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- Clinical Presentation: Define the case(s) presented, pertinent attendant issues, and observations.
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- If P > .99, P = .999 for example, it should be expressed as P > .99.

Abbreviations, Nomenclature and Symbols
These should conform to those found in the AMA Manual of Style: A Guide for Authors and Editors, 10th Edition. The use of standard international units is encouraged. Note: The use of nonstandard abbreviations is strongly discouraged. In accepted manuscripts, use of such abbreviations may cause a delay in the copyediting process.
Neurosurgery ARTICLE TYPES

Research-Human-Clinical Studies

Research-Animal

Research-Laboratory
These represent a substantial body of laboratory or clinical work. Additional data may be presented as supplementary information, which will be published online should the article be accepted. A structured abstract of no more than 250 words is required. Maximum length: 3,000 words of text (not including abstract, references, figures, tables, and online-only material). For observational epidemiological studies and diagnostic accuracy studies, see Research Reporting Guidelines for further requirements.

Research-Human-Study Protocols
Study Protocols describe proposed or ongoing research, and provide a detailed account of the hypothesis, rationale, and methodology of the planned study. The journal will consider Study Protocols of proposed or ongoing trials (provided they have not completed patient recruitment at the time of submission). Study Protocols will usually be published without further peer review if the study has received institutional IRB and ethics approval, and peer-review and grant funding from a major extramural funding body. We are unable to consider Study Protocols without ethics or IRB approval or major extramural funding at the time of submission. All clinical trials must be registered at an appropriate online public registry, and registration information should be included with the submission.

Examples of major funding agencies including, but not limited to:

- Academy of Finland (Finland)
- BIOTEC (Thailand)
- California Institute for Regenerative Medicine (US)
- Canadian Institutes of Health Research (Canada)
- Centre National de la Recherche Scientifique (France)
- Consejo Superior de Investigaciones Científicas (Spain)
- Consiglio Nazionale delle Ricerche (Italy)
- Danmarks Grundforskningsfond (Denmark)
- Deutsche Forschungsgemeinschaft (Germany)
- FAPESP (Brazil)
- Fondazione Telethon (Italy)
- Fonds zur Forderung der wissenschaftlichen Forschung (Austria)
- Fonds voor Wetenschappelijk Onderzoek (Belgium)
- Health Research Board (Ireland)
- Howard Hughes Medical Institute (US)
- Indian Council of Medical Research (India)
- INSERM (France)
- International Human Frontier Science Program Organization (International)
Study Protocols accepted for publication will be citable and accessible online and in print. Investigators must consent in principle to submit all or a substantial portion of the primary manuscript to *Neurosurgery* at the conclusion of the study, which the Journal will send for peer-review. The Journal will provisionally commit to rapidly publish the main clinical findings of the study absent major deviations from protocol, poor reporting or over interpretation of data, loss of originality, or undue delay after the planned submission date. The Journal will continue to accept for consideration manuscripts whose protocols have not been previously submitted to *Neurosurgery*.

**Maximum length:** 3,000 words of text (not including abstract, references, figures, tables, and online-only material). For protocols of randomized controlled trials, see Research Reporting Guidelines for information regarding CONSORT. Study Protocols should include the following information arranged according to these subheadings:

**Abstract:** The abstract should be no more than 250 words and should summarize all the key elements of the protocol including the rationale, objectives, methods, populations, time frame, and expected outcomes under the following subheadings: Background; Objective; Methods; Expected Outcomes; Discussion.

**General Information:**

Protocol title, protocol identifying number (if any), and date.

Name and address of the sponsor/funding agency.

Name and title of the investigator(s) responsible for conducting the research, and the address and telephone number(s) of the research site(s), including responsibilities of each.

Name(s) and address(es) of the clinical laboratory(ies) and other medical department(s) or institutions involved in the research.
**Rationale and Background Information:** The rationale specifies the reasons for conducting the research in light of extant knowledge. It should include a statement of the question, issue, or problem that forms the basis of the project, the etiology of this problem, and its possible solutions. It should put the proposal in proper context. It should answer the question of why and what: why the research needs to be done and what will be its relevance.

