The *Brazilian Journal of Otorhinolaryngology* aims to provide timely information for physicians and scientists focused on otorhinolaryngology and head and neck disorders, including contemporary, ethical, clinically relevant information in: General otolaryngology; Head and neck surgery; Respiratory sleep disorders; Allergy/rhinology; Otology/neurotology; Laryngology/broncho-esophagology; Pediatric otolaryngology; Cranio-facial surgery; Skull base surgery; Head and neck oncology; Phoniatrics; Upper airway related diseases; Facial plastics and reconstructive surgery.

The journal is the official peer-reviewed open access scientific publication of the Brazilian Association of Otorhinolaryngology and Cervicofacial Surgery (ABORL-CCF).

All articles will be published under the CC-BY license (Creative Commons Attribution 4.0 International) with copyright owned by the ABORL-CCF.

**IMPACT FACTOR**

2022: 2.200 © Clarivate Analytics Journal Citation Reports 2023

**ABSTRACTING AND INDEXING**

PubMed/Medline
LILACS - Literatura Latino-Americana e do Caribe em Ciências da Saúde
SciELO - Scientific Electronic Library Online
Scopus
Science Citation Index Expanded

**EDITORIAL BOARD**

*Editor-in-Chief*
Carlos Takahiro Chone, Universidade Estadual de Campinas, CAMPINAS, Brazil

*Co-editors*
Eulalia Sakano, Universidade Estadual de Campinas, CAMPINAS, SP, Brazil
Mariana de Carvalho Leal Gouveia, Universidade Federal de Pernambuco, RECIFE, PE, Brazil

**Associate Editors**

**Head and Neck Surgery**
Onivaldo Cervantes, Universidade Federal de Sao Paulo, Sao Paulo, SP, Brazil
Jose Tagliarini, Universidade Estadual Paulista Julio de Mesquita Filho, SAO PAULO, Brazil

**Pediatric Otolaryngology**
Fabiana Cardoso Pereira Valera, Universidade de Sao Paulo, SAO PAULO, Brazil

**Otology and Skull Base Surgery**
Fayez Bahmad Jr., Universidade de Brasilia, Brasilia, DF, Brazil
Eduardo Tanaka Massuda, Universidade de Sao Paulo, SAO PAULO, Brazil

**Neurotology**
Osmar Mesquita de Sousa Neto, Faculdade de Ciências Médicas da Santa Casa de São Paulo, São Paulo, Brazil

**Laryngology and Voice**
Luciano Rodrigues Neves, Universidade Federal de Sao Paulo, Sao Paulo, SP, Brazil

**Facial Plastic and Reconstructive Surgery**
Jose Eduardo Lutaif Dolci, Irmandade da Santa Casa de Misericordia de Sao Paulo, SAO PAULO, Brazil

**Rhinology and Skull Base Surgery**
Edwin Tamashiro, Universidade de Sao Paulo, SAO PAULO, Brazil
Otavio Bejzman Piltcher, Universidade Federal do Rio Grande do Sul, PORTO ALEGRE, Brazil

**Bucopharyngology and Sleep Medicine**
Edilson Zancanella, Universidade Estadual de Campinas, CAMPINAS, Brazil
GUIDE FOR AUTHORS

INTRODUCTION
The BJORL is an open-access peer-reviewed journal dedicated to the advancement of patient care in Otorhinolaryngology - Head and Neck Surgery. The BJORL publishes original articles relating to both the clinical and basic science aspects of Otorhinolaryngology. The Journal reserves the right to exclusive publication of all accepted manuscripts. Manuscripts previously published or under review by another publication will not be considered by any chance. Once accepted for review, the manuscript must not be submitted elsewhere. Unethical publishing, such as plagiarism, undisclosed conflicts of interest, inappropriate authorship, and duplicate publication are forbidden. This includes publication in a non-otorhinolaryngology journal or in another language. In case of doubt, disclosure is essential, and the Editor is available for consultation. Transfer of copyright to BJORL is a prerequisite of publication. All authors must sign a Copyright Transfer Agreement form. This form must be uploaded in the submission files.

Authors must disclose any financial relationship(s) at the time of submission. Information that could be perceived as potential conflict(s) of interest, such as grants or funding, employment, affiliations, patents, inventions, honoraria, consultancies, royalties, stock options/ownership, or expert testimony, must be stated.

The BJORL welcomes manuscripts related to general otolaryngology; head and neck surgery; respiratory sleep disorders; allergy/rhinology; otology/neurotology; laryngology/broncho-esophagology; pediatric otolaryngology; cranio-facial surgery; skull base surgery; head and neck oncology; phoniastics; upper airway related diseases; and facial plastics and reconstructive surgery.

Please note that articles submitted as of May 1, 2022, which are accepted for publication will be subject to a fee (Article Publishing Charge, APC) payment by the author or research funder to cover the costs associated with publication. All articles must be submitted in English. More information, including the APC, can be found at the open access information page.

Manuscript categories and requirements
The Brazilian Journal of Otorhinolaryngology publishes Original Reports, Contemporary Reviews, Systematic and Evidence-Based Reviews, Letters to the Editor, and Invited Articles and Reviews. Topics of interest include all subjects that relate to the practice of medicine and the betterment of public health worldwide.

Original Reports
Original articles are concise (1) reports of clinical data, (2) reports of basic science data, or (3) meta-analyses studies, that represent advanced information, and should present data that have not yet been published.

