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Submission of a manuscript titled: **“Variation of the Cochlear Anatomy and Cochlear Duct Length: Analysis with a New Tablet-Based Software”**

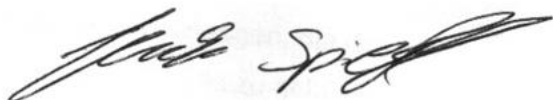
Dear Professor Bernal-Sprekelsen,

enclosed, please find the submission to our results on an investigation of the variation of the cochlea and cochlear duct length in respect to an analysis with a tablet-based software.

In cochlear implantation, thorough preoperative planning together with measurement of the cochlear duct length (CDL) assists in choosing the right electrode. For measuring the CDL, different techniques have been introduced in the past century along with the at the time available technology. A tablet-based software offers an easy and intuitive way to visualize and analyze the anatomy of the temporal bone, its proportions and measure the CDL. Therefore, we investigated the calculation technique of the CDL via a tablet-based software on our own cohort retrospectively. We found a broad range of CDL with a variation of over 30%, and significant differences in sex, but none in age or side. Almost every cochlea (98%) was measured longer than 31.0 mm. Therefore, if a tonotopic matching of electrical stimulation site with variations of cochlea anatomic length is intended, it requires a set of different electrode lengths to choose accordingly. Interestingly, the AID was smaller than Stenvers view head x-ray would have suggested.

We hope that our manuscript meets the requirements and the high standards of your journal *European Archives of Oto-Rhino-Laryngology* in order to be considered for publication.

Best regards,



Jennifer Spiegel

on behalf of the author team