**Study Goals and Objectives:** Goals are broad statements of what the proposal hopes to accomplish. Specific objectives are statements of the research question(s). Objectives should be straightforward, simple, and specific. They should be stated as bullets points or enumerated.

**Study Design:** The design of the study should include information on the type of study, the research population or the sampling frame, inclusion and exclusion criteria, withdrawal criteria, and the expected duration of the study, etc. For example, a study may be described as basic science research, epidemiological research, observational, or interventional; if observational, it may be either descriptive or analytic, if analytic it could either be cross-sectional or longitudinal. If experimental, it may be described as a controlled or a non-controlled study.

**Methodology:** This should include the design of the study, the setting, the type of participants or materials involved, a clear description of all interventions (including a description of the drug/device that is being tested), comparisons to be made, procedures to be used, measurements to be taken, observations to be derived, laboratory investigations to be collected, and the type of analysis used, including a power calculation if appropriate. Interventions could also be in the realm of epidemiology or outcomes sciences (e.g., surveys).

Standardized or previously documented procedures and techniques should be described and appropriately referenced. Instruments that are to be used to collect information (questionnaires, case report forms, etc.) may be provided as supplemental material at the discretion of the author. In the case of a randomized controlled trial, additional information on the process of randomization and blinding, description of stopping rules for individuals, for part or entirety of the study, the procedures and conditions for breaking the codes, etc., should also be described.

A graphic outline of the study design and procedures using a flow diagram must be provided. This should include the timing of assessments.

**Discussion:** This can include discussion of any practical or operational issues involved in performing the study, and any other issues linked to the study that do not fall within the previous headings.

**Trial Status:** Investigators should inform the journal of the status of their study at the time of submission. The journal will consider study protocol articles for proposed or ongoing trials provided they have not completed patient recruitment at the time of submission.

**Safety Considerations:** Safety aspects should be provided in the protocol on how the safety of research participants will be ensured. This can include procedures for recording and reporting adverse events and their follow-up, for example.
Follow-up: The research protocol must give a clear indication of what follow-up will be provided to the research participants and for how long. This may include a follow-up especially for adverse events, even after data collection for the research study is completed.

Data Management and Statistical Analysis: The protocol should provide information on how the data will be managed, including data handling and coding for computer analysis, monitoring, and verification. The statistical methods proposed for the analysis of data should be clearly outlined, including reasons for the sample size selected, power of the study, level of significance to be used, procedures for accounting for any missing or spurious data, etc. For projects involving qualitative approaches, specify in sufficient detail how the data will be analyzed.

Quality Assurance: The protocol should describe the quality control and quality assurance system for the conduct of the study, including GCP, follow-up by clinical monitors, DSMB, data management, etc.

Expected Outcomes of the Study: The protocol should indicate how the study will contribute to advancement of knowledge and how the results will be utilized, not only in publications but also how they will likely affect health care, health systems, or health policies.

Duration of the Project: The protocol should specify the time that each phase of the project is likely to take, along with a timeline for each activity to be undertaken.

Project Management: This section should briefly describe the role and responsibility of each member of the team.

Ethics: The protocol should have a description of ethical considerations relating to the study. This section should state the issues that are likely to raise ethical concerns. It should also describe the informed consent process.

Research-Human-Clinical Trials
In these studies, individuals are randomly allocated to receive or not receive a preventive, therapeutic, or diagnostic intervention and then followed up to determine the effect of the intervention. 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, 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 comment section placing the results in context with the published literature and addressing study limitations; and the conclusions. Trial registration information (name, number, and URL) must be included with the submission. See Clinical Trial Registration for further information regarding the Journal’s requirements for registering clinical trials. A structured abstract of no more than 250 words is required. Maximum length: 3,000 words of text (not including abstract, references, figures, tables, and online-only material). For randomized controlled trials, see Research Reporting Guidelines for information regarding CONSORT.
Review
Reviews are balanced accounts of all aspects of a particular subject including the pros and cons of any contentious or uncertain aspect. Qualitative reviews should include an unstructured abstract of no more than 250 words. A structured abstract is required for quantitative reviews. Maximum length: 3,500 words of text (not including abstract, references, figures, tables, and online-only material) with no more than a total of 100 references. For systematic reviews and meta-analyses, see Research Reporting Guidelines for information regarding PRISMA and MOOSE.

