIs] that are significant before rounding, but nonsignificant after rounding.) Usually, with perhaps the exception of some genetics studies, the smallest *P* value that should be expressed is $P < 0.001$, because additional zeros do not convey useful information; the largest *P* value that should be expressed is $P > 0.99$. Please refer to the *AMA Manual of Style* (9th edition or later) for a glossary of statistical terms and advice regarding significant digits and rounding numbers. Ensure that all *P*-values defined in Figure legends and Table footnotes are linked (by symbols such as * and #) to the corresponding data.

Please avoid placing undue emphasis on *P* values, but rather express data with some measure of the effect size between groups and 95% CI, which should be interpreted. Please see: Amrhein V, Greenland S, McShane B. Scientists rise up against statistical significance. Nature. 2019; 567(7748):305–7. doi:10.1038/d41586-019-00857-9

Percentages are usually inappropriate if the denominator (sample size or n) is less than about 20. The cutpoint of 20 to indicate a small sample is reasonable, but arbitrary. Especially in small samples, percentages can be misleading because the size of the percentage can be so much greater than the number it represents, e.g., "In this experiment, 33% of the rats lived, 33% died, and the third got away." (Lang and Secic. How to report statistics in medicine. 2nd ed. Philadelphia: American College of Physicians; 2006). Nevertheless, percentages may still be useful for comparison (38% vs 37% is an easier comparison than 5/13 vs 7/19). The actual numerator and denominator must be given if the denominator is less than about 20. Percentages are often unnecessary if the denominator (sample size) is less than about 100, although they may be useful for ease of comparison of values with different denominators. Generally, when proportions or percentages derived from a mix of large (>100) and smaller (<100) denominators occur nearby, report all to the decimal level appropriate for the *smallest* denominator. Actual numbers should also be given. Percentages should not have a decimal place if the denominator (sample size) is less than about 200; use integers (whole numbers). If the denominator is between 200 and 500, then one decimal place can be used, but is not required.

Report data to an appropriate degree of precision. Precision may be limited by the instrumentation used. Avoid spurious precision, such as reporting the weight of people to the nearest 1 g (0.001 kg) or age to the nearest 4 days (0.01 years). In the methods section state the name and version of the statistical software used.

For further guidance, see Lang and Altman. Basic statistical reporting for articles published in biomedical journals: the "Statistical Analyses and Methods in the Published Literature" or the SAMPL Guidelines. Int J Nurs Stud. 2015; 52:5–9. Reviewers will be asked to check the statistical methods, and the manuscript may be sent to our consultants for specialist statistical review if considered necessary.

8.4.19 Qualitative research

Qualitative research studies use nonquantitative methods to address a defined research question that may not be accessible by quantitative methods, such as people's interpretations, experiences, and perspectives. The analysis methods are explicit, systematic, and reproducible, but the results do not involve numerical values or use statistics. Examples of qualitative data sources include, but are not limited to, interviews, text documents, audio/video recordings, and free-form answers to questionnaires and surveys. Qualitative research studies should be reported in accordance with the Consolidated criteria for reporting qualitative research (COREQ) or Standards for Reporting Qualitative Research (SRQR) (O'Brien BC, Harris IB, Beckman TJ, Reed DA, Cook DA. Acad Med. 2014; 89:1245–51. doi: 10.1097/ACM.0000000000000388), and a completed checklist should be provided. Reporting guidelines can be found in the EQUATOR Network's Guidelines for reporting qualitative research. Authors may find it convenient to use the reporting checklist tool found at https://www.goodreports.org/.

8.5 Author contributions

The contributions of each author to the work that is reported should be identified using their initials and stated clearly and briefly according to ICMJE recommendations (see Section 10.3.2).

8.6 Acknowledgments

General acknowledgments for consultations and statistical analyses should be listed concisely, including the names of the individuals who were directly involved. Consent should be obtained in writing from those individuals before their names are listed in this section (see Section 10.3. Authorship statement). The highest academic degree may be included, but academic and social titles should be omitted. Do not include thanks to anonymous referees or editors, or effusive comments.

Changes in author affiliation, and explanations if necessary, can be presented here (see Section 8.1).

Previous publication of the work as a preprint, as an Abstract of a poster or an oral presentation at a conference should be presented here.

All financial and material support for the research, work, writing, and editorial assistance from internal or external agencies, including commercial companies, should be clearly and completely identified. If no specific funding was received, please include the following statement: "We did not receive any specific grant for this research from any funding agency in the public, commercial, or not-for-profit sectors." If a study is funded by an agency with a proprietary or financial interest in the outcome of the study, the corresponding author must include the following statement in the comments to the Editors and in the Acknowledgments section upon submission: "I had full access to all of the data in this study, and I take complete responsibility for the integrity of the data and the accuracy of the data analysis." (See Section 2).

