Author's response to reviews

Title: 3D-Ultrasonography for Evaluation of Facial Muscles in Patients with Chronic Facial Palsy or Defective Healing: a Pilot Study

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3D-Ultrasonography for Evaluation of Facial Muscles in Patients with Chronic Facial Palsy or Defective Healing: a Pilot Study
Gerd F Volk, Martin Pohlmann, Mira Finkensieper, Heather J Chalmers and Orlando Guntinas-Lichius

Response to the reviewers:

Dear Sirs:

Thank you to the referees and their comments!

1. Referee #1:
No response necessary.

2. Referee #2:
Major Compulsory Revisions
2.1. Page 6, in the paragraph of “3D Ultrasonography”: Please include a photo depicting the probe coupling with the linear mover, or a subject being measured with the motorized 3D US acquisition system because it is rather difficult to visualize the system.
Answer 2.1: Done. We included a new figure 1 showing the system at work.

2.2. Page 9-10 in the paragraph of “facial muscle volume on .....”: Please clarify total scanning area and area in which muscle was identified: Although colored areas in each measured point seemed to be various, I wondered if that indicated muscle area visually? However, the paper described that the system didn’t detect the whole volume of muscle. At the point of view, the colored area means muscle atrophy or just not identifying muscle with the system? How wide is the transducer?
Answer 2.2: As written on page 8, first paragraph, that the aim was not to measure the complete, absolute, volume of the mimic muscles but to measure the volume of the same part of each muscle through direct bilateral comparison. The overlap with other mimic muscles with mutual anchoring is a characteristic feature of some mimic muscles. Therefore, in these areas, a distinction of each mimic muscle is often impossible. This was the primary reason not to address total muscle volume. Furthermore, the transducer had an acoustic window of 38.5 mm. This information was added on page7, first paragraph. This factor limited the measurements; most of all for the frontal muscle as this muscle is a big flat muscle. The penetration depth was no limitation, because the mimic muscles are very thin. The robotic system moved along a maximum length of 10 cm, hence, the third dimension was no limitation. Because we only measured parts of the muscles, it was very important to measure always the same part of the muscle on both sides and in all patients. Hence, the landmarks, and reliable landmarks were very important. This information was added now on page 8, second paragraph.

Minor Essential Revisions
2.3. Page 7 line 10: “2-3” should be removed from “Figure 1A 2-3”, which was left in the modification of the manuscript.
Answer 2.3: Done.

Discretionary Revisions
2.4. Page 9 line 4-10 and table 1&2: Please change the initials of patients to the patient or case no. for the protection of personal information and to more easily understand the relations among tables, figures and text.
Answer 2.4: Done, initials changed to numbers.

3. Editorial requests:
3.1. Please include author’s email on the title page.
Answer 3.1: Done.

3.2. Please include Keywords section after the Abstract.
Answer: 3.2. Done

3.3. Please include list of abbreviations after the conclusion.
Answer 3.3. Done.

3.4. Please include Acknowledgements. By way of a section 'Acknowledgements', please acknowledge anyone who contributed towards the article by making substantial contributions to conception, design, acquisition of data, or analysis and interpretation of data, or who was involved in drafting the manuscript or revising it critically for important intellectual content, but who does not meet the criteria for authorship. Please also include the source(s) of funding for each author, and for the manuscript preparation. Authors must describe the role of the funding body, if any, in design, in the collection, analysis, and interpretation of data; in the writing of the manuscript; and in the decision to submit the manuscript for publication. Please also acknowledge anyone who contributed materials essential for the study. If a language editor has made significant revision of the manuscript, we recommend that you acknowledge the editor by name, where possible.
Answer 3.4: No acknowledgement necessary.

3.5.: The role of a scientific (medical) writer must be included in the acknowledgements section, including their source(s) of funding. We suggest wording such as 'We thank Jane Doe who provided medical writing services on behalf of XYZ Pharmaceuticals Ltd.'
Authors should obtain permission to acknowledge from all those mentioned in the Acknowledgements section.
Answer 3.5: Not applicable, there was not scientific writer involved.

Orlando Guntinas-Lichius
For all authors
Jena, 8-April-2014