Case Report
Please be aware that *Neurosurgery* accepts a very small percentage of submitted case reports and publishes a limited number in each issue. Consequently, review time and time to publication are extended. Case reports must show an unusual clinical development, or a new insight into a well-recognized clinical problem. A case report should have an educational message, provide evidence of how the case contributes to our understanding of the condition/treatment, and if relevant, comply with the CARE Guidelines. (see Research Reporting Guidelines for information regarding CARE). Case reports that do not satisfy these requirements will be rejected without peer review.

Important Note: case reports appear in print as a truncated version with the abstract and selected figures only. Full text, references, and figures are reproduced online at [http://www.neurosurgery-online.com](http://www.neurosurgery-online.com).

A structured abstract of no more than 250 words is required. Maximum length: 1,200 words of text (not including abstract, references, figures, tables, and online-only material).

Abstracts for Case Reports contain the following headings:

- Background and Importance: State the significance of the issue and importance of the case(s).
- Clinical Presentation: Define the case(s) presented, pertinent attendant issues, and observations.
- Conclusion: State outcome of case(s) and recommend treatment pathways.

Legacy-Institutions and People

Special Article
These papers may address virtually any important topic in medicine, public health, research, ethics, health policy, or health law and generally are not linked to a specific article. Legacy and Special Articles should include an unstructured abstract of no more than 250 words. Maximum length: 2,500 words of text (not including abstract, references, figures, tables, and online-only material).

Letter to the Editor
Letters discussing a recent *Neurosurgery* article or a topic of neurosurgical interest not necessarily related to a published article can be submitted. They should be submitted online via [http://www.editorialmanager.com/neu](http://www.editorialmanager.com/neu). Letters must not duplicate other material published or submitted for publication and should not include unpublished data. Important Note: Letters to the
Response to Letter to the Editor

Corresponding authors are invited by the Editorial Office to submit a Response to Letter to the Editor upon receipt of a Letter to the Editor regarding their article in Neurosurgery. Response letters must not duplicate other material published or submitted for publication and should not include unpublished data. Important Note: Responses to letters to the editor are indexed in the journal Table of Contents; however, the text is only available online at http://www.neurosurgery-online.com. Maximum length: 1,000 words of text (not including references, figures, tables, and online-only material).

Commentary

Commentaries are invited at the discretion of the editor and can be a brief communication on a subject pertinent to the field. Commentaries may also be invited from a selected reviewer or reviewers once a paper has been accepted for publication. The goal of a commentary in the latter case is to enrich the reader’s understanding of the manuscript by highlighting a particular aspect of the given paper or to offer an alternative perspective on the contents reported. Important Note: Commentaries are published in print or online only at the discretion of the Editor-in-Chief. Maximum length: 1,000 words of text (not including references, figures, tables, and online-only material).

Editorial

Editorials are invited essays written and submitted by a member of the editorial board. Editorials are used as a venue for members of the editorial board to express their views on an issue timely to the neurosurgery community. These are solicited by the Journal. Maximum length: 3,000 words of text (not including references, figures, tables, and online-only material).

Guest Editorial

Guest editorials are invited essays written and submitted by a member of the neurosurgery community. Guest editorials are used as a venue for the author to express his or her views on an issue timely to the neurosurgery community. These are solicited by the Journal. Questions may be directed to neurosurgerypubs@cns.org. Maximum length: 3,000 words of text (not including references, figures, tables, and online-only material).

Editor-in-Chief Registrar

The Registrar is an article type reserved specifically for communications from the Editor-in-Chief to the Journal readership. The Editor-in-Chief may use this as a venue to provide updates on the Journal and its features or to communicate his or her views on a subject timely to the neurosurgery community.

