Reviewer's report

Title: Comparison of two protective lung ventilatory regimes on oxygenation during one-lung ventilation. A randomized controlled trial

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Reviewer: jens lohser

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This study encompasses the first comparison of PCV versus VCV in the setting of one-lung ventilation when employing protective lung ventilation.

The authors show a statistically significant increase in only peak airway pressures and equivalence in terms of oxygenation.

The finding of increased peak airway pressures is expected and well documented. It should be discussed in light of the recent publication by Roze et al. (BJA 2010, 105: 377-381), which demonstrates that intra-bronchial pressures are essentially identical between the two ventilatory modes.

The finding of equivalence in oxygenation is not entirely surprising, but novel and important. The authors may want to discuss the fact that the small sample size does not rule out a benefit for certain subgroups of patients/pulmonary pathologies.

The study is overall well written and executed, but would benefit from further English language editing.

Please check your reference list, as there are spelling mistakes in the author’s names.

The first sentence of the Methods section states that 42 patients were enrolled, while everything else (including the tables) refers to 41 patients. Was one patient not studied or excluded? Please clarify.

In my opinion, this manuscript should be published, assuming the above areas are addressed.

Level of interest: An article of importance in its field

Quality of written English: Needs some language corrections before being published

Statistical review: Yes, but I do not feel adequately qualified to assess the statistics.

Declaration of competing interests:
I declare that I have no competing interests