

Supplementary Table 3. Risk of Bias Assessment of Included Studies Using the RoB 2.0 Tool

D1: Bias arising from the randomisation process; D2: Bias due to deviations from intended interventions; D3: Bias due to missing outcome data; D4: Bias in measurement of the outcome; D5: Bias in selection of the reported result

Colour key: Low risk Some concerns High risk

Study	D1	D1 Reason	D2	D2 Reason	D3	D3 Reason	D4	D4 Reason	D5	D5 Reason	Overall
Skurvydas et al. (2006)	Some concerns	Stated to be randomised; method of sequence generation and/or allocation concealment not adequately described	Some concerns	Participants/personnel not blinded to CWI (inherent to intervention); performance bias possible	Low risk	Complete outcome data for all randomised participants; no missing data	Some concerns	Outcome assessors not blinded; self-reported/subjective outcomes susceptible to detection bias	Low risk	All pre-specified outcomes reported; no evidence of selective outcome reporting	Some concerns
Bailey et al. (2007)	Some concerns	Stated to be randomised; method of sequence generation and/or allocation concealment not adequately described	Some concerns	Participants/personnel not blinded to CWI (inherent to intervention); performance bias possible	Low risk	Complete outcome data for all randomised participants; no missing data	Some concerns	Outcome assessors not blinded; self-reported/subjective outcomes susceptible to detection bias	Low risk	All pre-specified outcomes reported; no evidence of selective outcome reporting	Some concerns
Goodall & Howatson (2008)	Some concerns	Stated to be randomised; method of sequence generation and/or allocation concealment not adequately described	Some concerns	Participants/personnel not blinded to CWI (inherent to intervention); performance bias possible	Low risk	Complete outcome data for all randomised participants; no missing data	Some concerns	Outcome assessors not blinded; self-reported/subjective outcomes susceptible to detection bias	Low risk	All pre-specified outcomes reported; no evidence of selective outcome reporting	Some concerns
Vaile et al. (2008)	Some concerns	Stated to be randomised; method of sequence generation and/or allocation concealment not adequately described	Some concerns	Participants/personnel not blinded to CWI (inherent to intervention); performance bias possible	Low risk	Complete outcome data for all randomised participants; no missing data	Some concerns	Outcome assessors not blinded; self-reported/subjective outcomes susceptible to detection bias	Low risk	All pre-specified outcomes reported; no evidence of selective outcome reporting	Some concerns
Ingram et al. (2009)	Some concerns	Stated to be randomised; method of sequence generation and/or allocation concealment not adequately described	Some concerns	Participants/personnel not blinded to CWI (inherent to intervention); performance bias possible	Low risk	Complete outcome data for all randomised participants; no missing data	Some concerns	Outcome assessors not blinded; self-reported/subjective outcomes susceptible to detection bias	Low risk	All pre-specified outcomes reported; no evidence of selective outcome reporting	Some concerns
Howatson et al. (2009)	Some concerns	Stated to be randomised; method of sequence generation and/or allocation concealment not adequately described	Some concerns	Participants/personnel not blinded to CWI (inherent to intervention); performance bias possible	Low risk	Complete outcome data for all randomised participants; no missing data	Some concerns	Outcome assessors not blinded; self-reported/subjective outcomes susceptible to detection bias	Low risk	All pre-specified outcomes reported; no evidence of selective outcome reporting	Some concerns
Jakeman et al. (2009)	Some concerns	Stated to be randomised;	Some concerns	Participants/personnel not blinded to CWI	Low risk	Complete outcome	Some concerns	Outcome assessors not blinded; self-	Low risk	All pre-specified	Some concerns

		method of sequence generation and/or allocation concealment not adequately described		(inherent to intervention); performance bias possible		data for all randomised participants; no missing data		reported/subjective outcomes susceptible to detection bias		outcomes reported; no evidence of selective outcome reporting	
