Reviewer’s report

Title: A systematic review on tracheostomy decannulation: discovering for a new era. A proposal of a quantitative semiquantitative clinical score

Version: 2 Date: 13 November 2014

Reviewer: Roberto Fumagalli

Reviewer’s report:

Santus P et al. performed a systematic review of the literature about decannulation. The topic is very interesting due to the high frequency of decannulation concerns in clinical practice. A score system is proposed. In general the paper is well done, with an interesting physiological introduction. The score is interesting and supported by literature, even if a prospective evaluation is needed. Due to the speculative nature of the paper I would avoid the inclusion of “discovering for a new era” in the title.

In general I have only minor comments.

In the score proposed Authors included relevant comorbidities. The adjective “relevant” is difficult to understand. Probably it would be better to add relevant for what (e.g. gas exchange, mechanical properties of the lung, prognosis, etc). Moreover, I would stress the utility of bronchoscopy before and during decannulation (as indicated also in the proposed score: Patent airway).

Minor comments
Background: please explain the abbreviation ETT the first time is cited.
At the end of line 102 probably there is a typo mistake (the same in lines 124, and 140).
Results: line 217-8 (PaO2 and PaCO2 not only here but everywhere in the text).
Minor typo mistakes in lines 238, 259, 265, 286, 324, and 325.
Score: hypotheses and interpretations: “We suggest an hypothetical score, that requires discussion and validation after convenient modifications in daily practice.” Probably is better to propose a “prospective validation study”.

Level of interest: An article of importance in its field