Author’s response to reviews

Title: Development of an algorithm using clinical tests to avoid post-operative residual neuromuscular block

Authors:

Christoph Unterbuchner (christoph.unterbuchner@ukr.de)
Manfred Blobner (M.blobner@tum.de)
Friedrich Pühringer (Puehringer_f@klin-rt.de)
Matthias Janda (Matthias.janda@medizin.uni-rostock.de)
Sebastian Bischoff (Bischoff.sebastian@gmail.com)
Berthold Bein (B.bein@asklepios.com)
Annette Schmidt (Annette.schmidt@web.de)
Kurt Ulm (kurt.ulm@tum.de)
Victor Pithamitsis (victor.pithamitsis@gmx.net)
Heidrun Fink (heidrunfink@hotmail.com)

Version: 2 Date: 14 Jul 2017

Author’s response to reviews:

Cover letter to the manuscript:

BANE-D-17-00023

Development of an algorithm using clinical tests to avoid post-operative residual neuromuscular block

Christoph Unterbuchner, M.D.; Manfred Blobner; Friedrich Pühringer; Matthias Janda; Sebastian Bischoff; Berthold Bein; Annette Schmidt; Kurt Ulm; Viktor Pithamitsis; Heidrun Fink

BMC Anesthesiology
Dear editor,

Thank you very much for the possibility to improve our manuscript by revision.

Editor Comments:

1. For trial registration at the end of the abstract, we would like you to confirm that your clinical trial is in a publicly accessible registry.

Answer 1: We inserted in the last section of the abstract following registration sentence:

Trial registration: Clinical Trials.gov (principal investigator’s name: CU, and identifier: NCT03219138) on July 8, 2017.

2. Methods: "After approval by the local ethics committees of the six participating study centres and written informed consent", please include the name of the committee in this statement, and also the reference number of approval.

Answer 2:

Page 5, line 1: We inserted following modification:” After approval by the local ethics committees (main ethical committee, Technische Universität München, Germany; protocol N° 1783/ 07) of the six participating study centres and written informed consent, 318 patients (ASA I-2) were enrolled in the study.”
3. "In conclusion, we developed and verified tools...", this should be arranged as a separate "Conclusion" section.

Answer 3: This section is arranged as a separate tool as follows:

Conclusion

We developed and verified tools for the PACU to identify patients with residual neuromuscular block. AMG, even when used uncalibrated in awakening patients, proved to identify a residual neuromuscular block. An algorithm based on muscle function tests is also able to indicate residual neuromuscular blocks with high sensitivity for a TOFR < 0.7. This tool might reduce the risk to overlook severe residual neuromuscular block in the PACU of institutions, in which only qualitative neuromuscular monitoring with PNS is used.

Further clinical studies are necessary to test this muscle function algorithm in other populations (ASA 3-4, age > 65 years) and varying clinical settings.

4. "The datasets used and/or analysed during the current study is available from the corresponding author on reasonable request.", please remove "/or".

Answer 4: We removed “or”.

5. "All authors read and approved the final manuscript." should be moved to the end of "Authors' contributions" section.

Answer 5: We removed this part to the contributions section.

6. Consort_Flow_Diagram.pptx should be included as figure 1 of the manuscript.

Answer 6: Consort_Flow_Diagram is included as figure 1 of the manuscript.
7. "the respective data was excluded from analysis (see Figure 1 and supplementary online material).", please modify this sentence to make clear what is supplementary online material.

Answer 7:

Figure 1 respective figure 2 is an example of excluded data. So we deleted supplement online material, because in our opinion it is not relevant for the reader.

8. Figure titles (max 15 words) and legends (max 300 words) should be provided in the main manuscript in "Figure legends" section following the Reference section, not in the graphic file.

Answer 8: We provided figure titles and legends in the main manuscript in “figure legends”.

9. Please remove "Ethikvotum PORC.pdf" from supplementary files.

Answer 9: We removed “Etikvotum PORC”.

10. Please provide us a clean final version without track changes.

Answer 10: We removed track changes.

Reviewer reports:

Fülesdi Béla (Reviewer 1): I have no further comments or questions

Stefan Soltesz, M.D. (Reviewer 2): All my comments have been adequately addressed.
Thank you to the reviewers.

Sincerely

The PORC-Pilot-Team.