Book Review

Reviews of books and new media are invited by the Editor. Questions may be directed to neurosurgerypubs@cns.org. Maximum length: 1,000 words of text (not including references).
Cover Essay
A cover essay is an invited submission based on the journal cover art. The goal of this essay is to illuminate the image that appears on the cover of the Journal. These essays will be solicited by the editor and those solicited may include the author of the paper from which a cover image was selected, the artist who created the cover image, or an author whom the editor feels can provide insight into the cover art. Maximum length: 3,000 words of text (not including references, figures, tables, and online-only material).

Journal Club
Neurosurgery’s Journal Club extends the existing practice of Journal Club common to all neurosurgical training programs where resident and fellows critically review published articles under the guidance of faculty. Journal Club submissions will comprise a scholarly review written by neurosurgical residents/fellows based on top-ranked articles recently published in Neurosurgery.

Competition and Eligibility
Journal Club articles are chosen from among the top-downloaded Neurosurgery articles of the previous calendar quarter. Programs will be notified by email and on the journal website of upcoming articles selected for Journal Club review 3 months ahead of the deadline for submission for competitive review.

Quarterly, the best Journal Club review, adjudged by our dedicated Journal Club Review Panel, will be published in the print edition of Neurosurgery, and the “winning” program and institution will be prominently highlighted in the Table of Contents. The 4 runner-up reviews will be featured online at http://www.neurosurgery-online.com.

Current neurosurgery residents and fellows in any North American Neurosurgery ACGME accredited program may contribute to Journal Club reviews. We particularly encourage submissions that reflect the participatory nature of the traditional journal club setting familiar to all programs. Thus, faculty guidance and participation are appropriate, but the work must be done by the residents/fellows. Authors of Journal Club submissions may not be from the same institution or have any real or apparent conflict of interest with the authors of the Journal Club article being reviewed.

Format
Journal Club submissions should provide a thoughtful critical review of the elements in the article, rather than simply rehashing the paper, and should focus on the most important results. To maintain uniformity and for ease of adjudication, we have outlined a strict format. Comments must be accurate, well-reasoned, and scholarly. Maximum length: 2,000 words of text with no more than a total of 5 references. Figures and tables are not permitted.

Journal Club reviews must include all of the following 11 components:

- Significance/Context and Importance of the Study
- Originality of the Work
- Appropriateness of the Study Design or Experimental Approach
- Adequacy of Experimental Techniques
• Soundness of Conclusions and Interpretation
• Relevance of Discussion
• Clarity of Writing, Strength and Organization of the Paper
• Economy of Words
• Relevance, Accuracy and Completeness of Bibliography
• Number and Quality of Figures, Tables and Illustrations
• Future/Next Steps

Journal Club Commentary
Corresponding authors are invited by the Editorial Office to submit a Response to Journal Club upon acceptance of a winning Journal Club article regarding their original article in Neurosurgery. Responses to Journal Club must not duplicate other material published or submitted for publication and should not include unpublished data. Maximum length: 1,000 words of text (not including references).

Science Times
Published six times a year and written exclusively by panel members, Science Times articles provide timely reviews of significant new scientific papers that are relevant to the field of neurosurgery. Topics span basic neuroscience, clinical neuroscience, neurotechnology, and health care research. The purpose of Science Times is to help maintain and broaden the common literacy necessary to translate new scientific knowledge into advances in the neurosurgical clinic and operating room.

REFERENCES
• All references cited in the text must be both listed and cited by the reference number (footnotes are not accepted).
• Each reference should be cited in the text, tables, or figures in consecutive numerical order by means of superscript Arabic numerals. Use superscript numerals outside periods and commas, inside colons and semicolons. When more than 2 references are cited at a given place in the manuscript, use hyphens to join the first and last numbers of a closed series; use commas without space to separate other parts of a multiple citation (e.g., As reported previously,1,3-8,19...The derived data were as follows3,4,12:)
• References should be numbered consecutively in the order in which they are cited in the text.
• References in tables and in figure legends must appear in the reference page(s).
• In listed references, use the author’s surname followed by initials without periods. (e.g., Doe JF)
• If there are 6 or fewer authors of a reference, all authors should be listed. If there are more than 6 authors, then the list should be truncated to 3 authors followed by “et al.”
  o 1 author Doe JF.
  o 2 authors Doe JF, Roe JP III.
  o 6 authors Doe JF, Roe JP III, Coe RT Jr, Loe JT Sr, Poe EA, van Voe AE.