Group authorship: if you would like the names of the individual members of a collaboration Group to be searchable through their individual PubMed records, please ensure that the title of the collaboration Group is included on the title page and also include collaborating author names as the last paragraph of the "Acknowledgments" section. Please add authors in the format first name, middle initial(s) (optional), and last name. You can add institution or country information for each author if you wish, but this should be consistent across all authors.

8.7 Conflicts of interest statement

Please ensure that the initials of each author listed in your manuscript appear in the *Conflicts of interest statement*. If no author has any potential or recognized conflict of interest, then it may be sufficient to state "The authors have each completed the International Committee of Medical Journal Editors Form for Disclosure of Conflicts of Interest. No author has any potential or actual conflict of interest to disclose/None of the authors disclose any potential conflict of interest related to the the present article." See Section 3.

8.8 Data sharing statement

All manuscripts must include a data sharing statement. The statement should include the following information as applicable:

- Accession codes, unique identifiers, or Web links for publicly available data sets,
- A list of Figures or Tables that have associated raw data,
- A description of any restrictions or any conditions for access of nonpublicly available data.

Authors are encouraged to include formal citation to data sets in article reference lists where deposited data sets are assigned Digital Object Identifiers (DOIs) by a data repository. Please

see Section 5.2 Clinical trials and Section 8.4.7 Genomic and other data repositories, as applicable.

Data sharing statements should provide a statement about the availability of data supporting the results reported in the article. By data, we mean the minimal data set that would be necessary to interpret, replicate, and build upon the methods or findings reported in the article. Where source data for Figures are provided, statements confirming this should be included in the data availability statement. If you cannot share the data described in your manuscript, e.g., for legal or ethical reasons, or do not intend to share publically, the data then you must provide an appropriate data availability statement. *Asian Biomedicine* notes that FAIR sharing allows for access to shared data under restrictions (e.g., to protect confidential or proprietary information), but notes that the FAIR sharing principles encourage you to share data in ways that are as open as possible (but that can be closed as necessary).

Depending on the data described in the publication, the data sharing statement should take one of the following common forms or may be a composite of the statements below:

- Statistical summaries are presented in the published article. The data sets generated or analyzed during the present study are available in the [Name] repository, [persistent Web link to data sets].
- Statistical summaries are presented in the published article. The data sets generated or analyzed during the present study are available from the corresponding author on reasonable request.
- All data generated or analyzed during the present study are included in this published article.
- Source data for Figure(s) [number(s)] are provided with the paper (must be used in combination with another statement).
- The [data type] data that support the findings of the present study are available in [repository name, e.g., "figshare"] with the identifier(s) [data DOI(s), e.g., "doi: 10.6084/m9.figshare.1499292_D8"] [Reference number]. Having a DOI will gain more citations for the outputs of your academic research.
- The data sets generated or analyzed during the present study are not publicly available because [reason(s) why data are not public] but are available from the corresponding author on reasonable request.
- No data sets were generated or analyzed during the present study (e.g., entirely theoretical research or reviews).
- The data that support the findings of the present study are available from [third party name], but restrictions apply to the availability of these data, which were used under license for the current study, and so are not publicly available. Data are, however, available from the authors upon reasonable request and with permission of [third party name].

Reason(s) why data may not be public

In the absence of consent for publication or complete anonymization, public sharing of data about potentially identifiable human participants in research is usually not possible because of the need to protect research participant privacy. Where human or other data are only available on request, at the minimum, a named group or individual to whom enquiries about data access can be made must be provided. This may often be the corresponding author, but responsibility for data access should ideally not lie solely with an individual, whose contact information could change.

A limited number of data repositories that archive sensitive data, such as the dbGAP, the EGA, the Cancer Imaging Archive, and the UK Data Archive, provide permanent online summary records (metadata records) about sensitive data sets. In these cases, the summary record or accession code should be linked or cited in the data availability statement. Such repositories may, also, have application procedures for obtaining access to data, which may only be granted to researchers whose request is approved. Such restrictions should be documented in the data availability statement.