These reports typically include randomized trials, intervention studies, cohort studies, case-control studies, epidemiologic assessments, other observational studies, surveys with high response rates, cost-effectiveness analyses and decision analyses, and studies of screening and diagnostic tests. Each manuscript should clearly state an objective or hypothesis; the design and methods (including the study setting and dates, patients or participants with inclusion and exclusion criteria and/or participation or response rates, or data sources, and how these were selected for the study); the essential features of any interventions; the main outcome measures; the main results of the study; a discussion section placing the results in context with the published literature and addressing study limitations; and the conclusions and relevant implications for clinical practice or health policy.

Authors are encouraged to adhere to study standards, for example the PROBE guideline for observational studies, or STARD guideline for diagnostic/prognostic studies. Data included in research reports must be original and should be as timely and current as possible. A structured abstract is required.

Word count: 3,000 words (max), excluding abstract and references.
Abstract: 300 words maximum. Do not use subheadings or abbreviations; write as a continuous paragraph. Must be structured with the headings: Objective(s), Methods, Results, Conclusion.
References: 75 references (max).
Figures/Tables: Total of no more than 8 figures and tables.
Number the pages of the manuscript consecutively, beginning with the Title Page as page 1. Please use a spell-checker in addition to careful editing of the manuscript before submission. Authors should not add line numbering as this is automatically added by the submission system.

**Original Reports should be formatted as follows:**
- Abstract
- Keywords
- Level of Evidence
- Introduction
- Materials and Methods
- Results
- Discussion
- Conclusion
- References

**Highlights**
Highlights are required for original articles. They consist of a small collection of topics (bullets, markers) that summarize the main findings of the article. They must be sent in an editable file, including 3 to 5 topics (maximum 85 characters including spaces, per topic). Please name the file "Highlights". Some examples can be found on our page at Internet: https://www.elsevier.com/authors/tools-and-resources/highlights.

**Contemporary Reviews**
This type of paper should address a new and/or rapidly evolving topic including diagnostic or therapeutic advances, or technological innovations. Whenever possible, a Systematic Literature Review with or without a Meta-Analysis is preferred over a Contemporary Review. It is, however, possible that a meaningful literature does not yet exist on a rapidly evolving topic, so that a Systematic Literature Review with or without a Meta-Analysis could not be performed. In that case, a Contemporary Review may be submitted.

**Word count:** 3,000 words (max), excluding abstract and references.

**Abstract:** 300 words maximum. Do not use subheadings or abbreviations; write as a continuous paragraph. Must be structured with the headings: Objective(s), Methods, Results, Conclusion.

**References:** 75 references (max).

**Figures/Tables:** Total of no more than 8 figures and tables.

Number the pages of the manuscript consecutively, beginning with the Title Page as page 1. Please use a spell-checker in addition to careful editing of the manuscript before submission. Authors should not add line numbering as this is automatically added by the submission system.

**Contemporary Reviews should be formatted as follows:**
- Abstract
- Keywords
- Introduction
- Headings
- Conclusion
- References

**Highlights**
Highlights are required for original articles. They consist of a small collection of topics (bullets, markers) that summarize the main findings of the article. They must be sent in an editable file, including 3 to 5 topics (maximum 85 characters including spaces, per topic). Please name the file "Highlights". Some examples can be found on our page at Internet: https://www.elsevier.com/authors/tools-and-resources/highlights.

**Systematic and Evidence-Based Reviews**
Submissions of Systematic Reviews are highly encouraged by the BJORL editors. They address a specific question or issue that is relevant for clinical practice and provide an evidence-based, balanced, patient-oriented review on a focused topic. Reviews should include the clinical question or issue and its importance for general medical practice, specialty practice, or public health; description of how the relevant evidence was identified, assessed for quality, and selected for inclusion; synthesis of
the available evidence such that the best-quality evidence (e.g., well-conducted clinical trials, meta-analyses, and prospective cohort studies) should receive the greatest emphasis; and discussion of controversial aspects and unresolved issues. A structured abstract is required. Authors are encouraged to adhere to study standards, for example the PRISMA guideline for systematic reviews.

**Word count:** 4,000 words (max), excluding abstract and references.

**Abstract:** 300 words maximum. Do not use subheadings or abbreviations; write as a continuous paragraph. Must be structured with the headings: Objective(s), Methods, Results, Conclusion.

**References:** 75 references (max).

**Figures/Tables:** Total of no more than 8 figures and tables.

Number the pages of the manuscript consecutively, beginning with the Title Page as page 1. Please use a spell-checker in addition to careful editing of the manuscript before submission. Authors should not add line numbering as this is automatically added by the submission system.

**Systematic and Evidence-Based Reviews should be formatted as follows:**

- Abstract
- Keywords
- Introduction
- Methods
- Results
- Discussion
- Conclusion
- References

**Highlights**

Highlights are required for original articles. They consist of a small collection of topics (bullets, markers) that summarize the main findings of the article. They must be sent in an editable file, including 3 to 5 topics (maximum 85 characters including spaces, per topic). Please name the file "Highlights". Some examples can be found on our page at Internet: https://www.elsevier.com/authors/tools-and-resources/highlights.