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>6 authors Doe JF, Roe JP III, Coe RT Jr, et al.

- Full-page ranges should be given in expanded form (e.g., 426–429, not 426–9).
- If non-English-language titles are translated into English, bracketed indication of the original language should follow the title.
- Abbreviate and italicize names of journals. Abbreviations for journal titles should be those found on PubMed and adopted by the Index Medicus.
- In references to journals that have no volume or issue numbers, use the issue date, as shown in example 1 below. If there is an issue number but no volume number, use the style shown in example 2. Conversely, if there is a volume number but no issue number, follow example 3.
  - 1. Author(s). Article Title. Journal Name. Month Year: inclusive pages.
  - 2. Author(s). Article Title. Journal Name. Year;(Issue No.):inclusive pages.
  - 3. Author(s). Article Title. Journal Name. Year;vol:inclusive pages.
- Papers "submitted for publication" but not yet accepted and citations such as "personal communication" or "unpublished data" are not acceptable as listed references and instead should be included parenthetically in the text. This material, with its date, should be noted in the text as “unpublished data” as follows: (J. F. Doe, MD, unpublished data, January 2010).
- Papers denoted "in press" (accepted for publication) should appear in the references.
- Contributors are responsible for the accuracy and completeness of the references.

**FIGURES**

To ensure the highest-quality reproduction of figures, please follow these guidelines carefully. Figures refer to both photographic and computer-generated graphs and charts.

NEUROSURGERY® Publications is not responsible for the quality of images in print; it is the responsibility of the authors to submit publication-quality, high-resolution images. If you have questions, consult a graphics specialist.

**Creating and Saving**

- Art should be created/scanned, saved, and submitted as either a TIFF or an EPS file.
- Art should be created or scaled to the size intended for print. Image orientation should also be the same as intended for print.
- Artwork originating and generated from office suite programs such as MS Word, MS PowerPoint, and MS Excel should be saved as a PDF and converted to a high-resolution TIFF or EPS file using Photoshop.
- Figures should look sharp and crisp when viewed at 100% magnification in Photoshop.
- Any text or labels used on an image should be formatted using Helvetica or Arial font.
- Panel labels should be set in the upper left-hand corner.
- Figures should not be manipulated; i.e., no feature within an image may be enhanced, obscured, moved, removed, or introduced.
- Figures are numbered with Arabic numerals (1, 2, 3, etc.) when there is more than one figure included with the manuscript. Do not use roman numerals to number figures.
• If a figure has multiple parts (“composite figure”) each part (“panel”) is designated with uppercase alphabetical letters in the figure legend and in-text reference.
• Composite figures must be submitted as separate panels (without embedded labels), e.g., Figure 1A.tif, Figure 1B.tif, to be combined during production if accepted for publication.
• Each file should be saved as the appropriate figure number (e.g., Figure 1.tif). Do not include the author name in figure file name.

Formatting Specifications
• File formats appropriate for figures: TIFF and EPS
• All figures must be designated GRAYSCALE (black and white) or CMYK (color).
• If figures are in RGB, they should be converted to CMYK prior to submission if they are to be printed in color. Authors should note that the RGB color space is significantly larger than the process CMYK color space, and therefore, depending on the content of the image, color shifts may occur during the conversion.
• Electronic photographs, radiographs, CT scans, and scanned images must have a resolution of at least 300 dpi (dots per inch). Line art (purely black and white figures with no shades of gray) must have a resolution of at least 1200 dpi. Figures that do not meet the resolution requirement will be returned if submitted.
• Digital art files should be cropped to remove non-printing borders (such as unnecessary white or black space around an image) and should not include embedded “legend” text.