Pournot et al. (2011)	Some concerns	Stated to be randomised; method of sequence generation and/or allocation concealment not adequately described	Some concerns	Participants/personnel not blinded to CWI (inherent to intervention); performance bias possible	Low risk	Complete outcome data for all randomised participants; no missing data	Some concerns	Outcome assessors not blinded; self-reported/subjective outcomes susceptible to detection bias	Low risk	All pre-specified outcomes reported; no evidence of selective outcome reporting	Some concerns
Brophy-Williams et al. (2011)	Some concerns	Stated to be randomised; method of sequence generation and/or allocation concealment not adequately described	Some concerns	Participants/personnel not blinded to CWI (inherent to intervention); performance bias possible	Low risk	Complete outcome data for all randomised participants; no missing data	Some concerns	Outcome assessors not blinded; self-reported/subjective outcomes susceptible to detection bias	Low risk	All pre-specified outcomes reported; no evidence of selective outcome reporting	Some concerns
Pointon et al. (2012)	Some concerns	Stated to be randomised; method of sequence generation and/or allocation concealment not adequately described	Some concerns	Participants/personnel not blinded to CWI (inherent to intervention); performance bias possible	Low risk	Complete outcome data for all randomised participants; no missing data	Some concerns	Outcome assessors not blinded; self-reported/subjective outcomes susceptible to detection bias	Low risk	All pre-specified outcomes reported; no evidence of selective outcome reporting	Some concerns
Santos et al. (2012)	Some concerns	Stated to be randomised; method of sequence generation and/or allocation concealment not adequately described	Some concerns	Participants/personnel not blinded to CWI (inherent to intervention); performance bias possible	Low risk	Complete outcome data for all randomised participants; no missing data	Some concerns	Outcome assessors not blinded; self-reported/subjective outcomes susceptible to detection bias	Low risk	All pre-specified outcomes reported; no evidence of selective outcome reporting	Some concerns
Delextrat et al. (2013)	Some concerns	Stated to be randomised; method of sequence generation and/or allocation concealment not adequately described	Some concerns	Participants/personnel not blinded to CWI (inherent to intervention); performance bias possible	Low risk	Complete outcome data for all randomised participants; no missing data	Some concerns	Outcome assessors not blinded; self-reported/subjective outcomes susceptible to detection bias	Low risk	All pre-specified outcomes reported; no evidence of selective outcome reporting	Some concerns
Glasgow et al. (2014)	Low risk	Adequate random sequence generation and allocation concealment reported	Some concerns	Participants/personnel not blinded to CWI (inherent to intervention); performance bias possible	Low risk	Complete outcome data for all randomised participants; no missing data	Low risk	Objective outcome measures with blinded outcome assessors	Low risk	All pre-specified outcomes reported; no evidence of selective outcome reporting	Low risk
White et al. (2014)	Some concerns	Stated to be randomised; method of sequence generation and/or allocation concealment not adequately described	Low risk	Protocol adherence ensured; assessor blinding maintained; no deviations noted	Low risk	Complete outcome data for all randomised participants; no missing data	Low risk	Objective outcome measures with blinded outcome assessors	Low risk	All pre-specified outcomes reported; no evidence of selective outcome	Low risk

										reporting	
Takeda et al. (2014)	Some concerns	Stated to be randomised; method of sequence generation and/or allocation concealment not adequately described	Some concerns	Participants/personnel not blinded to CWI (inherent to intervention); performance bias possible	Low risk	Complete outcome data for all randomised participants; no missing data	Some concerns	Outcome assessors not blinded; self-reported/subjective outcomes susceptible to detection bias	Low risk	All pre-specified outcomes reported; no evidence of selective outcome reporting	Some concerns
Marquet et al. (2015)	Some concerns	Stated to be randomised; method of sequence generation and/or allocation concealment not adequately described	Some concerns	Participants/personnel not blinded to CWI (inherent to intervention); performance bias possible	Low risk	Complete outcome data for all randomised participants; no missing data	Some concerns	Outcome assessors not blinded; self-reported/subjective outcomes susceptible to detection bias	Low risk	All pre-specified outcomes reported; no evidence of selective outcome reporting	Some concerns
