Reviewer's report

Title: Consumption of Cisatracurium in different age groups, using a closed loop computer controlled system.

Version: 3
Date: 4 December 2013

Reviewer: Mehmet Ozcan

Reviewer's report:

Minor essential revisions: Many of my initial concerns were addressed. However, some other issues remain.

1. First of all, there are still problems with the language of the manuscript. For instance, line 7 of the abstract reads: "...were assigned to three according to their age". I believe the word "groups" is missing after the word "three". Line 14 of the abstract reads: "...We should noted though that the difference..." I would simply start the sentence "The difference in cisatracurium...", but if they wish, they could say "We noted that the difference...". This is just the abstract, and the first 14 lines of it. I will not mention any further linguistic/grammatical issues for the remainder of the manuscript, but recommend a revision by a person with an excellent command of biomedical English.

2. In Methods (page 4 lines 11-13), exclusion criteria are now included but there are some errors: is albumin > 3.5 mg/dl an EXCLUSION criteria? I would say that to be a good level of albumin! Same thing for bilirubin <2 mg/dl. I think "greater than" and "less than" signs needs a revision!

3. Page 6 line 8 reads "...The tracheal extubation was performed before full recovery form neuromuscular block (TOF-ratio >90%). This is more like AFTER full recovery from block. Please revise.

4. Page 6 line 12-12 has Recovery index written twice. Please revise.

5. Table 1. The column headings (Group 1, group 2, group 3) has numbers in parentheses. These must be the ages (in years) of the groups, but I did not see that clearly mentioned in the table legend.

Also, there are 3 groups and 1 p number for comparing those 3. If there is a p<0.05 (e.g. cisatracurium), there is no way of knowing which 2 groups are found to be significantly different (e.g. is p<0.05 refers to group 1 vs 2, group 1 vs 3, or groups 2 vs 3?). You should find a way to make that obvious. Finally, cisatracurium consumption can be rounded to 2 decimal points like those of propofol and sufentanil (i.e. 1.767 could be 1.77 for simplicity).

6. All figures: What are the error bars? standard deviation? Standard error of the mean? 99th percentile? This should be stated in the appropriate figure legends.

7. Discussion: The title of the study is "Consumption of Cisatracurium in different age groups, using a closed loop computer controlled system." Therefore, one looks forward to reading primarily about cisatracurium. However, the first
sentence of Discussion says this study was done to see the effect of cisatracurium, propofol, and sufentanil. There is a disconnect between the title and the discussion. Titration of cisatracurium was done using a closed loop system. Therefore it is likely less subjectively dosed than the other 2 drugs. It is the main outcome of the study. Why, then, emphasize the secondary findings (consumption of propofol and sufentanil) in the most important place in discussion (i.e. the opening sentence). I don’t say you should ignore those, but I would expect to read about your primary findings (i.e. cisatracurium) in the first sentence/paragraph of the discussion.

**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