**Case Report**

Case Reports describe encounters with one or several patients with unique or unusual clinical situations. The key to an acceptable Case Report is the identification of a clinical pearl or clinical wisdom that could benefit future patients. Authors are encouraged to adhere to study standards, for example the CARE guideline for case reports.

**Word count:** 1000 words (max); 
**References:** 5 (max); 
**Figures/Tables:** No more than a total of 5 figures and tables.

Number the pages of the manuscript consecutively, beginning with the Title Page as page 1. Please use a spell-checker in addition to careful editing of the manuscript before submission. Authors should not add line numbering as this is automatically added by the submission system.

Case Reports should be formatted as follows:

- Introduction
- Case Report
- Discussion
- Conclusion
- References

**Letters to the Editor**

It should comment on previously published research in which significant scientific controversy exists. A Letter to the Editor deemed appropriate for publication will be submitted to the author(s) of the published article so they can provide comments. They should be double-spaced, and a word count should be provided. Letters may have no more than 3 authors. The text should include the full name, academic degrees, and a single institutional affiliation for each author and the e-mail address for the corresponding author. Letters must not duplicate other
material published or submitted for publication and should not include unpublished data. Letters not meeting these specifications are generally not considered. Letters will be published at the discretion of the editors and are subject to abridgement and editing for style and content.

**Word count:** 400 words (max).

**References:** 1 (the reference of the manuscript being discussed + any supplementary references).

**Letters in Reply**
Replies by authors should not exceed 500 words of text and 5 references. They should have no more than 3 authors.

**Invited Articles and Reviews**
The Journal may, at times, invite original research and reviews on specific topics. These topics would require broad coverage or unusual publication treatment. These invited works will be subject to standard peer-review. If accepted, the Editor-in-Chief of the Journal may choose to publish the article in print and online, or online only.

**Editorials**
Editorials provide a forum for interpretive, analytical, or reflective opinions related to manuscripts in the BJORL or statements about clinical, scientific, or socioeconomic issues. The invitation-only Editorial should be objective and dispassionate but is likely to provide alternative points of view and some bias. Editorials should not exceed 1,200 words with no more than 5 references. Editorials do not have an Abstract.

**Funding**
Authors should list all funding sources in the Acknowledgments section. Authors are responsible for the accuracy of their funder designation. If in doubt, please check the Open Funder Registry for the correct nomenclature: https://www.crossref.org/services/funder-registry/

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

**Informed consent and patient details**
Studies on patients or volunteers require ethics committee approval and informed consent, which should be documented in the paper. Appropriate consents, permissions and releases must be obtained where an author wishes to include case details or other personal information or images of patients and any other individuals in an Elsevier publication. Written consents must be retained by the author but copies should not be provided to the journal. Only if specifically requested by the journal in exceptional circumstances (for example if a legal issue arises) the author must provide copies of the consents or evidence that such consents have been obtained. For more information, please review the Elsevier Policy on the Use of Images or Personal Information of Patients or other Individuals. Unless you have written permission from the patient (or, where applicable, the next of kin), the personal details of any patient included in any part of the article and in any supplementary materials (including all illustrations and videos) must be removed before submission. The authors should ensure that the work described has been carried out in accordance with WMA Declaration of Helsinki - Ethical Principles for Medical Research Involving Human Subjects.

**Animal studies**
reviewed and approved, as well as the name of the body giving approval, must be included in the Methods section of the manuscript. Authors are encouraged to adhere to animal research reporting standards, for example the ARRIVE reporting guidelines for reporting study design and statistical analysis; experimental procedures; experimental animals and housing and husbandry. Authors should also state whether experiments were performed in accordance with relevant institutional and national guidelines for the care and use of laboratory animals:

- US authors should cite compliance with the US National Research Council's Guide for the Care and Use of Laboratory Animals, the US Public Health Service's Policy on Humane Care and Use of Laboratory Animals, and Guide for the Care and Use of Laboratory Animals.
- UK authors should conform to UK legislation under the Animals (Scientific Procedures) Act 1986 Amendment Regulations (SI 2012/3039).
- European authors outside the UK should conform to Directive 2010/63/EU.
Personal communications and unpublished data

A signed statement of permission should be included from each individual identified as a source of information in a personal communication or as a source for unpublished data, and the date of communication and whether the communication was written or oral should be specified. Personal communications should not be included in the list of reference be provided. Although the degree of specificity needed will depend on the context of what is being reported, specific ages, race/ethnicity, and other sociodemographic details should be presented only if clinically or scientifically relevant and important. Cropping of photographs to remove identifiable personal features that are not essential to the clinical message may be permitted as long as the photographs are not otherwise altered. Please do not submit masked photographs of patients. Patients' initials or other personal identifiers may not appear in an image.

Research reporting guidelines

Accurate and complete reporting enables readers to fully appraise research, replicate it, and use it. Authors are expected to adhere to the following research reporting standards.

- CONSORT guidelines for randomized trials
- PRISMA guidelines for systematic reviews and meta-analyses

Species names

Upon its first use in the title, abstract, and text, the common name of a species should be followed by the scientific name (genus, species, and authority) in parenthesis. For well-known species, however, scientific names may be omitted from the article titles. If no common name exists in English, only the scientific name should be used.

Genetic nomenclature

Sequence variants should be described in the text and tables using both DNA and protein designations whenever appropriate. Sequence variant nomenclature must follow the current HGVS guidelines; see http://varnomen.hgvs.org/, where examples of acceptable nomenclature are provided.