Leeder et al. (2015)	Low risk	Adequate random sequence generation and allocation concealment reported	Some concerns	Participants/personnel not blinded to CWI (inherent to intervention); performance bias possible	Low risk	Complete outcome data for all randomised participants; no missing data	Some concerns	Outcome assessors not blinded; self-reported/subjective outcomes susceptible to detection bias	Low risk	All pre-specified outcomes reported; no evidence of selective outcome reporting	Some concerns
Moreira et al. (2015)	Some concerns	Stated to be randomised; method of sequence generation and/or allocation concealment not adequately described	Some concerns	Participants/personnel not blinded to CWI (inherent to intervention); performance bias possible	Low risk	Complete outcome data for all randomised participants; no missing data	Some concerns	Outcome assessors not blinded; self-reported/subjective outcomes susceptible to detection bias	Low risk	All pre-specified outcomes reported; no evidence of selective outcome reporting	Some concerns
Vieira et al. (2016)	Low risk	Adequate random sequence generation and allocation concealment reported	Some concerns	Participants/personnel not blinded to CWI (inherent to intervention); performance bias possible	Low risk	Complete outcome data for all randomised participants; no missing data	Low risk	Objective outcome measures with blinded outcome assessors	Low risk	All pre-specified outcomes reported; no evidence of selective outcome reporting	Some concerns
Fonseca et al. (2016)	Some concerns	Stated to be randomised; method of sequence generation and/or allocation concealment not adequately described	High risk	Important protocol deviations; participants unblinded with evidence affecting outcomes	High risk	Substantial missing outcome data with differential dropout between groups	Some concerns	Outcome assessors not blinded; self-reported/subjective outcomes susceptible to detection bias	Low risk	All pre-specified outcomes reported; no evidence of selective outcome reporting	High risk
Yeung et al. (2016)	Low risk	Adequate random sequence generation and allocation concealment reported	Some concerns	Participants/personnel not blinded to CWI (inherent to intervention); performance bias possible	Low risk	Complete outcome data for all randomised participants; no missing data	Some concerns	Outcome assessors not blinded; self-reported/subjective outcomes susceptible to detection bias	Low risk	All pre-specified outcomes reported; no evidence of selective outcome reporting	Some concerns
Sánchez-Ureña et al. (2017)	Low risk	Adequate random sequence generation and allocation concealment	Some concerns	Participants/personnel not blinded to CWI (inherent to intervention); performance bias	Low risk	Complete outcome data for all randomised participants;	Some concerns	Outcome assessors not blinded; self-reported/subjective outcomes susceptible to	Low risk	All pre-specified outcomes reported; no	Some concerns

		reported		possible		no missing data		detection bias		evidence of selective outcome reporting	
Lindsay et al. (2017)	Some concerns	Stated to be randomised; method of sequence generation and/or allocation concealment not adequately described	Some concerns	Participants/personnel not blinded to CWI (inherent to intervention); performance bias possible	Low risk	Complete outcome data for all randomised participants; no missing data	Low risk	Objective outcome measures with blinded outcome assessors	Low risk	All pre-specified outcomes reported; no evidence of selective outcome reporting	Some concerns
Schimpchen et al. (2017)	Some concerns	Stated to be randomised; method of sequence generation and/or allocation concealment not adequately described	Some concerns	Participants/personnel not blinded to CWI (inherent to intervention); performance bias possible	Low risk	Complete outcome data for all randomised participants; no missing data	Low risk	Objective outcome measures with blinded outcome assessors	Low risk	All pre-specified outcomes reported; no evidence of selective outcome reporting	Some concerns
Stenson et al. (2017)	Low risk	Adequate random sequence generation and allocation concealment reported	Some concerns	Participants/personnel not blinded to CWI (inherent to intervention); performance bias possible	Low risk	Complete outcome data for all randomised participants; no missing data	Some concerns	Outcome assessors not blinded; self-reported/subjective outcomes susceptible to detection bias	Low risk	All pre-specified outcomes reported; no evidence of selective outcome reporting	Some concerns
