Supplementary file 3. Risk of bias assessments

Summary of risk of bias assessments for randomized controlled trials (n=2)[a]

First Author, Year	Random sequence generation	Allocation concealment	Blinding of participants and personnel	Blinding of outcome assessment	Incomplete outcome data	Selective reporting	Other sources of bias	Overall risk of bias[b]
Dutheil, 2013	Low	Unclear	High	High	Low	Low	High	High
Uchal, 2005	Low	Low	Unclear	Low	Low	Low	Low	Unclear

[a]Assessed using the Cochrane Collaboration's Risk of Bias Tool

[b]Overall risk of bias is Low if all domains are rated as low, High if at least one domain is assessed as high, and Unclear if at least one domain is assessed as unclear and no domains are assessed as high

Summary of quality assessments for cohort studies (n=6)[a]

First Author, Year	Selection					Comparability		Outcome				Total Score[b] /9
	Representa-tiveness of exposed cohort /1	Selection of non-exposed cohort /1	Ascertain-ment of exposure /1	Outcome not present at start /1	Total /4	Compara-bility of cohorts /2	Total /2	Assess-ment of outcome /1	Adequate length of follow-up /1	Adequate follow-up of cohorts /1	Total /1	
Chu, 2011	1	1	0	1	3	2	2	1	1	1	3	8
Ellman, 2004	1	1	1	1	4	1	1	1	1	1	3	8
Govindarajan, 2015	1	1	1	1	4	2	2	1	1	1	3	9
Rothschild, 2009	1	1	1	1	4	2	2	1	1	1	3	9
Schieman, 2008	1	1	1	1	4	1	1	1	1	1	3	8
Vinden, 2014	1	1	1	1	4	1	1	1	1	1	3	8

[a]Assessed using the Newcastle-Ottawa Quality Assessment Scale

[b]An overall score of 7 to 9 stars is considered as low risk of bias, 4 to 6 as unclear risk of bias, and 3 or less as high risk of bias

Summary of risk of bias assessments for before-after studies (n=3)[a]

First Author, Year	Random sequence generation[b]	Allocation concealment[b]	Blinding of participants and personnel	Blinding of outcome assessment	Incomplete outcome data	Selective reporting	Other sources of bias[c]	Overall risk of bias[d]
Amirian, 2014	NA	NA	High	High	Low	Low	High	High
Gerdes, 2008	NA	NA	High	High	Low	Low	High	High
Lederer, 2006	NA	NA	High	High	Low	Low	High	High

[a]Assessed using Cochrane Effective Practice and Organization of Care (EPOC) Review Group's criteria for before-after studies, adapted from the Cochrane Collaboration Risk of Bias Tool

[b]Assessed as 'not applicable' (NA) when the studies did not include a control group

[c]Assessed as High due to lack of a control group

[d]Overall risk of bias is Low if all domains are rated as low, High if at least one domain is assessed as high, and Unclear if at least one domain is assessed as unclear and no domains are assessed as high

Summary of risk of bias assessments for time series studies (n=1)[a]

First Author, Year	Intervention independent of other changes	Intervention effect pre-specified	Intervention unlikely to affect data collection	Allocation concealment[a]	Incomplete outcome data	Selective reporting	Other sources of bias[c]	Overall risk of bias[d]
Leitchfried, 2011	Low	High	Low	NA	Low	Low	High	High

[a]Assessed using Cochrane Effective Practice and Organization of Care (EPOC) Review Group's criteria for interrupted time series studies, adapted from the Cochrane Collaboration Risk of Bias Tool

[b]Assessed as not applicable (NA) when the studies did not include a control group

[c]Assessed as High due to lack of a control group

[d]Overall risk of bias is Low if all domains are rated as low, High if at least one domain is assessed as high, and Unclear if at least one domain is assessed as unclear and no domains are assessed as high

Summary of quality assessments for cross-sectional studies (n=34)[a]

First Author, Year	Selection			Outcome				Total Score[b] /5
	Adequacy of case definition /1	Representative-ness of the sample /1	Total /2	Assessment of outcome /1	Same method of ascertainment for entire sample /1	Response rate /1	Total /3	
Aziz, 2004	0	0	0	0	1	0	1	1
Beaujouan, 2005	1	0	1	0	1	0	1	2
Chang, 2013	1	0	1	0	1	1	2	3
Chen, 2008	1	0	1	0	1	0	1	2
Doppia, 2011	1	1	2	0	1	1	2	4
Elovaino, 2015	1	1	2	0	1	1	2	4
Gander, 2000	1	1	2	0	1	1	2	4
Harbeck, 2015	1	0	1	0	1	1	2	3
Heponiemi, 2014	1	1	2	0	1	1	2	4
Jackson, 2017	0	0	0	0	1	0	1	1
Kanieta, 2011	1	0	1	0	1	1	2	3
Lindfors, 2006	1	1	2	0	1	1	2	4
Mahmood, 2017	1	0	1	0	1	0	1	2
Nishimura, 2014	1	1	2	0	1	0	1	3
Pit, 2014	1	0	1	0	1	1	2	3
Pit, 2016	1	0	1	0	1	1	2	3
Roberts, 2014	1	1	2	0	1	0	1	3
Saadat, 2016	1	1	2	0	1	1	2	4
Saadat, 2017	1	1	2	0	1	1	2	4
Sanches, 2015	1	0	1	0	1	0	1	2
Sargent, 2009	1	0	1	0	1	0	1	2

First Author, Year	Selection			Outcome				Total Score[b] /5
	Adequacy of case definition /1	Representative-ness of the sample /1	Total /2	Assessment of outcome /1	Same method of ascertainment for entire sample /1	Response rate /1	Total /3	
Sende, 2010	1	0	1	0	1	0	1	2
Sexton, 2001	1	0	1	0	1	0	1	2
Shanafelt, 2005	1	0	1	0	1	1	2	3
Shanafelt, 2010	1	1	2	0	1	0	1	3
Shanafelt, 2014	1	0	1	0	1	1	2	3
Shirom, 2006	1	1	2	0	1	1	2	4
Shirom, 2010	1	1	2	0	1	1	2	4
Smith, 2016	1	0	1	0	1	1	2	3
Starmer, 2016	1	1	2	0	1	1	2	4
Tanti, 2017	1	0	1	0	1	0	1	2
Tokuda, 2009	1	1	2	0	1	1	2	4
Vela-Bueno, 2008	1	1	2	0	1	1	2	4
Wada, 2010	1	1	2	0	1	0	1	3

[a]Assessed using the Newcastle-Ottawa Quality Assessment Scale, adapted for cross-sectional studies

[b]An overall score of 4 to 5 stars is considered as low risk of bias, 3 as unclear risk of bias, and 2 or less as high risk of bias. For response rate, ≥50% was used as the criterion to be awarded a star

Summary of quality assessments for non-comparative studies (n=1)[a]

First Author, Year	Selection			Exposure		Outcome				Total Score[b] /6
	Adequacy of case definition /1	Representat-iveness of the sample /1	Total /2	Ascertain-ment of exposure	Total /1	Assessment of outcome /1	Same method of assessment for entire sample /1	Loss to follow-up /1	Total /3	
Gander, 2008	1	1	2	0	0	0	1	1	2	4

[a]Assessed using the Newcastle-Ottawa Quality Assessment Scale, adapted by the authors to be suitable to the non-comparative design

[b]An overall score of 5 to 6 stars is considered as low risk of bias, 3 to 4 as unclear risk of bias, and 2 or less as high risk of bias