Reviewer’s report

Title: The effects of protective lung ventilation on regional cerebral oxygen saturation in intracranial tumor operation during dura opening: study protocol for a randomized controlled trial

Version: 0 Date: 04 Nov 2019

Reviewer: Mohamed Rahouma

Reviewer's report:

I would like to thanks the editor for the opportunity to review this manuscript.
I have the following manuscript:

Major comments:

- I believe that authors should consider operation duration in the trial design although they will include certain operation range as they mentioned.

- Authors mentioned appropriate tests name but in the inappropriate place i.e. Mann Whitney test for continuous variables "oxygen saturation, arterial oxygenation index and lactic acid " while Chi square for categorical variables as brain relaxation (as categories).

Minor comments:

- In the title, please change "operative" to "operation".

- Please specify the meaning of the astrix (*) after the third author.

- Please spell out any abbreviations at their first time eg POCD & Hb in page 3, I:E in page 5 line 57, SpO2, BIS, PetCo2 and TOF in page 6, VILI in page 8.

- Line 27 Please revisit the word "organisms" in this sentence" result in the changes in the light intensity of penetrating organisms".

- Line 39: Please delete the word "parallel-group" here and elsewhere.

- Page 3 line 43: Please put space in this "via a computergenerated randomized".

- Page 5, line 20: Please add explanation to choosing intra-axial tumors, younger patients than 65 with proper references.

- Page 5, line 51: please add reference to this sentence "The ideal body weight of male patients is calculated as (centimeters of height-80) ×0.7 and of female patients is calculated as (centimeters of height-70) ×0.6.".
- Page 6, line 23: Please add table with all details on Lung ultrasound score in the supplements with proper reference. Also, please add more details with proper reference to "Brain relaxation scoring".

- Page 6 line 35 Please write "Reoperation" after this sentence "The secondary operation rate in one week after surgery".

- Page 7 line 57: Please define "All adverse events" and mention the specific reference for that eg CTCAE v4.0.

- Page 8 line 558: Please report "sensitivity and specificity for Near infrared spectroscopy (NIRS) " with proper references.

**Level of interest**
Please indicate how interesting you found the manuscript:

An article of importance in its field

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Please indicate the quality of language in the manuscript:

Acceptable

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All images and figures within the manuscript should be genuine i.e. without evidence of manipulation. No specific feature within an image may be enhanced, obscured, moved, removed, or introduced. If you have concerns about the veracity of the figures you should choose the first option below.

**Statistical review**
Is it essential that this manuscript is seen by an expert statistician? If so, please give your reasons in your report.
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