Missau et al. (2018)	Low risk	Adequate random sequence generation and allocation concealment reported	Low risk	Protocol adherence ensured; assessor blinding maintained; no deviations noted	Some concerns	Some missing data; reasons provided and comparable across groups	Low risk	Objective outcome measures with blinded outcome assessors	Low risk	All pre-specified outcomes reported; no evidence of selective outcome reporting	Some concerns
Doeringer et al. (2018)	Some concerns	Stated to be randomised; method of sequence generation and/or allocation concealment not adequately described	Some concerns	Participants/personnel not blinded to CWI (inherent to intervention); performance bias possible	Low risk	Complete outcome data for all randomised participants; no missing data	Some concerns	Outcome assessors not blinded; self-reported/subjective outcomes susceptible to detection bias	Low risk	All pre-specified outcomes reported; no evidence of selective outcome reporting	Some concerns
Sánchez-Ureña et al. (2018)	Low risk	Adequate random sequence generation and allocation concealment reported	Some concerns	Participants/personnel not blinded to CWI (inherent to intervention); performance bias possible	Some concerns	Some missing data; reasons provided and comparable across groups	Some concerns	Outcome assessors not blinded; self-reported/subjective outcomes susceptible to detection bias	Low risk	All pre-specified outcomes reported; no evidence of selective outcome reporting	Some concerns
Siqueira et al. (2018)	Low risk	Adequate random sequence generation and allocation concealment reported	Some concerns	Participants/personnel not blinded to CWI (inherent to intervention); performance bias possible	Low risk	Complete outcome data for all randomised participants; no missing data	Low risk	Objective outcome measures with blinded outcome assessors	Low risk	All pre-specified outcomes reported; no evidence of selective outcome reporting	Some concerns
Wiewelhoe et al.	Low risk	Adequate	Some	Participants/personnel	Low risk	Complete	Some	Outcome assessors	Low	All pre-	Some

(2018)		random sequence generation and allocation concealment reported	concerns	not blinded to CWI (inherent to intervention); performance bias possible		outcome data for all randomised participants; no missing data	concerns	not blinded; self-reported/subjective outcomes susceptible to detection bias	risk	specified outcomes reported; no evidence of selective outcome reporting	concerns
Silva et al. (2018)	Some concerns	Stated to be randomised; method of sequence generation and/or allocation concealment not adequately described	Low risk	Protocol adherence ensured; assessor blinding maintained; no deviations noted	Low risk	Complete outcome data for all randomised participants; no missing data	Low risk	Objective outcome measures with blinded outcome assessors	Low risk	All pre-specified outcomes reported; no evidence of selective outcome reporting	Some concerns
Darani et al. (2018)	Some concerns	Stated to be randomised; method of sequence generation and/or allocation concealment not adequately described	Some concerns	Participants/personnel not blinded to CWI (inherent to intervention); performance bias possible	Low risk	Complete outcome data for all randomised participants; no missing data	Low risk	Objective outcome measures with blinded outcome assessors	Low risk	All pre-specified outcomes reported; no evidence of selective outcome reporting	Some concerns
Stearns et al. (2018)	High risk	No adequate randomisation; allocation not concealed; selection bias likely	High risk	Important protocol deviations; participants unblinded with evidence affecting outcomes	Some concerns	Some missing data; reasons provided and comparable across groups	Some concerns	Outcome assessors not blinded; self-reported/subjective outcomes susceptible to detection bias	Low risk	All pre-specified outcomes reported; no evidence of selective outcome reporting	High risk
Çakir et al. (2019)	Some concerns	Stated to be randomised; method of sequence generation and/or allocation concealment not adequately described	Some concerns	Participants/personnel not blinded to CWI (inherent to intervention); performance bias possible	Low risk	Complete outcome data for all randomised participants; no missing data	Low risk	Objective outcome measures with blinded outcome assessors	Low risk	All pre-specified outcomes reported; no evidence of selective outcome reporting	Some concerns
