Reviewer's report

Title: Role of sedation for agitated patients undergoing noninvasive ventilation in clinical practice

Version: 2 Date: 22 February 2015

Reviewer: Claudia Crimi

Reviewer's report:

The present study deals with an interesting and important issue topic: the role of sedation in patients treated with noninvasive ventilation (NIV) for acute respiratory failure. Although confusion and agitation represent so far a relative contraindication for NIV if we consider guidelines, the authors have shown that sedation may contribute to NIV success especially in patients with a low literature evidence for NIV indication based on their underlying disease.

It is an original work and the findings are interesting but please find my comments below.

Major comments:

1. Why did you further classify your patients in DNI and non-DNI? It is unclear what value this classification adds to the paper in order to meet your primary aim; moreover it may reduce your sample size,

2. I would reconsider the message that sedated patients on NIV for acute respiratory failure (who may required intubation at their worsening) can be safely managed in a respiratory ward as stated by the authors (Page 14, Line 9), please consider to better explain this concept in order to avoid misleading message to the readers.

2. Statistical analysis: I couldn’t find in the statistical analysis the normal distribution check of t-test (ie. Shapiro-Wilks or Q-Q Plot). Moreover there is a difference in the number of cases in the non-DNI group between intermittent and continuous sedation (28 vs.11). I suggest you to use a more robust non-parametric test like Mann-Whitney.

Minor comments:

1. Page 5 Line 4, I suggest to use a present tense.

2. Page 10 Line 15, I suggest avoid letters to express numbers, in order to be consistent throughout the manuscript.

3. Table 1 label: change the semicolon with a full stop.

Level of interest: An article of outstanding merit and interest in its field

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