Submitting
• Attach a separate file for each individual art submission.
• Do not embed figures in the manuscript file.
• Figures should be labeled using the Description field provided in the Attach Files section of Editorial Manager (e.g., Figure 1, Figure 2). This provides a label for each figure in the PDF generated by Editorial Manager.
• Cite figures consecutively in the manuscript, and number them in the order in which they are discussed. If a figure contains multiple panels (A, B, C, etc.) all panels must be cited in alphabetical order or the figure must be cited as a
• whole before proceeding to the next numerical figure.
• Ensure the file format is either TIFF or EPS and the resolution is at least 300 dpi.
• Carefully review the PDF conversion of your submission files to ensure that figures uploaded without error and appear as intended. If you experience any difficulties uploading figure images, or have questions regarding submission specifications please contact the Editorial Office via phone (+001)404.712.5930 or email: neurosurgerypubs@cns.org.

Color Figures
Authors are responsible for the costs of any color reproductions in the printed journal and for obtaining permission to reproduce previously published illustrations. Color is preferred with all histopathology, and in particular immunohistochemistry illustrations.

Figure Reproduction Costs
• $500 for one color figure
• $150 for each additional figure thereafter

Authors may request that figures be produced in color in the electronic versions of the journal free of charge and converted to grayscale in print. Please do not submit multiple versions of figures; the publisher will convert any color figures to grayscale in production. The publisher will note in the printed legends that color versions are available online. When preparing illustrations for color production online and for grayscale production in print, ensure that colors chosen will reproduce well when printed in grayscale and that descriptions of figures in text and legends will be sufficiently clear for both print and electronic versions. These are the author’s responsibility. There are no costs associated with color figures submitted with invited articles and special supplements.

Figure Legends
• Legends for all figures should be brief, specific, and appear on a separate page at the end of the manuscript document, following the list of references.
• Use scale markers in the image for electron micrographs, and indicate the type of stain used.
• All symbols or abbreviations appearing in an illustration must be defined in the legend.
• Legends for composite figures should be formatted as a single legend containing necessary information about each part/panel (not separated).
• Credit for any previously published illustration must be given in the corresponding legend. This includes reference to the original source and indication that permission has been obtained to reuse the image (if required).
• For further information on figure legend formatting, please see the AMA Manual of Style: A Guide for Authors and Editors, 10th Edition or visit online: http://www.amamanualofstyle.com.
TABLES

Creating and Saving

- Create tables using the table formatting and editing feature of Microsoft Word. Do not use Microsoft Excel or comparable spreadsheet programs.
- Tables are text-only items. Images may not be embedded within tables.
- The use of color in table cells or other color elements is not permitted.
- Save each table in a separate Microsoft Word document.
- Tables that include one or more parts (e.g., Table 1A, Table 1B) should be submitted in one single file.
- Formatting Specifications
- Accepted file formats for tables: DOC and DOCX
- Each table file should include the table title, appropriate column heads, and any legends (including abbreviations). Table titles and legends should not be included within the manuscript file.
- Do not include author names in headers or footers of table files.
- Abbreviations are not permitted in table titles. Any abbreviation(s) used in the body of the table, including dashes must be defined in a footnote to the table, listed in reading order. They should be self-explanatory and should supplement, rather than duplicate, the material in the text.
- Tables are numbered with Arabic numerals (1, 2, 3, etc.) when there is more than one table included with the manuscript. Do not use roman numerals to number tables.
- Cite tables consecutively in the manuscript, and number them in the order in which they are discussed.
- Many tables include information from other articles and series of patients. In these tables, include the name of the first author of the series in the far left column of the table, and include the reference and year alongside the author's name. Each series mentioned in a table must list a corresponding reference in the Reference section of the manuscript.