Mokhtar et al. (2019)	Some concerns	Stated to be randomised; method of sequence generation and/or allocation concealment not adequately described	Some concerns	Participants/personnel not blinded to CWI (inherent to intervention); performance bias possible	Low risk	Complete outcome data for all randomised participants; no missing data	Some concerns	Outcome assessors not blinded; self-reported/subjective outcomes susceptible to detection bias	Low risk	All pre-specified outcomes reported; no evidence of selective outcome reporting	Some concerns
L'Hermette et al. (2020)	Some concerns	Stated to be randomised; method of sequence generation and/or allocation concealment not adequately described	Low risk	Protocol adherence ensured; assessor blinding maintained; no deviations noted	Low risk	Complete outcome data for all randomised participants; no missing data	Some concerns	Outcome assessors not blinded; self-reported/subjective outcomes susceptible to detection bias	Low risk	All pre-specified outcomes reported; no evidence of selective outcome reporting	Some concerns
Barber et al. (2020)	Some concerns	Stated to be randomised; method of sequence generation and/or allocation concealment not adequately	Low risk	Protocol adherence ensured; assessor blinding maintained; no deviations noted	Low risk	Complete outcome data for all randomised participants; no missing data	Low risk	Objective outcome measures with blinded outcome assessors	Low risk	All pre-specified outcomes reported; no evidence of selective	Low risk

		described								outcome reporting	
Dantas et al. (2020)	Low risk	Adequate random sequence generation and allocation concealment reported	Low risk	Protocol adherence ensured; assessor blinding maintained; no deviations noted	Low risk	Complete outcome data for all randomised participants; no missing data	Low risk	Objective outcome measures with blinded outcome assessors	Low risk	All pre-specified outcomes reported; no evidence of selective outcome reporting	Low risk
Doeringer et al. (2020)	Some concerns	Stated to be randomised; method of sequence generation and/or allocation concealment not adequately described	Some concerns	Participants/personnel not blinded to CWI (inherent to intervention); performance bias possible	Low risk	Complete outcome data for all randomised participants; no missing data	Some concerns	Outcome assessors not blinded; self-reported/subjective outcomes susceptible to detection bias	Low risk	All pre-specified outcomes reported; no evidence of selective outcome reporting	Some concerns
Kositsky & Avela (2020)	Some concerns	Stated to be randomised; method of sequence generation and/or allocation concealment not adequately described	Some concerns	Participants/personnel not blinded to CWI (inherent to intervention); performance bias possible	Low risk	Complete outcome data for all randomised participants; no missing data	Some concerns	Outcome assessors not blinded; self-reported/subjective outcomes susceptible to detection bias	Low risk	All pre-specified outcomes reported; no evidence of selective outcome reporting	Some concerns
Pesenti et al. (2020)	Low risk	Adequate random sequence generation and allocation concealment reported	Low risk	Protocol adherence ensured; assessor blinding maintained; no deviations noted	Low risk	Complete outcome data for all randomised participants; no missing data	Low risk	Objective outcome measures with blinded outcome assessors	Low risk	All pre-specified outcomes reported; no evidence of selective outcome reporting	Low risk
Roonkiani et al. (2020)	Some concerns	Stated to be randomised; method of sequence generation and/or allocation concealment not adequately described	Some concerns	Participants/personnel not blinded to CWI (inherent to intervention); performance bias possible	Low risk	Complete outcome data for all randomised participants; no missing data	Some concerns	Outcome assessors not blinded; self-reported/subjective outcomes susceptible to detection bias	Low risk	All pre-specified outcomes reported; no evidence of selective outcome reporting	Some concerns
Hohenauer et al. (2020)	Some concerns	Stated to be randomised; method of sequence generation and/or allocation concealment not adequately described	Some concerns	Participants/personnel not blinded to CWI (inherent to intervention); performance bias possible	Low risk	Complete outcome data for all randomised participants; no missing data	Some concerns	Outcome assessors not blinded; self-reported/subjective outcomes susceptible to detection bias	Low risk	All pre-specified outcomes reported; no evidence of selective outcome reporting	Some concerns
