Tractography under the microscope: Critical appraisal manual for a systematic review/meta-analysis

**Aim**

This manual shall aid reviewers in performing the critical appraisal of articles included in the systematic review and meta-analysis. Each article will be reviewed by two independent reviewers and discrepancies resolved through discussion. Reviewers will meet weekly to discuss questions and obtain clarifications during the entire critical appraisal process.

**Critical appraisal**

The critical appraisal will be performed using the Quality Assessment of Diagnostic Accuracy Studies 2 (QUADAS-2) tool for critical appraisal of primary diagnostic accuracy studies (Whiting et al., 2011). To perform the critical appraisal, please visit the project’s CADIMA page and rate each article’s risk of bias by answering the pre-specified QUADAS-2 questions.

The QUADAS-2 criteria are subdivided to evaluate the study in terms of the patient selection, index test(s), reference test, and flow and timing. The index test refers to DTI- and/or FOD-based tractography. If a study used both DTI- and FOD-based tractography, please extract information for both methods and refer to DTI-based tractography as index test #1 and FOD-based tractography as index test #2. The reference test refers to the intraoperative (sub)cortical mapping.

**References**

Whiting, P. F., Rutjes, A. W. S., Westwood, M. E., Mallett, S., Deeks, J. J., Reitsma, J. B., Leeflang, M. M. G., Sterne, J. A. C., Bossuyt, P. M. M., & the QUADAS-2 Group. (2011). QUADAS-2: A Revised Tool for the Quality Assessment of Diagnostic Accuracy Studies. *Annals of Internal Medicine*, *155*(8), 529–536. https://doi.org/10.7326/0003-4819-155-8-201110180-00009