Appendix 1 (as supplied by the authors): Description of tools used to assess quality of observational studies and randomized controlled trials

Even though several quality assessment tools for observational studies such as the MOOSE, Downs and Black checklist, and Newcastle-Ottawa Scale are available, none has been fully validated. Among these tools, the Newcastle-Ottawa Scale is most comprehensive for assessing the quality of non-randomized studies in meta-analyses. The Newcastle-Ottawa Scale for case-control and cohort studies consists of eight items with three subscales: selection of cases and controls, exposed cohort and non-exposed cohort (four items), comparability of cases and controls, cohorts (one item), and exposure, outcome (three items). A "star" system of the Newcastle-Ottawa Scale (range 0 to 9 stars) has been developed for the assessment: each study can be awarded a maximum of one star for each numbered item within the selection and exposure, outcome categories, while a maximum of two stars can be given for the comparability category.

Jadad scale includes 5-points for randomization (described as randomized, 1 point; table of random numbers or computer-generated randomization, additional 1 point), double-blind (described as double-blind, 1 point; use of masking such as identical placebo, additional 1 point), and follow-up (the numbers and reasons for withdrawal in each group are stated; 1 point) in the report of an randomized controlled trial. In general, scores of 2 or less are considered as low quality, and scores of 3 to 5 are considered as high quality.