Health sciences databases

Some of the repositories in this section are suitable for data sets requiring restricted data access, which may be required for the preservation of study participant anonymity in clinical data sets. We suggest contacting repositories directly to determine those with data access controls best suited to the specific requirements of your study. *indicates restricted data access possible:

*National Addiction & HIV Data Archive Program (NAHDAP)
*National Database for Autism Research (NDAR)
*The Cancer Imaging Archive
ClinicalTrials.gov
SICAS Medical Image Repository (formally Virtual Skeleton Database)
PhysioNet
*National Database for Clinical Trials related to Mental Illness (NDCT)
*Research Domain Criteria Database (RDoCdb)
*Synapse

8.9 References

Research articles and nonresearch articles (e.g., *Review* and *Commentary* articles) must cite appropriate and relevant literature in support of the claims made. Only articles, clinical trial registration records, and Abstracts that have been published or are in press, or are available through public e-print/preprint servers, should be cited. References to published books, journal articles, articles in collections, and conference or workshop proceedings, technical reports, and Websites should be listed at the end of the manuscript in numbered order of appearance in the text. Any statement in the manuscript that relies on external sources of information (i.e., not the authors' own new ideas or findings or general knowledge) should use a citation. Authors should give direct references to original research sources whenever possible. Although references to review articles can be an efficient way to guide readers to a body of literature, review articles do not always reflect original work accurately. However, extensive lists of references to original work on a topic can use excessive space. Fewer references to key original papers often serve as well as more exhaustive lists, particularly since electronic literature searching now allows readers to retrieve published literature efficiently. Authors should ensure that their citations are accurate (i.e., they should ensure that the citation supports the statement made in their manuscript and authors should not misrepresent another work by citing it if it does not support the point the authors wish to make). Authors should not cite sources that they have not read nor *preferentially* cite their own publications or those of their friends, colleagues, or institution(s). Authors should also avoid citing work solely from one country. Wherever possible, authors should ideally cite sources that have undergone peer review. Excessive and inappropriate self-citation or coordinated efforts among several authors to collectively self-cite is strongly discouraged. Advertisements or advertorial material should not generally be cited unless it is strictly necessary and identified as such.

All references included in the list should be cited in the text using Arabic numerals in square brackets before punctuation, e.g., [1], and all references cited in the text should appear in the reference list. To minimize such citation errors, all references should be verified using either an electronic bibliographic source, such as PubMed, or—better—PDFs or print copies from original sources, and cited exactly as published, including errors, and use of italics, superscripted or subscripted matter, or special symbols (except that titles should be in sentence case). Authors are responsible for the accuracy and completeness of their references, for correct in-text citations, and for checking that none of the references refer to retracted articles except in the context of referring to the retraction.

8.9.1 Personal communications and unpublished data

These sources should not be included in the references list but may be described in the text and should be referred to as "personal communications" and "unpublished observations". Avoid citing a "personal communication" unless it is essential and the information is not available in a public source, in which case, the name of the person and date of the communication should be cited in parentheses in the text (see Section 8.9.2). Authors must obtain written consent from the person who provided the communication. The author(s) must give the full name and the highest academic degree of the person, provide the date of the communication, and indicate whether it was in oral or written (letter, fax, or e-mail) form. A signed statement of permission should be included from each person identified as a source of information in a personal communication or as a source of unpublished data.

Avoid using conference abstracts as references: if unpublished, they can be cited in the text, in parentheses. References to papers accepted, but not yet published, should be designated as "in press"; authors should obtain written permission to cite such articles and verification that they have been accepted for publication. Information from manuscripts submitted, but not accepted, should be cited in the text as "unpublished observations" with written permission from the source. We will generally require copies of manuscripts "in press" or "unpublished observations" to facilitate the review process.

8.9.2 References in the main text, Tables, and Figure legends

- References should be indicated by numbers in square brackets in line with the text, numbered consecutively in order of appearance, and placed before punctuation, e.g., [1]. The actual authors can be referred to if deemed important, but the reference number(s) must always be given. Otherwise omit author or investigator names (and dates of publication) as this information is included in the list of references and omitting the redundancy usually improves the flow of the text improving clarity.
- References cited in Tables or Figure legends should be included in sequence at the point where the Table or Figure is first mentioned in the main text.

- Please remove field codes inserted by bibliographic software such as EndNote before submitting manuscripts. This can be done easily by selecting all text (ctrl+a) and using ctrl+shift+f9 on the keyboard.
- Do not cite Abstracts unless they are the only available published reference to an important concept. Unpublished Abstracts can be cited in the text, in parentheses.
- Do not use reference numbers to cite uncompleted work or work that has not yet been accepted for publication (i.e., "unpublished observation", "personal communication") as references. See Section 8.9.1.