Sequence data

Nucleotide sequence data can be submitted in electronic form to any of the three major collaborative databases: DDBJ, EMBL, or GenBank. It is only necessary to submit to one database as data are exchanged between DDBJ, EMBL, and GenBank on a daily basis. The suggested wording for referring to accession-number information is: 'These sequence data have been submitted to the DDBJ/EMBL/GenBank databases under accession number U12345'. Addresses are as follows:

- DNA Data Bank of Japan (DDBJ)
- EMBL Nucleotide Archive
- GenBank

Proteins sequence data should be submitted to either of the following repositories:

- Protein Information Resource (PIR)
- SWISS-PROT

Structural data

For manuscripts describing structural data, atomic coordinates and the associated experimental data should be deposited in the appropriate databank (see below). Please note that the data in the databanks must be released, at the latest, upon publication of the article. We trust in the cooperation of our authors to ensure that atomic coordinates and experimental data are released on time.

- Organic and organometallic compounds: Crystallographic data should not be sent as Supporting Information, but should be deposited with the Cambridge Crystallographic Data Centre (CCDC).
- Inorganic compounds: Fachinformationszentrum Karlsruhe (FIZ).
- Proteins and nucleic acids: Protein Data Bank.
- NMR spectroscopy data: BioMagResBank.

Previous release of information

A complete manuscript following presentation at a meeting or publication of preliminary findings elsewhere (eg, an abstract) is eligible for consideration for publication. Authors considering presenting or planning to present the work at an upcoming scientific meeting should indicate the name and date of the meeting on the manuscript submission form. For accepted papers, the editors may be able to coordinate publication with the meeting presentation. Authors who present information contained in a manuscript that is under consideration by the Elsevier during scientific or clinical meetings should not distribute complete reports (ie, copies of manuscripts) or full data presented as tables and figures to conference attendees or journalists. Publication of abstracts in print and online conference
proceedings, as well as posting of slides or videos from the scientific presentation on the meeting website, is acceptable. However, for manuscripts under consideration by the Elsevier, publication of full reports in proceedings or online, issuing detailed news releases reporting the results of the study, or participation in formal news conferences will jeopardize chances for publication of the submitted manuscript in the Elsevier. Media coverage of presentations at scientific meetings will not jeopardize consideration, but direct release of information through press releases or news media briefings may preclude consideration by the Elsevier.

Conflict of interest
All authors must disclose any financial and personal relationships with other people or organizations that could inappropriately influence (bias) their work. Examples of potential competing interests include employment, consultancies, stock ownership, honoraria, paid expert testimony, patent applications/registrations, and grants or other funding. Authors must disclose any interests in two places: 1. A summary declaration of interest statement in the title page file (if double anonymized) or the manuscript file (if single anonymized). If there are no interests to declare then please state this: 'Declarations of interest: none'. This summary statement will be ultimately published if the article is accepted. 2. Detailed disclosures as part of a separate Declaration of Interest form, which forms part of the journal's official records. It is important for potential interests to be declared in both places and that the information matches. More information.

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

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

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

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

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

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

Corresponding author
The corresponding author will be the representative of all coauthors as the primary correspondent with the editorial office during the submission and review process. If the manuscript is accepted, the corresponding author will review an edited typescript and proof, make decisions regarding release of information in the manuscript to the news media, federal agencies, or both, and will be identified as the corresponding author in the published article. The corresponding author is responsible for ensuring that the reported conflict of interest disclosures are accurate, up-to-date, and consistent with the information provided for each author.

Submission declaration and verification
Submission of an article implies that the work described has not been published previously (except in the form of an abstract, a published lecture or academic thesis, see 'Multiple, redundant or concurrent publication' for more information), that it is not under consideration for publication elsewhere, that
its publication is approved by all authors and tacitly or explicitly by the responsible authorities where the work was carried out, and that, if accepted, it will not be published elsewhere in the same form, in English or in any other language, including electronically without the written consent of the copyright-holder. To verify compliance, your article may be checked by Crossref Similarity Check and other originality or duplicate checking software.

Preprints
Please note that preprints can be shared anywhere at any time, in line with Elsevier's sharing policy. Sharing your preprints e.g. on a preprint server will not count as prior publication (see 'Multiple, redundant or concurrent publication' for more information).

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

Authorship
The list of authors should accurately illustrate who contributed to the work and how. All those listed as authors should qualify for authorship according to the following criteria in accordance with ICMJE standards:
1. Have made substantial contributions to conception and design, or acquisition of data, or analysis and interpretation of data;
2. Been involved in drafting the manuscript or revising it critically for important intellectual content;
3. Given final approval of the version to be published. Each author should have participated sufficiently in the work to take public responsibility for appropriate portions of the content; and
4. Agreed to be accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved. Contributions from anyone who does not meet the criteria for authorship should be listed, with permission from the contributor, in an Acknowledgments section (for example, to recognize contributions from people who provided technical help, collation of data, writing assistance, acquisition of funding, or a department chairperson who provided general support). Prior to submitting the article all authors should agree on the order in which their names will be listed in the manuscript.

The number of authors should not exceed to seven, otherwise must be justified and the editorial board will evaluate case by case.

ORCID
As part of the journal's commitment to supporting authors at every step of the publishing process the journal requires the submitting author (only) to provide an ORCID iD when submitting a manuscript. If you don't have an ORCID ID, it can be registered at https://orcid.org/register.

