Reviewer's report

Title: Can Modern Infrared Analyzers Replace Gas Chromatography to Measure Inhaled Anesthetic Vapors Concentrations?

Version: 1 Date: 24 September 2007

Reviewer: Girish Joshi

Reviewer's report:

General
The authors compare the newer IR monitors for inhaled anesthetics with the 'gold' standard gas chromatography. This is a well-written manuscript. The authors have provided some discussion regarding the clinical relevance of their findings, such as potential overdosing at lower concentrations. However, it would be beneficial for anesthesiology practitioners to know clearly what they should do if faced with a IR monitor in the operating room. With increasing interest in 'awareness' during general anesthesia, and attention towards gas monitoring as well as brain function monitoring, the authors could comment on the potential implications of their findings on the possibility of awareness if the anesthesia practitioner were to use gas monitoring to guide 'depth of hypnosis.'

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Major Compulsory Revisions (that the author must respond to before a decision on publication can be reached)

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Minor Essential Revisions (such as missing labels on figures, or the wrong use of a term, which the author can be trusted to correct)

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Discretionary Revisions (which the author can choose to ignore)
See the comments in the 'general' section.

What next?: Accept after discretionary revisions

Level of interest: An article whose findings are important to those with closely related research interests

Quality of written English: Acceptable

Statistical review: No, the manuscript does not need to be seen by a statistician.
Declaration of competing interests:

I declare that I have no competing interests.