8.9.3 References in the references list

- References must be limited to those cited in the text and listed in numerical order of citation indicated in square brackets, e.g., [1], NOT alphabetical order. Use Vancouver style.
- The surnames (family names) and initials of up to the first 6 authors should be included for each reference. For articles where there are 8 or more authors, list the first 6 authors only, followed by "et al.", meaning "and (more than 1) others"; therefore, if there are 7 authors, the seventh author should be included in the list. Convert given (first) names and middle names to initials for a maximum of 4 initials following each surname.
- References should include, in order, authors' surnames and initials, article title, abbreviated journal name, year, volume (but not month or issue number where pages are continuous throughout a volume) and inclusive page numbers.
- Abbreviations for journal names should conform to those used in the U.S. National Library of Medicine, National Institutes of Health, and National Center for Biotechnology Information PubMed database as they appear in the NLM catalog (www.ncbi.nlm.nih.gov/nlmcatalog/journals). If the journals are not included in the NLM catalog, use the ISSN List of Title Word Abbreviations for standard abbreviations of journal names (www.issn.org/services/online-services/access-to-the-ltwa/). If you are uncertain, please use the full journal name.
- If citing a Website, provide the author information, article title, Website address (URL), and the date you accessed the information.
- Reference to an article that is "in press" must state the journal name and, if possible, the year and volume, and DOI.
- Please *do not* include DOI or PubMed identifier (PMID) numbers at the end of cited references, *unless* the article is published online only without bridging page numbers, including ahead of print, when DOIs *should* be given.
- Please remove hyperlinks, vestiges of which are often found remaining after cutting and pasting from Internet databases.

Examples of the most common reference types are provided below. Please pay particular attention to the formatting, word capitalization, spacing, and style, including the use of an en dash (–) and not a hyphen (-) to indicate spans of numbers and abbreviated page numbers. For any types not listed here, use the style specified in the Uniform Requirements for Manuscripts Submitted to Biochemical Journals (5th edition), published in the New England Journal of Medicine 1997; 336:309–15 and archived at ICMJE.org; or the AMA Manual of Style, 9th edition, or later. Another comprehensive source is as follows: Patrias K. Citing medicine: the NLM style guide for authors, editors, and publishers [Internet]. 2nd ed. Wendling D, editor. Bethesda (MD): US National Library of Medicine; 2007[cited 2018 Jan 5] Available from: https://www.ncbi.nlm.nih.gov//books/NBK7256/, although we follow this style with variations and options at the discretion of the editors, including the retention of diacritics, accent marks, ligated letters, and special characters as published, and more than two initials after surnames or family names if published. Hyphenated names as published are indicated with a hyphen or hyphenated initials.

Standard journal articles

Mutirangura A. Quantitative PCR analysis for methylation level of genome: clinical implications in cancer. Asian Biomed (Res Rev News). 2007; 1:121–8.

Journal supplement

Udomsawaengsup S, Pattana-arun J, Tansatit T, Pungpapong SU, Navicharern P, Sirichindakul B, et al. Minimally invasive surgery training in soft cadaver (MIST-SC). J Med Assoc Thai. 2005; 88(Suppl 4):S189–94.

Journal article not in English, but with English abstract (and title)

Kawai H, Ishikawa T, Moroi J, Hanyu N, Sawada M, Kobayashi N, et al. Elderly patient with cerebellar malignant astrocytoma. No Shinkei Geka. 2008; 36:799–805. [in Japanese, English abstract]

Journal article not in English (with translated title)
Miyazaki K, Murakami A, Imamura S, Yoshii M, Ishida M, Washio N, Okisaka S. [A case of fundus albipunctatus with a retinol dehydrogenase 5 gene mutation in a child]. Nippon Ganka Gakkai Zasshi. 2001; 105:530–4. [in Japanese]

Book with edition
Sherlock S, Dooley J. Diseases of the liver and biliary system. 9th ed. London: Blackwell; 1993, p. 72–95.

Book with editors
Letheridge S, Cannon CR, editors. Bilingual education: teaching English as a second language. New York: Praeger; 1980.

Book chapter in book with editor and edition
Hewlett EL. Microbial virulence factors. In: Mandell GL, Douglas RG, Benette JE, editors. Principles and practice of infectious diseases. 3th ed. New York: Churchill Livingstone; 1990, p. 2–9.

Book series with editors
Wilson JG, Fraser FC, editors. Handbook of teratology, vols. 1–4. New York: Plenum Press; 1977–1978.

Book chapter in a volume in a series with a separate title and separate authors and editors
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8.10 Tables

Please prepare each Table in MS Word format on a separate page and upload to Editorial manager in order of appearance in the text and before any Figures. Tables include information concisely and display it efficiently; they also provide information at any desired level of detail and precision. Including data in Tables rather than text often reduces the length of the text. Tables should therefore supplement, not duplicate, the text, and vice versa (the text should not duplicate data presented in Tables). Each Table must be cited in the text. However, the Tables should stand alone and need footnotes to explain any symbols and abbreviations used in them.