Submitting

- Table files are uploaded individually as separate documents during the submission process.
- Do not submit tables embedded within the manuscript file.
- Carefully review the PDF conversion of your submission files to ensure that any tables submitted are legible, and are not cut-off on either side of the page.
- For further information on Table formatting, please see the AMA Manual of Style: A Guide for Authors and Editors, 10th Edition or visit online: http://www.amamanualofstyle.com.

SUPPLEMENTAL DIGITAL CONTENT

Authors may submit supplemental digital content to enhance their article’s text and to be considered for online only posting. Supplemental digital content may include the following types of content: text documents, graphs, tables, figures, graphics, illustrations, and videos. Note: Supplemental Digital
Content will not be copyedited or formatted in any way by the Editorial Office of the Publisher. These materials will be published as is.

**Formatting Requirements**

- Do not include author/institution information within supplemental material or in the file names.
- Supplemental digital content items are numbered with Arabic numerals (1, 2, 3, etc.) when there is more than one.
- Cite all supplemental digital content consecutively in the text, and number in the order in which they are cited.
- Citations should include the type of material submitted, should be clearly labeled as “Supplemental Digital Content,” and should provide a brief description of the content.
- Items may only be grouped into one singular supplemental digital content file if they are referenced as a whole in the text.

**In-text Citation Examples**

(see Figures, Supplemental Digital Content, which demonstrate the technique used)
(see Table, Supplemental Digital Content 1, which illustrates the rise in cost of knee replacement surgery)
(see Video, Supplemental Digital Content 2, which demonstrates the degrees of flexibility in the elbow)
(see Supplemental Methods, Supplemental Digital Content 3, for further details)

- All supplemental digital content files should include a title, legend, abbreviations list, etc., within the supplemental content file. For those files like figures and videos that may be uploaded as separate files, please upload a separate legend file. If figures are submitted in either a Microsoft Word or PowerPoint file, legends should be included within the individual file. For the video legends please provide 3-5 descriptive annotations designating the significant moments in the video. Example: 0:10 - Placement of Patient; 1:00 – Incision; 3:00 – Procedure.

- If a supplemental content file includes references, they should be formatted according to the AMA Manual of Style: A Guide for Authors and Editors, 10th Edition, as with references in the main text.

**File Type and Size Requirements**

- Supplemental documents, graphs, and tables may be presented in any format.
- Supplemental figures should be submitted with the following file extensions: .tif, .eps, .ppt, .jpg, .pdf, or .gif
- Supplemental video files should be submitted following these requirements:
  - Accepted video file types include: .wmv, .mov, .fv, .qt, .mpg, .mpeg, and .mp4
  - Video files should be formatted with a 320 x 240 pixel minimum screen size.
  - Video files should be 1GB or smaller and should not exceed 10 minutes in runtime.
  - Videos must include embedded audio narration in English or detailed subtitles in English.
  - Videos should not include manufacturer logos or commercial trademarks.
  - Do not include author/institution information or “title page” slides in videos.
  - Any text used in videos should be formatted using Arial font.
Video files too large to upload in Editorial Manager may be alternately submitted as a URL for downloading (via a file transfer or cloud storage website, such as Dropbox) at the “Attach Files” step in Editorial Manager. In lieu of attaching the file, authors may select the “URL” option as the delivery method.

3-5 descriptive annotations designating the significant moments in the video must be provided during the submission process in Editorial Manager and included in the legend for the video. Example provided below: 0:10 - Placement of Patient; 1:00 – Incision; 3:00 – Procedure.

**ACCEPTED MANUSCRIPTS**

**Page Proofs / Electronic Proofs**
Authors are sent page proofs by email. These should be checked immediately and corrections, as well as answers to any queries, returned to the publishers as an annotated PDF via the online proofing system within 2 working days (further details are supplied with the proof). It is the author's responsibility to check proofs thoroughly.

**Advance Access**

Advance Access articles are published online four weeks after they have been accepted for publication, in advance of their appearance in a printed journal. Appearance in Advance Access (in either of the models below) constitutes official publication, and the Advance Access version can be cited by a unique DOI (Digital Object Identifier). When an article appears in an issue, it is removed from the Advance Access page.

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