

**Assessment of risk of bias in systematic reviews using the ROBIS tool**

Study	Patients	Index test(s)	Reference standard	Target condition(s)	Domain 1	Domain 2	Domain 3	Domain 4	Overall risk of bias
Hegedus et al.	Patients with shoulder complaints	Hawkins, Kennedy, Neer, Painful Arc, Empty Can, Resisted external rotation	Arthroscopy	Subacromial pain syndrome, anterior instability	Low	Low	Low	Low	Low
Hermanns et al.	Patients with shoulder complaints	Painful Arc, Gerber, Resisted external rotation, Full can, Empty can, External rotation lag, Internal rotation lag, Dropping Sign	Ultrasound or MRI	Rotator cuff pathology	Low	Low	Low	Low	Low

**Assessment of risk of bias in diagnostic accuracy studies using the QUADAS-2 tool**

Study	Domain 1A	Domain 1B	Domain 2A	Domain 2B	Domain 3A	Domain 3B	Domain 4A	Overall risk of bias
Taylor et al.	Low	Low	Low	Low	Low	Low	Low	Low
Kim et al.	Low	Low	Low	Low	Low	Low	Low	Low

**Assessment of risk of bias in randomized controlled trials using the ROB2 tool**

Study	Domain 1	Domain 2	Domain 3	Domain 4	Domain 5	Overall risk of bias
Sakata et al.	Low	Some concerns	Low	Low	Some concerns	Some concerns
Andersson et al.	Low	Some concerns	Low	Low	Some concerns	Some concerns
Swanik et al.	Some concerns	High	High	Low	Some concerns	High
Sommervold et al.	Low	Some concerns	Low	Low	Some concerns	Some concerns
Cha et al.	Some concerns	Some concerns	Low	Some concerns	Some concerns	Some concerns
Giombini et al.	Some concerns	Some concerns	Low	Some concerns	Some concerns	Some concerns
Lluch et al.	Low	Some concerns	Low	Some concerns	Low	Some concerns
Lynch et al.	Some concerns	High	High	Some concerns	Some concerns	High
Asker et al.	Low	Some concerns	Some concerns	Low	Low	Some concerns
Pas et al.	Low	Some concerns	High	Low	Low	High
Achenbach et al.	Low	Some concerns	High	Low	Low	High

**Assessment of risk of bias in non-randomized studies of interventions using the ROBINS-I tool**

Study	Domain 1	Domain 2	Domain 3	Domain 4	Domain 5	Domain 6	Domain 7	Overall risk of bias
Shitara et al.	Critical	Low	Low	Low	Low	Low	Low	Critical
Mey et al.	Serious	Low	Low	Low	No information	Moderate	Moderate	Moderate
Merolla et al. (A)	Serious	Low	Low	Low	Low	Moderate	Moderate	Serious
Merolla et al. (B)	Serious	Low	Low	Low	Low	Moderate	Moderate	Serious