- Tables presented as MS Excel files (or similar) or image files cannot be accepted.
- Use a concise Table heading, which is self-explanatory, and number the Tables consecutively in the order of their first citation in the text using Arabic numerals and upload them in that order.
- Tables should be presented without unnecessary vertical or internal horizontal rules (lines).
- Color and shading should be avoided. Parts of the Table can be highlighted using superscript, italics, symbols, or bold text, the meaning of which should be explained in the footnote.
- An appropriate number of significant figures should be used for all data reported. See Section 8.4.17 Statistical requirements.
- Each column should have a short heading, and detailed explanation should be provided in a footnote if necessary.
- Items requiring explanatory footnotes should be indicated using symbols (†, ‡, §, ‖, ¶, ††, ‡‡, …), with the footnotes arranged immediately under the Table in alphabetical order. Asterisks (*, **, and hash or pound symbols [#]) should be reserved to indicate the probability level of tests of significance (usually $*P < 0.05$, $**P < 0.01$, and $***P < 0.001$, with #, ##, and ### being used for alternative comparisons as is conventional. These inequalities may be useful for groups of data, e.g., in Tables and Figures, but ensure that they are linked by the symbols to the corresponding data.).
- Abbreviations used in the Table must be defined and placed after the footnotes.
- If authors include a block of data or Table from another source, whether published or unpublished, they must acknowledge the original source and obtain appropriate permission.
- Please view the *AMA Manual of Style* (9th edition or later) for further advice on how to prepare Tables for publication.

8.11 Figures

8.11.1 General guidelines

Figures are critical to display clearly the new knowledge contributed by your work. The number of Figures should be restricted to the minimum necessary to display data to support the text. For clarity and conciseness, it is sometimes helpful to use Figures (graphs) as an alternative to Tables with many entries. However, do not present the same data in duplicate (e.g., in both Figures and Tables).

Figures must be submitted as separate image files at an appropriate resolution (see Section 8.11.2 below). The files should be named according to the Figure number and format and are best identified with the name of the corresponding author and manuscript reference number (once this is assigned), e.g., "ABM-20-00035_CorrespondingAuthorName_Fig1.tif", "ABM-20-00035_CorrespondingAuthorName_Fig2.jpg". For submission, it is probably helpful for review if multipanel Figures (e.g., with parts A, B, C, D, and so on) are submitted as a single correctly orientated composite that contains all parts of the Figure, and upload these in order of their intended appearance in the text. However, we will accept various panels uploaded separately, and separate panels may be required before acceptance.

- Each Figure must be cited in the text.
- Figures must have an informative Figure legend and be numbered in the order of their first citation in the text with an Arabic numeral and uploaded in that order after Tables.
- Figure legends should be grouped on a separate page placed at the end of the manuscript following the References section. The text included in each legend should be sufficient to enable a reader to understand the information in each Figure without reading the main text. All symbols and abbreviations must be defined in the Figure legend. Items requiring explanatory footnotes should follow the same style as that for Tables, as described in Section 8.10.
- Any error bars must be defined in the Figure legends.
- The legends of photomicrographs should state the type of specimen, original magnification, length of the scale marker, and the stain used.
- Figures should be closely cropped to minimize the amount of white space around them and thus facilitate their accurate placement with other elements of the manuscript.
- Do not include titles, legends, or captions within or on your Figures.
- Do not place a box around Figures or Figure keys (except box-and-whisker plots).
- Width of any Figure or Figure panel should be sized to one (about 8 cm), 1.5 (about 12 cm), or 2 column widths (17 cm) as appropriate.
- Height of any Figure should be less than 20 cm.
- All fonts should be embedded.
- Labeling in Figures must be in a sans serif typeface, such as Arial or Helvetica, and must be at least of 8 points (pt), preferably 10 pt (2–3 mm), after sizing to one, 1.5, or 2 column widths as appropriate (see above). Smaller lettering will produce text that is barely legible.
- The style and format of lettering, except for indicating subparts of Figures, should be uniform throughout all the

Figures in a manuscript. Variance of type size within a Figure should be minimal, e.g., do not use 8-pt type on an axis and 20-pt type for the axis label.

