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NEWSLETTER #115 MAY 2023

WIKISTIM, Cochrane, and Opportunity

In our March newsletter, we critiqued a Cochrane review by Traeger et al. (Traeger et al., 2023) published on March 7, and in the ensuing two months additional comments and editorials have appeared in the literature.

On April 6, Russo et al. (Russo et al., 2023) published a detailed critique of a Cochrane review by O'Connell et al. (O'Connell et al., 2021) that had appeared only 16 months earlier in December 2021, was the most recent at the time of Russo's submission, and remains on line at the Cochrane website. Whereas Traeger et al. focus on spinal cord stimulation (SCS) for low back pain, O'Connell et al. cover SCS and dorsal root ganglion stimulation for chronic pain more generally. As one might expect, many of the criticisms of the O'Connell review are applicable to the Traeger review.

On April 16, Durbhakula et al. published a detailed critique of Traeger in the journal *Pain Medicine* (Durbhakula et al., 2023). Dr. Durbhakula has since published a note in the WIKISTIM discussion section, where followup comments by our readers are welcome.

Cochrane defended the Traeger review on the social media site LinkedIn (Anon, 2023a), where we and others have added brief comments, most of which have been critical. On its own website, where the public cannot comment without permission, Cochrane has posted additional promotional material (Anon, 2023b). At least one letter has been submitted to the editors, and we hope Cochrane will allow it to appear.

Additional critical publications are foreseeable, but criticism alone cannot remedy the deficiencies of the latest Cochrane reviews; rather, a new review is required. Thus, neuromodulation specialists and societies plan to perform a more comprehensive and representative review by subject matter experts for submission to Cochrane and/or other peer reviewed scientific publications. The fact that this new review would itself be

subject to criticism should and would be welcome since such attention serves the best interests of patients, practitioners, and payers.

Can WIKISTIM support or facilitate systematic reviews and meta-analyses? WIKISTIM has always been more than a bibliographic resource; from its inception 10 years ago it has included structured abstracts with multiple data fields for clinical study details, akin to entries in a data table. (Indeed, the entire SCS literature could be, and repeatedly was, summarized in published tables until the 1990s, when the number of entries outgrew the printed page.) WIKISTIM currently presents 98 SCS articles completely (click here for an example) and another 34 partially hyperabstracted using more than 200 available data fields that can be downloaded to a spreadsheet program for any desired purpose, including meta-analysis. This feature is intended to spare users the time and trouble of recreating data tables. Furthermore, WIKISTIM presents the abstracted data publicly for ongoing peer review and validation.

Standards for systematic review and meta-analysis are a work in progress in medicine in general (Higgins et al., 2019; Pollock et al. 2017; Siddaway et al., 2019). In the field of neuromodulation, investigators have been developing standards for reporting the results of clinical trials (Duarte et al., 2022; Katz et al., 2021), but these address just one of the many potential problems incurred by systematic reviews as in the present instance. The most recent Cochrane reviews have focused on a small subset of SCS publications that do not represent the field properly. This limited focus is not only a problem but is also an opportunity for WIKISTIM.

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Please note that PubMed now includes citations of "Preprints" that report unpublished results of research funded by the U.S. National Institutes of Health. We think these papers would be best described as "online ahead of peer review" (to mirror PubMed's description of epubs as "online ahead of print"). To stay close to PubMed terminology, however, we are flagging each of entries as a "preprint before peer review," and we advise caution when quoting, citing, or relying upon them.

Deep Brain Stimulation (now 7574 citations)

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