Changes to authorship
Authors are expected to consider carefully the list and order of authors before submitting their manuscript and provide the definitive list of authors at the time of the original submission. Any addition, deletion or rearrangement of author names in the authorship list should be made only before the manuscript has been accepted and only if approved by the journal Editor. To request such a change, the Editor must receive the following from the corresponding author: (a) the reason for the change in author list and (b) written confirmation (e-mail, letter) from all authors that they agree with the addition, removal or rearrangement. In the case of addition or removal of authors, this includes confirmation from the author being added or removed.
Only in exceptional circumstances will the Editor consider the addition, deletion or rearrangement of authors after the manuscript has been accepted. While the Editor considers the request, publication of the manuscript will be suspended. If the manuscript has already been published in an online issue, any requests approved by the Editor will result in a corrigendum.

**Protocols**
Authors of manuscripts reporting clinical trials are encouraged to submit trial protocols (including the complete statistical analysis plan) along with their manuscripts.

**Registration of clinical trials**
Registration in a public trials registry is a condition for publication of clinical trials in this journal in accordance with International Committee of Medical Journal Editors recommendations. Trials must register at or before the onset of patient enrolment. The clinical trial registration number should be included at the end of the abstract of the article. If the trial is not registered, or was registered retrospectively, the reasons for this should be explained.

A clinical trial is defined as any research study that prospectively assigns human participants or groups of humans to one or more health-related interventions to evaluate the effects of health outcomes. Health-related interventions include any intervention used to modify a biomedical or health-related outcome (for example drugs, surgical procedures, devices, behavioural treatments, dietary interventions, and process-of-care changes). Health outcomes include any biomedical or health-related measures obtained in patients or participants, including pharmacokinetic measures and adverse events. Purely observational studies (those in which the assignment of the medical intervention is not at the discretion of the investigator) will not require registration.

**Article transfer service**
This journal uses the Elsevier Article Transfer Service to find the best home for your manuscript. This means that if an editor feels your manuscript is more suitable for an alternative journal, you might be asked to consider transferring the manuscript to such a journal. The recommendation might be provided by a Journal Editor, a dedicated Scientific Managing Editor, a tool assisted recommendation, or a combination. If you agree, your manuscript will be transferred, though you will have the opportunity to make changes to the manuscript before the submission is complete. Please note that your manuscript will be independently reviewed by the new journal. More information.

**Copyright**
Upon acceptance of an article, authors will be asked to complete a 'Journal Publishing Agreement' to assign to the society the copyright in the manuscript and any tables, illustrations or other material submitted for publication as part of the manuscript (the "Article") in all forms and media (whether now known or later developed), throughout the world, in all languages, for the full term of copyright, effective when the Article is accepted for publication. Besides, the journal also request a signed Copyright Statement. A template is available at: https://static.elsevier.es/miscelanea/authors-agreement-copyright-transference-2021.docx.

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

**Role of the funding source**
You are requested to identify who provided financial support for the conduct of the research and/or preparation of the article and to briefly describe the role of the sponsor(s), if any, in study design; in the collection, analysis and interpretation of data; in the writing of the report; and in the decision to submit the article for publication. If the funding source(s) had no such involvement, it is recommended to state this.

**Open access**
Please visit our Open Access page for more information.

**Embargo policy**
All information regarding the content and publication date of accepted manuscripts is strictly confidential. Unauthorized prepublication release of accepted manuscripts may result in rescinding the acceptance and rejecting the paper. This policy applies to all categories of articles, including Original Investigations, Reviews, Editorials, Viewpoints, Letters, etc. Information contained in or about accepted articles cannot appear in print, audio, video, or digital form or be released by the news media until 3 pm central time on the third Thursday of the month (or other specified embargo release date for the cases in which articles are released early).
Unauthorized use
Published manuscripts become the permanent property of the Elsevier and may not be published elsewhere without written permission. Unauthorized use of the Elsevier name, logo, or any content for commercial purposes or to promote commercial goods and services (in any format, including print, video, audio, and digital) is not permitted by the Elsevier.

Language (usage and editing services)
Please write your text in good English (American or British usage is accepted, but not a mixture of these). Authors who feel their English language manuscript may require editing to eliminate possible grammatical or spelling errors and to conform to correct scientific English may wish to use the Language Editing service available from Elsevier's Language Services.

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

Submit your article
Please submit your article via https://www.editorialmanager.com/BJORL.

All submitted manuscripts are reviewed initially by a Brazilian Journal of Otorhinolaryngology editor. Manuscripts are evaluated according to the following criteria: material is original and timely, writing is clear, study methods are appropriate, data are valid, conclusions are reasonable and supported by the data, and information is important. From these basic criteria, the editors assess a paper's eligibility for publication. Manuscripts with insufficient priority for publication are rejected promptly.

PREPARATION
Double anonymized review
This journal uses double anonymized review, which means the identities of the authors are concealed from the reviewers, and vice versa. More information is available on our website. To facilitate this, please include the following separately:

Title page (with author details): This should include the title, authors' names, affiliations, acknowledgements and any Declaration of Interest statement, and a complete address for the corresponding author including an e-mail address.

Anonymized manuscript (no author details): The main body of the paper (including the references, figures, tables and any acknowledgements) should not include any identifying information, such as the authors' names or affiliations.