- Use an initial capital followed by lower case, rather than all capitals, letters in the labels of a Figure; initial symbols such as % should be spelled out (e.g., "Percentage"), and it is preferred that units are placed in parentheses, e.g., Axis label (units). Leave adequate space between the lettering and the axis.
- Avoid bold lettering, because this looks unpleasantly dark when printed.
- Design Figures so that the least possible number of letters is needed to avoid crowding.
- Minimize the number of tick marks on the axes, and if more than 5, do not number each tick. We prefer that tick marks face inward and are only used for labeled quantities.
- Line weights of about 0.75 pt to 1.5 pt are usually appropriate (2.0 pt might be suitable for flowcharts). Very thin lines tend to vanish on resizing. Please make sure that all lines are thicker than 0.5 pt when the Figure is sized for publication.
- Use shades of gray that differ by >30%, or contrasting colors, to identify different symbols or columns in a bar chart.
- Avoid hatching or other patterns, such as dots that can cause moiré patterns or colors that are close in hue (or red and green combinations; see note on red–green color blindness following).
- The vertical axis of histograms should not be truncated to exaggerate small differences.
- Avoid background grids or shading.
- Do not use 3D graphs where there is no data axis in the third dimension, use a 2D graph instead. The 3D rendering is simply a spurious decorative effect, does not convey meaningful information, and may make interpretation more difficult. Avoid shadows, pixelated computer drawings, and unnecessary aesthetic effects for the same reason.
- Digital photographs should be in black-and-white (grayscale) or in color if justified scientifically. Please note that Figures to be printed grayscale should not be submitted in color.
- Any information that might identify the hospital or patient, including dates and hospital numbers, should be cropped out, masked, or obscured. All lettering should be made using software and be in proportion to the drawing, graph, or photograph.
- Photomicrographs must include an internal scale marker.
- While it is accepted that authors sometimes need to manipulate images for clarity, manipulation for the purposes of deception or fraud will be seen as misconduct and is not acceptable. The grouping of images from different parts of the same gel, or from different gels, fields, or exposures, must be made explicit by using dividing lines (or other graphic means of demarcation) and must also be stated in the Figure legend. No specific feature within an image should be enhanced, obscured (with the exception of for deidentification of people), moved, removed, or introduced. Adjustment of brightness, contrast, or color balance is acceptable as long as it does not obscure or eliminate any information present in the original. Nonlinear adjustment (e.g., changes to gamma settings) must be disclosed in the Figure legend.
- People with red–green color blindness cannot interpret Figures that use these colors. To quote Okabe and Ito, "There is a good chance that the paper you submit may go to color blind reviewers or readers. Supposing that your paper will be reviewed by 3 white males (which is not unlikely), the probability that at least one of them is colorblind is a whopping 22%! [$22\% = 1 - (1 - 0.92)^3$]." We recommend to provide alternative versions of Figures that are more accessible to such individuals and recolor your Figures using magenta instead of red (in the case of double labeling, e.g., with Texas Red and FITC; please see Masataka Okabe and Kei Ito. Color Universal Design (CUD)—How to make figures and presentations that are friendly to colorblind people. [online] 2002 (modified on 2.15.2008, 9.24.2008), Available at http://jfly.iam.u-tokyo.ac.jp/color/. Accessed September 03, 2016; or Wong. Nature Methods 2011; 8:441), turquoise and red, or blue and yellow (although yellow is generally not clearly visible in print). Color schemes that are colorblind safe, print friendly, and photocopier safe can be obtained using tools available at ColorBrewer (v 2.0) found at: colorbrewer2.org.
- The *AMA Manual of Style* (9th or later) provides further advice on how to prepare figures for publication.
- Please use the artwork quality checking (AQC) tool when you upload your Figure to the Editorial Manager system during the submission process. Detailed instructions for revising Figures are associated with the tool in the system.
- The Editors reserve the right to redesign or recreate all graphical elements (pictures, graphs, schematic presentations, etc.) of the manuscript if they do not conform to the uniform style of the Journal and may request original data to do so.

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8.11.2 Formats

Regardless of the application used, when your digital artwork is finalized, please "save as" or convert the images to one of the following formats {please note the resolution requirements: (pixels per inch [ppi] [1 inch = 2.54 cm]} for the final size for line drawings, halftones, and line/halftone combinations given below):

- EPS (Encapsulated PostScript): vector drawings. Embed the font or save the text as "graphics".
- TIFF (Tagged Image File Format): color (red, green, blue [RGB]) or grayscale photographs (halftones); always use a minimum of 300 ppi, but not more than 600 ppi. TIFF files should be saved with LZW compression, which is lossless (decreases file size without decreasing quality).
- TIFF: bitmapped line art drawings (purely black and white with no grayscale); use a minimum of 750 ppi, but not more than 1,200 ppi.
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- PDF (Adobe Portable Document Format): at an appropriate resolution, it may be acceptable after consultation with the managing editor at abmjournal@chula.ac.th.
- JPG (Joint Photographic Experts Group): *.jpg at a minimum 300 ppi. JPG files should be saved at maximum quality.
- CDX (ChemDraw): suitable for molecular structures. Submit as 300 ppi RGB TIFF file.

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- Supply files that are optimized for screen use (such as PNG, GIF, BMP, PICT, WPG) because the resolution is usually too low for print publication.
- Submit graphics that are disproportionately large for their content (please keep file sizes below 10 MB).
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- Use gratuitous color or red-and-green combinations in graphs (see point about color blindness above). Color should be used sparingly to identify different categories of data.

