

Overview of Risk of Bias tools used in “Diagnosis, prevention, and treatment of common lower extremity muscle injuries in sport – Grading the evidence: a statement paper commissioned by the Danish Society of Sports Physical Therapy (DSSF)”

QUADAS-2 tool

The tool was originally based on data of the methodological literature on diagnostic test assessment, and a review on the existing quality assessment tools to identify all possible relevant items and their evidence-based. Through a four-round Delphi process, 11 experts agreed on the items to include.[1] The QUADAS was evaluated by asking reviewers a range of questions about its use and performance, and assessed overall agreement.[2] The interrater reliability of QUADAS items was found to be poor, with a study reporting 47-90% agreement (mean 69%) and of $-0.28 - 0.58$ κ (mean 0.22).[3] The new QUADAS-2 has since been developed with new distinct domains; ‘Patient Selection’, ‘Index Test’, ‘Reference Standard’, and ‘Flow and Timing’,[4] which is recommended in the GRADE handbook.[5]

SIGN (Scottish intercollegiate guideline network) checklist

The SIGN 3 checklist developed by the network consists of 14 items and is closely aligned to procedures in the Cochrane handbook and the GRADE handbook.[6] No studies have investigated the validity or reliability of the checklist.

ROBIS

The ROBIS tool was developed in accordance with evidence-based standards, similar to the approach for the QUADAS-2 tool.[7–9] Properties of reliability of the ROBIS tool are comparable to the AMSTAR quality assessment tool.[10,11]

RoB

The tool to assess risk of bias in RCTs was developed from the Cochrane group, to be used when assessing risk of bias for studies included in systematic reviews.[12] The reliability of the 5 different domains ranges from 0.79 to 0.05 κ . [13]

References

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