Use of word processing software
It is important that the file be saved in the native format of the word processor used. The text should be in single-column format. Keep the layout of the text as simple as possible. Most formatting codes will be removed and replaced on processing the article. In particular, do not use the word processor's options to justify text or to hyphenate words. However, do use bold face, italics, subscripts, superscripts etc. When preparing tables, if you are using a table grid, use only one grid for each individual table and not a grid for each row. If no grid is used, use tabs, not spaces, to align columns. The electronic text should be prepared in a way very similar to that of conventional manuscripts (see also the Guide to Publishing with Elsevier). Note that source files of figures, tables and text graphics will be required whether or not you embed your figures in the text. See also the section on Electronic artwork.

To avoid unnecessary errors you are strongly advised to use the 'spell-check' and 'grammar-check' functions of your word processor.

The complete paper must not exceed 25 pages of A4 (21 cm x 29.7 cm) size paper, written in size 12 Times New Roman type, double spacing between the lines. If the reviewer considers necessary, he/she may suggest the author to suppress figures or tables or even to condense the text.

Article structure
Introduction
State the objectives of the work and provide an adequate background, avoiding a detailed literature survey or a summary of the results.
Methods
Provide sufficient detail to allow the work to be reproduced. Methods already published should be indicated by a reference: only relevant modifications should be described.

Results
Results should be clear and concise.

Discussion
This should explore the significance of the results of the work, not repeat them. A combined Results and Discussion section is often appropriate. Avoid extensive citations and discussion of published literature.

Conclusions
The main conclusions of the study may be presented in a short Conclusions section, which may stand alone or form a subsection of a Discussion or Results and Discussion section.

Essential title page information
Title Page
• Manuscript title (Concise and informative. Titles are often used in information-retrieval systems. Avoid abbreviations and formulae where possible.);
—A short running title of 40 characters;
—The full names of the authors and highest degrees;
—The author's institutional affiliations where the work was conducted;
—Funding and Conflict of Interests;
—A note indicating the corresponding author, including full contact details (postal codes, telephone and a valid e-mail; please note this will be published with the paper and that post-acceptance correspondence will be directed to this e-mail address);
—Meeting information, if applicable (society name, city, state, country, and exact date the meeting was held);
—Acknowledgments.
• Author names and affiliations, including ORCID iD. Please clearly indicate the given name(s) and family name(s) of each author and check that all names are accurately spelled. Present the authors' affiliation addresses (where the actual work was done) below the names. Indicate all affiliations with a lower-case superscript letter immediately after the author's name and in front of the appropriate address. Provide the full postal address of each affiliation, including the country name and, if available, the e-mail address of each author. Author affiliations should be presented in decreasing hierarchical order (e.g. Harvard University, Harvard Business School, Boston, USA) and should be written as established in its own language (e.g. Universit Paris-Sorbonne; Harvard University, Universidade de S?o Paulo). The ORCID iD must be inserted in all authors profile. To that Click 'Change Details' to update the 'My Information' page, Select 'Link to ORCID'. The ORCID website will open in a new window: Enter your ORCID username and password. If any of the authors does not have an ORCID ID, it can be registered at https://orcid.org/register.
• Corresponding author. Clearly indicate who will handle correspondence at all stages of refereeing and publication, also post-publication. This responsibility includes answering any future queries about Methodology and Materials. Ensure that the e-mail address is given and that contact details are kept up to date by the corresponding author.
• Present/permanent address. If an author has moved since the work described in the article was done, or was visiting at the time, a 'Present address' (or 'Permanent address') may be indicated as a footnote to that author's name. The address at which the author actually did the work must be retained as the main, affiliation address. Superscript Arabic numerals are used for such footnotes.

Highlights
Highlights are mandatory for original and review articles. They consist of a short collection of bullet points that capture the novel results of your research as well as new methods that were used during the study (if any). Please have a look at the examples here: example Highlights.

Highlights should be submitted in a separate editable file in the online submission system. Please use 'Highlights' in the file name and include 3 to 5 bullet points (maximum 85 characters, including spaces, per bullet point).
Abstract
A concise and factual abstract is required. The abstract should state briefly the purpose of the research, the principal results and major conclusions, with no more than 300 words. An abstract is often presented separately from the article, so it must be able to stand alone. For this reason, references must be avoided. Also, non-standard or uncommon abbreviations must be avoided. For original and review articles, the abstract must be structured in: Objective(s), Methods, Results, and Conclusion(s).

Keywords
Three to five keywords must be listed, and they can be found on MeSH (Medical Subject Headings, http://www.nlm.nih.gov/mesh/).

Abbreviations
Do not use abbreviations in the title or abstract and limit their use in the text. Expand all abbreviations at first mention in the text.

Acknowledgements
Collate acknowledgements in a separate section at the end of the article before the references and do not, therefore, include them on the title page, as a footnote to the title or otherwise. List here those individuals who provided help during the research (e.g., providing language help, writing assistance or proof reading the article, etc.).

Formatting of funding sources
List funding sources in this standard way to facilitate compliance to funder's requirements:

Funding: This work was supported by the National Institutes of Health [grant numbers xxxx, yyyy]; the Bill & Melinda Gates Foundation, Seattle, WA [grant number zzzz]; and the United States Institutes of Peace [grant number aaaa].

