

| Criteria/Article | Reject | Major Revision | Minor Revision | Accept |
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| Originality/Impact | No | Yes | Yes | Yes |
| Abstract | <ul style="list-style-type: none"> • Missing; poorly written; • Content doesn't match text; • Stated objective/methods/results/conclusions missing or incomprehensible • Subject matter is not fresh, new; content is not original; material is of marginal general interest | <ul style="list-style-type: none"> • Errors in data (compared with text, tables, figures); • Poorly written (incomplete sentences, needs major rewriting for sense and flow); • Components (objective/methods/results/conclusions) missing or unclear • Subject matter is of specialized or moderate interest, or of major interest only if paper is substantially revised | <ul style="list-style-type: none"> • Minor data errors (rounding errors; minor mismatch with text/tables/figures); • Components present but may need minor writing for readability • Subject matter is original and important | <ul style="list-style-type: none"> • All components present; • Data are accurate and match text; • Well-written, concise, clear • Subject matter is original, pressworthy, of major general interest |
| Introduction | <ul style="list-style-type: none"> • Missing; poorly written (would require major rewriting for sense); • No clear statement of why study was performed); • Hypothesis missing, weak, or unclear; • Intro text doesn't match/support body text; • Multiple data errors | <ul style="list-style-type: none"> • Needs major rewriting for sense and flow; data errors (data do don't match text/tables/figures); • Hypothesis and objective not clearly stated; • Inadequate references (but could be fixed via lit review) • IRB/HIPAA documentation missing | <ul style="list-style-type: none"> • Minor data errors (e.g., rounding errors); • Minor rewriting; hypothesis is clearly presented and is supported by text • References are adequate | <ul style="list-style-type: none"> • Well-written, concise; • Hypothesis and purpose of study are clearly and concisely presented • Data are accurate; hypotheses are correctly presented and fully supported by text • Current references that will be of |

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| | <p>or data are questionable;</p> <ul style="list-style-type: none"> • Inadequate or outdated references or too many references (and little chance of this flaw being fixed) • IRB/HIPAA documentation missing | | | interest to readers |
| Materials and Methods | <ul style="list-style-type: none"> • Unfixable flaws in data/research (number/selection of subjects; instruments/drugs used; blinded/unblinded; independent vs consensus readings) • Description of procedures missing or so unclear that others couldn't reproduce study, with little likelihood that deficit could be fixed; • IRB/HIPAA compliance statements missing • Questionable data | <ul style="list-style-type: none"> • Flaws in data and/or numerous errors/mismatches in data that potentially can be fixed; • Poorly written (incomplete sentences, needs major rewriting for sense and flow); grammar/punctuation/spelling errors that detract from readability; • Description of procedures unclear; would be difficult for others to reproduce study by reading article, although with major rewriting, deficit could be remedied • Tables/figures need major work | <ul style="list-style-type: none"> • Minor data errors that are easily fixed • Adequately written, although writing could be polished; minor typos/grammar/punctuation errors • Description of procedures needs minor clarification (clearly remediable) • Too many/too few figures/tables (easily remediable) | <ul style="list-style-type: none"> • Data are accurate • All research components are present, clearly stated • Procedures are clear, concise, and easily replicable; article advances knowledge • All compliance guidelines are met • Tables/figures contribute substantially to content |

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| | <p>and/or major errors in data/statistical methods;</p> <ul style="list-style-type: none"> • No new information is imparted; poorly written/hard to understand; • Inadequate/missing figures/tables • Multiple grammar/punctuation/spelling errors and language grasp | | | |
| Results | <ul style="list-style-type: none"> • Missing or completely unresponsive of items mentioned in Materials and Methods • Does not answer the research question • Not credible • Statistical significance of findings not stated • Repetitive of data already covered • Findings are totally inconsistent with all available data in the literature (possibility of false data) | <ul style="list-style-type: none"> • Support of hypothesis/research question/items mentioned in Materials and Methods unclear, but key components are present and major rewriting can address lack of clarity • Credible, but poorly presented; can be made acceptable if rewritten • Repetitive, but can be revised | <ul style="list-style-type: none"> • Minor rewriting needed to support all items mentioned in Materials and methods • Credible • Minor repetition of data already included in tables/other text, but rewriting can address this | <ul style="list-style-type: none"> • Logically presented • Summarizes important observations • States statistical significance of findings • Credible; answers research question/hypothesis • Well written |