Qu et al. (2020)	Some concerns	Stated to be randomised; method of sequence generation and/or allocation concealment not adequately described	Low risk	Protocol adherence ensured; assessor blinding maintained; no deviations noted	Low risk	Complete outcome data for all randomised participants; no missing data	Some concerns	Outcome assessors not blinded; self-reported/subjective outcomes susceptible to detection bias	Low risk	All pre-specified outcomes reported; no evidence of selective outcome reporting	Some concerns
Coelho et al. (2021)	Low risk	Adequate random sequence generation and allocation	Some concerns	Participants/personnel not blinded to CWI (inherent to intervention);	Low risk	Complete outcome data for all randomised	Some concerns	Outcome assessors not blinded; self-reported/subjective outcomes	Low risk	All pre-specified outcomes reported;	Some concerns

		concealment reported		performance bias possible		participants; no missing data		susceptible to detection bias		no evidence of selective outcome reporting	
Bartley et al. (2021)	Low risk	Adequate random sequence generation and allocation concealment reported	Some concerns	Participants/personnel not blinded to CWI (inherent to intervention); performance bias possible	Low risk	Complete outcome data for all randomised participants; no missing data	Some concerns	Outcome assessors not blinded; self-reported/subjective outcomes susceptible to detection bias	Low risk	All pre-specified outcomes reported; no evidence of selective outcome reporting	Some concerns
Qu et al. (2022)	Some concerns	Stated to be randomised; method of sequence generation and/or allocation concealment not adequately described	Some concerns	Participants/personnel not blinded to CWI (inherent to intervention); performance bias possible	Low risk	Complete outcome data for all randomised participants; no missing data	Some concerns	Outcome assessors not blinded; self-reported/subjective outcomes susceptible to detection bias	Low risk	All pre-specified outcomes reported; no evidence of selective outcome reporting	Some concerns
Nasser et al. (2023)	Low risk	Adequate random sequence generation and allocation concealment reported	Low risk	Protocol adherence ensured; assessor blinding maintained; no deviations noted	Low risk	Complete outcome data for all randomised participants; no missing data	Some concerns	Outcome assessors not blinded; self-reported/subjective outcomes susceptible to detection bias	Low risk	All pre-specified outcomes reported; no evidence of selective outcome reporting	Low risk
Pinheiro et al. (2024)	Low risk	Adequate random sequence generation and allocation concealment reported	Low risk	Protocol adherence ensured; assessor blinding maintained; no deviations noted	Low risk	Complete outcome data for all randomised participants; no missing data	Low risk	Objective outcome measures with blinded outcome assessors	Low risk	All pre-specified outcomes reported; no evidence of selective outcome reporting	Low risk
Stella et al. (2024)	Low risk	Adequate random sequence generation and allocation concealment reported	Some concerns	Participants/personnel not blinded to CWI (inherent to intervention); performance bias possible	Low risk	Complete outcome data for all randomised participants; no missing data	Low risk	Objective outcome measures with blinded outcome assessors	Low risk	All pre-specified outcomes reported; no evidence of selective outcome reporting	Low risk
Wei et al. (2025)	Low risk	Adequate random sequence generation and allocation concealment reported	Some concerns	Participants/personnel not blinded to CWI (inherent to intervention); performance bias possible	Low risk	Complete outcome data for all randomised participants; no missing data	Low risk	Objective outcome measures with blinded outcome assessors	Low risk	All pre-specified outcomes reported; no evidence of selective outcome reporting	Some concerns
Barros et al. (2025)	Low risk	Adequate random sequence generation and allocation concealment reported	Some concerns	Participants/personnel not blinded to CWI (inherent to intervention); performance bias possible	Low risk	Complete outcome data for all randomised participants; no missing data	Some concerns	Outcome assessors not blinded; self-reported/subjective outcomes susceptible to detection bias	Low risk	All pre-specified outcomes reported; no evidence of selective outcome reporting	Some concerns