It is not necessary to include detailed descriptions on the program or type of grants and awards. When funding is from a block grant or other resources available to a university, college, or other research institution, submit the name of the institute or organization that provided the funding.

If no funding has been provided for the research, it is recommended to include the following sentence:

This research did not receive any specific grant from funding agencies in the public, commercial, or not-for-profit sectors.

Nomenclature and units
Units of measure
Laboratory values are expressed using conventional units of measure, with relevant Système International (SI) conversion factors expressed secondarily (in parentheses) only at first mention. Articles that contain numerous conversion factors may list them together in a paragraph at the end of the “Methods” section. In tables and figures, a conversion factor to SI should be presented in the footnote or legend. The metric system is preferred for the expression of length, area, mass, and volume. For more details, see the Units of Measure conversion table on the website for the AMA Manual of Style.

Names of drugs, devices, and other products
Use nonproprietary names of drugs, devices, and other products, unless the specific trade name of a drug is essential to the discussion.

Gene names, symbols, and accession numbers
Authors describing genes or related structures in a manuscript should include the names and official symbols provided by the US National Center for Biotechnology Information (NCBI) or the HUGO Gene Nomenclature Committee. Before submission of a research manuscript reporting on large genomic data sets (e.g., protein or DNA sequences), the data sets should be deposited in a publicly available database, such as NCBI’s GenBank, and a complete accession number (and version number if appropriate) must be provided in the "Methods" section of the manuscript.
Math formulae
Please submit math equations as editable text and not as images. Present simple formulae in line with normal text where possible and use the solidus (/) instead of a horizontal line for small fractional terms, e.g., X/Y. In principle, variables are to be presented in italics. Powers of e are often more conveniently denoted by exp. Number consecutively any equations that have to be displayed separately from the text (if referred to explicitly in the text).

Footnotes
Footnotes should be used sparingly. Number them consecutively throughout the article. Many word processors can build footnotes into the text, and this feature may be used. Otherwise, please indicate the position of footnotes in the text and list the footnotes themselves separately at the end of the article. Do not include footnotes in the Reference list.

Artwork
Electronic artwork
General points
• Make sure you use uniform lettering and sizing of your original artwork.
• Embed the used fonts if the application provides that option.
• Aim to use the following fonts in your illustrations: Arial, Courier, Times New Roman, Symbol, or use fonts that look similar.
• Number the illustrations according to their sequence in the text.
• Use a logical naming convention for your artwork files.
• Provide captions to illustrations separately.
• Size the illustrations close to the desired dimensions of the published version.
• Submit each illustration as a separate file.
• Ensure that color images are accessible to all, including those with impaired color vision.

A detailed guide on electronic artwork is available.
You are urged to visit this site; some excerpts from the detailed information are given here.

Formats
If your electronic artwork is created in a Microsoft Office application (Word, PowerPoint, Excel) then please supply 'as is' in the native document format.
Regardless of the application used other than Microsoft Office, when your electronic artwork is finalized, please 'Save as' or convert the images to one of the following formats (note the resolution requirements for line drawings, halftones, and line/halftone combinations given below):
EPS (or PDF): Vector drawings, embed all used fonts.
TIFF (or JPEG): Color or grayscale photographs (halftones), keep to a minimum of 300 dpi.
TIFF (or JPEG): Bitmapped (pure black & white pixels) line drawings, keep to a minimum of 1000 dpi.
TIFF (or JPEG): Combinations bitmapped line/half-tone (color or grayscale), keep to a minimum of 500 dpi.

Please do not:
• Supply files that are optimized for screen use (e.g., GIF, BMP, PICT, WPG); these typically have a low number of pixels and limited set of colors;
• Supply files that are too low in resolution;
• Submit graphics that are disproportionately large for the content.

Color artwork
Please make sure that artwork files are in an acceptable format (TIFF (or JPEG), EPS (or PDF), or MS Office files) and with the correct resolution. If, together with your accepted article, you submit usable color figures then Elsevier will ensure, at no additional charge, that these figures will appear in color online (e.g., ScienceDirect and other sites) regardless of whether or not these illustrations are reproduced in color in the printed version. For color reproduction in print, you will receive information regarding the costs from Elsevier after receipt of your accepted article. Please indicate your preference for color: in print or online only. Further information on the preparation of electronic artwork.

Figure captions
Ensure that each illustration has a caption. Supply captions separately, not attached to the figure. A caption should comprise a brief title (not on the figure itself) and a description of the illustration. Keep text in the illustrations themselves to a minimum but explain all symbols and abbreviations used.

All figure must be placed after Tables in separate pages.
Tables
Please submit tables as editable text and not as images. Tables can be placed either next to the relevant text in the article, or on separate page(s) at the end. Number tables consecutively in accordance with their appearance in the text and place any table notes below the table body. Be sparing in the use of tables and ensure that the data presented in them do not duplicate results described elsewhere in the article. Please avoid using vertical rules and shading in table cells.

References
Citation in text
Please ensure that every reference cited in the text is also present in the reference list (and vice versa). Any references cited in the abstract must be given in full. Unpublished results and personal communications are not recommended in the reference list, but may be mentioned in the text. If these references are included in the reference list they should follow the standard reference style of the journal and should include a substitution of the publication date with either ‘Unpublished results’ or ‘Personal communication’. Citation of a reference as 'in press' implies that the item has been accepted for publication.

