**Reviewer’s report**

**Title:** Interprofessional two-man team approach for interhospital transport of ARDS-patients under extracorporeal membrane oxygenation: A 10 years retrospective observational cohort study

**Version:** 0  **Date:** 20 Nov 2018

**Reviewer:** Stefano Falini

**Reviewer's report:**

The work describes the safety of a two team approach for transportation of ECMO patients to a referral center and it is undoubtedly interesting, as the current ELSO recommendations are not based on evidence.

Yet a major revision is deemed necessary to make the manuscript ready for publication.

1. The authors themselves seem uncertain on the type of article they are submitting: first they indicate the will to "demonstrate" (line 92) the safety and efficacy of the intervention but then only describe their population without conducting any comparative statistical analysis with the referred numbers. To add to the confusion, they indicate in the methods the adoption of "Student paired t-test" (line 108) but then fail to actually use it or at least report the results of such comparison.

In this regard, the authors have two options: they can either adopt the concept of narrative article or retrospective study. With the former they can hardly say they have demonstrated, but it would require less rearrangement of the manuscript. If instead they opt for the latter, they should specify in the methods the origin of the percentages they intend to compare with their numbers, then perform an appropriate comparative testing (t-student, anova, mann-whitney, etc.), and finally report the results of their analysis. This part cannot be reserved to the discussion only.

2. Methods and Results sections need a bit of rearrangement, or a better justification on why they are structured this way. For example, lines 285-287 should fall in the methods rather than in the results.

Additionally, I would like to signal how paragraph on lines 135-141 feels very little informative: useless for the trained intensivist, redundant, and not descriptive of the population.

3. The description of the analyzed population (ines 224-234) is hard to follow. The denominator of the fraction used to calculate the percentages may help in understanding how the subgroups are established, but a certain rephrasing is also recommended. 169 total patients are considered, of whom 126 were cannulated on site and 30 only transported (correct?). Out of these 30, 21
underwent subsequent cannulation while 9 did not. The four patients that died before arrival to which group belong? Out of all cannulated patients (to my understanding 126 + 30 = 156), 137 received VV while 10 received VA: what about the other 9? There is some confusion to be addressed.

4. Language revision is also suggested. In most cases the text can still be understood but in a few this is an impediment to reading, e.g. lines 192-193.

Are the methods appropriate and well described?
If not, please specify what is required in your comments to the authors.

No

Does the work include the necessary controls?
If not, please specify which controls are required in your comments to the authors.

Yes

Are the conclusions drawn adequately supported by the data shown?
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No

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