9 Manuscript checklist (before submission)

☐ 1. Title page
- 1.1. Article category (see Section 1)
- 1.2. Short title
- 1.2. Article title (see Section 8.2)
- 1.3. Author names (see Section 8.1) and the institutions at which the work was conducted and with which they are affiliated
- 1.4. Author(s) to whom correspondence should be addressed after publication of the article
- 1.5. Institutional e-mail address of author(s) to whom correspondence should be addressed after publication of the article

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☐ 3. Keywords or short phrases (5–10) (use MeSH where possible)
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☐ 6. Acknowledgments listed for grants, contributions that do not qualify for authorship, technical support, and corporate support. Meeting Abstract arising from the work presented. Changes in address or affiliation since work was conducted.
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☐ 8. Data sharing statement (see Section 8.8)
☐ 9. References double-spaced and cited in the order of appearance (see Section 8.9)
☐ 10. Figure legends grouped on a separate page
☐ 11. Tables (MS Word format)
☐ 12. Figures (eps, tiff, pdf, jpg)
☐ 13. Supporting (companion) documents

Of the following items, items (13.2), (13.3), and (13.9) are mandatory for acceptance, but may be provided during the submission process. Items (13.4)–(13.8) are required if applicable.

- 13.1. Comments supporting the submission (optional in Editorial Manager)
- 13.2. Authorship statement (upload required for acceptance). See Section 10.3
- 13.3. Statement of originality (during submission on Editorial Manager)
- 13.4. Copyright permissions. See Section 15
- 13.5. Ethics statement. Letter of approval from the relevant ethics review committee. See Section 3
- 13.6. Consolidated Standards of Reporting Trials (CONSORT) flow chart for randomized controlled trials submitted for publication. See Section 5
- 13.7. Statement of documented informed consent. See Section 4
- 13.8. Patient privacy and confidentiality statement. See Section 6
- 13.9. ICMJE Form for Disclosure of Potential Conflicts of Interest, completed by or for each author. See Section 3

10 Manuscript submission

10.1 Submission

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- Put the title page, Abstract and keywords, main text, and references, followed by Figure legends, in one file.
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10.3 Supporting documents

The following documents or statements should generally be uploaded if relevant to your submission (refer also to Section 10.2 and the Manuscript submission checklist in Section 9). Items (2), (3), and (9) are mandatory. Items (1), (4), (5), (6), (7), and (8) are required only if they apply to your manuscript.

1. A cover letter is not required because most of the required information will be uploaded or provided during the online submission process. At the Comments stage of the submission process, please enter any such additional comments you would like to send to the publication office. These comments will not appear directly to reviewers in your submission. However, it may facilitate the editorial process if you include a short description of the research or topic of the manuscript (2–3 sentences) and briefly provide any other information regarding the manuscript that the Editors may find useful, such as reasons why authors presume their work may be of interest to the readership of *Asian Biomedicine*, and a list of manuscripts that have been published, submitted, or are in press that are similar to the submission to *Asian Biomedicine*. Please include, in your submission, copies of those similar manuscripts that might be regarded as redundant publications so that the Editors can be assured there is no redundancy.

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2. Critically revising the manuscript: Writing—reviewing and editing.

Criteria 3 and 4. Check the box marked Other and enter the role: "Approved the final version and take responsibility for statements made in the published article." (Equal contribution by all authors.)

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6. Consolidated Standards of Reporting Trials (CONSORT) flow chart for randomized controlled trials submitted for publication. See Section 5.
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Editorial policies

11 The editorial and peer review process

Authors will be provided with a submission reference number (beginning ABM-S-). We recommend authors and coauthors add abmjournal@chula.ac.th and the domain @editorialmanager.com to an e-mail "whitelist" or "contact list" to avoid security software blocking emails containing deep links. The particular solution depends on the mailbox client or service provider. For security software, it also depends on current software settings, but usually a user can block an e-mail address or whitelist it. If a submission acknowledgment is not received in due course, the author should contact the Editorial Office at abmjournal@chula.ac.th.

Manuscripts are reviewed by the Editorial Office to ensure that the submission contains all parts and supporting documents. The submission may not be accepted if the author has not supplied all parts of the manuscript and required supporting documents as outlined in these guidelines or a revised submission may be requested. After a manuscript has been assigned to an editor, a manuscript number will be assigned (beginning ABM-D-).