Reference links
Increased discoverability of research and high quality peer review are ensured by online links to the sources cited. In order to allow us to create links to abstracting and indexing services, such as Scopus, CrossRef and PubMed, please ensure that data provided in the references are correct. Please note that incorrect surnames, journal/book titles, publication year and pagination may prevent link creation. When copying references, please be careful as they may already contain errors. Use of the DOI is highly encouraged.

A DOI is guaranteed never to change, so you can use it as a permanent link to any electronic article. An example of a citation using DOI for an article not yet in an issue is: VanDecar J.C., Russo R.M., James D.E., Ambeh W.B., Franke M. (2003). Aseismic continuation of the Lesser Antilles slab beneath northeastern Venezuela. Journal of Geophysical Research, https://doi.org/10.1029/2001JB000884. Please note the format of such citations should be in the same style as all other references in the paper.

Web references
As a minimum, the full URL should be given and the date when the reference was last accessed. Any further information, if known (DOI, author names, dates, reference to a source publication, etc.), should also be given. Web references can be listed separately (e.g., after the reference list) under a different heading if desired, or can be included in the reference list.

Data references
This journal encourages you to cite underlying or relevant datasets in your manuscript by citing them in your text and including a data reference in your Reference List. Data references should include the following elements: author name(s), dataset title, data repository, version (where available), year, and global persistent identifier. Add [dataset] immediately before the reference so we can properly identify it as a data reference. The [dataset] identifier will not appear in your published article.

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

References in a special issue
Please ensure that the words 'this issue' are added to any references in the list (and any citations in the text) to other articles in the same Special Issue.

Reference style
Authors are responsible for the accuracy and completeness of their references and for correct text citation. Number references in the order they appear in the text; do not alphabetize. In text, tables, and legends, identify references with superscript arabic numerals. When listing references, follow AMA style and abbreviate names of journals according to the journals list in PubMed. List all authors and/or editors up to 6; if more than 6, list the first 6 followed by et al. Any articles that are not in English must be translated. See Cumulative Index Medicus for abbreviating journal titles.

Examples of reference style:

**Online journals**

**Book chapter**

**Entire book**

**Database**

**Software**

**Web sites**

**Web references**
Please keep a print copy of any reference to web-only information. If the URL changes or disappears, interested readers may contact the corresponding author for a copy of the information. **Authors are responsible for the accuracy and completeness of their references and for correct text citation.**

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

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

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

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

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

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

Submission checklist
The following list will be useful during the final checking of an article prior to sending it to the journal for review. Please consult this Guide for Authors for further details of any item.

Ensure that the following items are present:
One author has been designated as the corresponding author with contact details:
• E-mail address
• Full postal address
• Telephone
All necessary files have been uploaded, and contain:
• Keywords
• All figure captions
• All tables (including title, description, footnotes)
• Highlights (for original articles and reviews)
Further considerations
• Manuscript has been 'spell-checked' and 'grammar-checked'
• All references mentioned in the Reference list are cited in the text, and vice versa
• Permission has been obtained for use of copyrighted material from other sources (including the Web)
• Color figures are clearly marked as being intended for color reproduction on the Web (free of charge) and in print, or to be reproduced in color on the Web (free of charge) and in black-and-white in print
• If only color on the Web is required, black-and-white versions of the figures are also supplied for printing purposes
For any further information please visit our customer support site at https://service.elsevier.com.

Highlights
Highlights are mandatory for this original reports and reviews as they help increase the discoverability of your article via search engines. They consist of a short collection of bullet points that capture the novel results of your research as well as new methods that were used during the study (if any). Please have a look at the examples here: example Highlights.

Highlights should be submitted in a separate editable file in the online submission system. Please use 'Highlights' in the file name and include 3 to 5 bullet points (maximum 85 characters, including spaces, per bullet point).

AFTER ACCEPTANCE
Proofs
One set of page proofs (as PDF files) will be sent by e-mail to the corresponding author (if we do not have an e-mail address then paper proofs will be sent by post) or a link will be provided in the e-mail so that authors can download the files themselves. To ensure a fast publication process of the article, we kindly ask authors to provide us with their proof corrections within two days. Elsevier now provides authors with PDF proofs which can be annotated; for this you will need to download the free Adobe Reader, version 9 (or higher). Instructions on how to annotate PDF files will accompany the proofs (also given online). The exact system requirements are given at the Adobe site.
If you do not wish to use the PDF annotations function, you may list the corrections (including replies to the Query Form) and return them to Elsevier in an e-mail. Please list your corrections quoting line number. If, for any reason, this is not possible, then mark the corrections and any other comments (including replies to the Query Form) on a printout of your proof and scan the pages and return via e-mail. Please use this proof only for checking the typesetting, editing, completeness and correctness of the text, tables and figures. Significant changes to the article as accepted for publication will only
be considered at this stage with permission from the Editor. We will do everything possible to get your article published quickly and accurately. It is important to ensure that all corrections are sent back to us in one communication: please check carefully before replying, as inclusion of any subsequent corrections cannot be guaranteed. Proofreading is solely your responsibility.

AUTHOR INQUIRIES
Visit the Elsevier Support Center to find the answers you need. Here you will find everything from Frequently Asked Questions to ways to get in touch. You can also check the status of your submitted article or find out when your accepted article will be published.

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