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| Discussion | <ul style="list-style-type: none"> • Unqualified statements and conclusions are made that are not supported by the data; conclusions and goals not linked • Study implications and/or limitations not included • Relevant studies not mentioned • Doesn't emphasize how study advances knowledge or study does not advance knowledge | <ul style="list-style-type: none"> • Statements, goals, and conclusions are not linked and are not clearly supported by data; major rewriting could address this • Some study implications and/or limitations are missing or not clearly presented • Study has the potential to advance knowledge if paper is rewritten and key components clearly presented | <ul style="list-style-type: none"> • Statements and conclusions are presented but need minor revision to correlate with data and link with goals • Study implications and/or limitations are presented but are missing a point(s), which can be addressed • Study advances knowledge | <ul style="list-style-type: none"> • Statements and conclusions are clearly supported by data and are linked to goals • Study clearly advances knowledge • Study's implications and limitations are completely and succinctly presented |
| References | <ul style="list-style-type: none"> • Misnumbered; list doesn't match text • Too many or too few (see manuscript type guidelines) • Out of date • Glaring omissions (clearly, authors did not review other important articles) • Failure to adhere to AMA citation style | <ul style="list-style-type: none"> • Too many or too few, but authors can address • Some refs are out of date and important refs are missing, but authors can fix via lit search; authors did make some effort to research other important articles • Not well correlated with text • Poorly prepared re AMA citation style | <ul style="list-style-type: none"> • Minor adding/trimming needed in ref list, but list is current and appropriate to article type • List missing an important article(s); easily addressed by authors • Needs minor work to correlate list with text • Adheres to AMA citation style | <ul style="list-style-type: none"> • Up to date; relevant • Appropriate to manuscript type • Correlated well with text • Adheres completely to AMA citation style |

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| Tables | <ul style="list-style-type: none"> • Duplicative/too many/too few • Unnecessary; repeats material in text • Unclear; data do not correlate with/support text | <ul style="list-style-type: none"> • Too many/too few, but can be addressed by authors • Some repetition of text; can be fixed • Some data errors (lack of correlation with text) | <ul style="list-style-type: none"> • Minor revisions needed to correlate data with text • A table could be added/removed • Tables support and augment text | <ul style="list-style-type: none"> • Appropriate number of tables • Data in tables support/match/augment text |
| Figures | <ul style="list-style-type: none"> • Too many/too few • Not cited in text • Duplicative • Poor quality images • Don't add to discussion/support goals • Missing arrows, etc., on images; arrows are not cited in legends; acronyms not spelled out in legends | <ul style="list-style-type: none"> • Too many/too few (but could be addressed by authors) • Correlation to/support of text/discussion/hypothesis is weak; must be strengthened • Some images are poor quality; better images must be substituted • Some problems with missing arrows/arrows not cited in legends, but topic is important and art could be fixed | <ul style="list-style-type: none"> • Figures are acceptable quality and support text/discussion/hypothesis • Minor revisions needed re missing arrows, etc. | <ul style="list-style-type: none"> • Figures are excellent quality • Correlate with and support text/discussion/hypothesis • Add to body of knowledge about topic |
| Data | <ul style="list-style-type: none"> • Major discrepancies within text, abstract, tables; suspicious/poorly prepared/insufficient/outdated data offering no possibility of revision; data are | <ul style="list-style-type: none"> • Discrepancies within text, abstract, tables (e.g., 100 patients mentioned in abstract and 110 in text); math errors in addition/subtraction/division/mult/equation prep; reviewer believes that errors can be corrected | <ul style="list-style-type: none"> • Minor rounding errors that easily can be corrected | <ul style="list-style-type: none"> • Data match throughout text, tables, abstract; data are clear, precise, up to date, original |

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| | similar to/repeat information from prior articles | | | |
| Writing style | <ul style="list-style-type: none"> • Poor; often incomprehensible; multiple spelling/grammar/punctuation errors; doesn't adhere to manuscript type format • Difficult to follow | <ul style="list-style-type: none"> • Needs major rewriting to improve clarity, but topic is important and worth reconsideration • Repetitive; doesn't adhere to manuscript type format, but could be fixed | <ul style="list-style-type: none"> • Minor grammar/punctuation / spelling errors • Some repetitiveness that easily can be fixed | <ul style="list-style-type: none"> • Well written • Succinct • Adheres to manuscript type format |
| Research | <ul style="list-style-type: none"> • Insufficient (not fixable) research; • Hypothesis not defined or answered | <ul style="list-style-type: none"> • Significant number of questions left unanswered/unresearched (could be fixed) • Hypothesis not clearly defined | <ul style="list-style-type: none"> • Minor research points could be addressed by authors • Hypothesis defined and answered but authors should consider additional points suggested by reviewers | <ul style="list-style-type: none"> • Thorough; clearly presented • All questions appropriately answered |

Sources:

<http://resources.bmj.com/bmj/reviewers/peer-reviewers-guidance> (BMJ peer review guidelines, complete with training materials for reviewers)

<http://jrsm.rsmjournals.com/cgi/content/full/101/10/507> (affect of peer review training)

<http://jama.ama-assn.org/cgi/content/full/280/3/237?ijkey=806201c7d893d43fe88d1c7901a0b059eac3bcc6> (blind vs open peer review stats)

<http://ajp.psychiatryonline.org/cgi/reprint/150/6/947?ijkey=b943aeaca2bfa783c2cdcee0a3ded084ebde3dfd> (see Appendix 1)

<http://jama.ama-assn.org/cgi/content-nw/full/287/21/2786/TABLEJOC11816T1> (table of peer review criteria)

<http://jama.ama-assn.org/cgi/content/full/287/21/2786> (more on peer review; see box)

<http://jama.ama-assn.org/cgi/content/full/287/21/2786> (JAMA article on peer review)

<http://radiology.rsnajnl.org> (also Radiology's author guidelines)

[Provenzale JM, Stanley RJ. A Systematic Guide to Reviewing a Manuscript. *AJR* 2005; 185:848-854](#)