Asian Biomedicine decisions about a manuscript are based on their relevance and importance in an Asian context. All manuscripts must address important scientific questions and the methodology to answer them should be well planned and well implemented, as well as adhere to internationally accepted ethical and scientific standards (World Association of Medical Editors Publication Ethics Committee. Recommendations on Publication Ethics Policies for Medical Journals, available from: http://www.wame.org/policies and others noted at the beginning of this *Guide*). The characteristics of the population and samples (including animal and laboratory samples) must be well defined. Studies with negative results, but sufficient sample size, will receive equal consideration. Studies of insufficient sample size are considered unethical because they put participants at undue risk, considering that the sample size is too small to have sufficient statistical power to answer the questions posed. Outcome measures must be relevant, credible, accurate, and sensitive. Data summaries, statistical analysis, and the interpretations of the results must be appropriate to the study questions.

All studies reported must be conducted only by scientifically qualified persons and under the supervision of competent clinicians or scientists. Laboratory procedures must be standardized and performed by qualified medical technologists or scientists who have knowledge of the pertinent scientific literature.

Reporting guidelines

Asian Biomedicine endorses the use of an appropriate reporting guideline when writing any health research manuscript.

We encourage and may require you to submit completed checklists for the relevant guidelines (and flow diagram if applicable) alongside your manuscript, indicating the manuscript page on which each checklist item is found. You may find it convenient to use the reporting checklist tool at [https://www.goodreports.org]; otherwise, editable checklists for reporting guidelines can be found on the EQUATOR Network site [www.equator-network.org], which also gives general information on how to choose the correct guideline and why guidelines are important. Using a checklist helps to ensure you have used a guideline correctly.

At a minimum, your article should report the content addressed by each item of the identified checklist or state that the item was not considered in the study and, if relevant, the reason why not (e.g., if you did not use blinding, your article should explain this). Meeting basic reporting requirements will greatly improve the value of your manuscript, may facilitate and enhance the peer review process, and may improve its chances of eventual publication.

The checklists are not intended simply as an administrative hurdle. We ask you to complete a checklist because this helps you to check that you have included all of the important information in your article and because it helps our editors and reviewers to complete the same check. If the checklist indicates an item that you have not addressed in your manuscript, please either explain in the manuscript text why this information is not relevant to your study or add the relevant information.

Peer review process

The Editor-in-Chief will assess manuscripts with the assistance of the Coeditor-in-Chief, Coeditors, and Assistant Editors. If the manuscript is not of sufficient merit to reach priority for publication, does not meet ethical standards, or is not appropriate for the scope of *Asian Biomedicine*, then it may be rejected without review. At least 2 reviewers, who are appropriate independent experts recruited by a responsible Editor, will review other manuscripts to provide peer review before further processing. The authors will be blinded to reviewers, who will be treated anonymously. Where an Editor is on the author list, or has any other competing interest regarding a specific manuscript, another member of the Editorial Board will be assigned to assume responsibility for overseeing peer review. The reviewers will have no connection with the authors and will preferably be from another country or at least a different institution. If these reviewers disagree on key issues, then further reviewers will be invited to give opinions until a consensus is reached. The responsible Editor reviews revisions before recommending publication, or not, ahead of final screening. For all revisions, the manuscript may be sent to the same or additional reviewers at the discretion of the Editor. The Editor-in-Chief has the final authority on all editorial decisions.

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humans, as well as concerns regarding scientific quality. It is hoped that they will provide the author with useful and constructive suggestions to improve their manuscript.

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Additional review

Biostatistics advisors are available to comment on statistical aspects of manuscripts. All manuscripts are reviewed by an Editor responsible for compliance to ethical and editorial guidelines before publication.

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12 Preparation for publication

Once a manuscript has been accepted for publication, authors should ensure that the final version of their manuscript in MS Word format has been uploaded to Editorial Manager, with all Tables and Figures as applicable. The assigned manuscript number should be incorporated into the names of any files.

Accepted manuscripts are then copyedited according to the Journal's house style and the galley proof in the form of a PDF file are sent by the managing editor to the corresponding author for final approval. Authors are responsible for all statements made in the published article, including changes made by the copyeditor.

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13 Corrections, retractions, and editorial expressions of concern

Rules of ethical behavior shall also apply after publication:

- *Asian Biomedicine* Editors should be informed immediately, at any time before or after publication, if any of the ethical statements is found to be untrue. The Editors hold all rights to correct every aspect of a publication, including retraction of the article, even if it has been already published.

We will follow the recommendations of the ICMJE and the Principles of Transparency and Best Practice in Scholarly Publishing (joint statement by COPE, DOAJ, WAME, and OASPA) on these matters. They are described in the latest version of the ICMJE recommendations updated in December 2021, section III. A. Corrections, Retractions, Republications, and Version Control; and B. Scientific Misconduct, Expressions of Concern, and Retraction.

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