

Additional file 6A. Risk of Bias for cross-sectional design data (Question 1).

	1. Study objective report	2. Balance measurement report	3. Study design report	4. Population source and sampling frame report	5. Eligibility criteria report	6. Participation rate report	7. Characteristics of participants	8. Statistical methods report	9. Balance findings report	10. Data variability of balance findings report	11. Statistical parameters report	12. Sample size calculations report	13. Comparability between groups	14. Adequate participation rate	15. Recruitment period of groups report	16. Data of subject losses taken into account	17. Blinding of assessors	18. Reliability report of balance outcomes	19. Standardized measures report	20. Assessment period of groups report	21. Adjust for covariates (age/sex)	22. Report of data by subgroups	23. Generalizability of the study results to the eligible population	24. Generalizability of the study results to other relevant populations	Total Quality Score (0 to 48)	Overall Quality Score (0 to 2)	RISK OF BIAS
Motealleh et al. [92]																	U								40	1.67	L
Priore et al. [101]															U			U		U					38	1.58	L
Steinberg et al. [85]															U			U		U					37	1.54	L
Yelvar et al. [102]																		U							37	1.54	L
Carvalho-e-Silva et al. [87]															U			U		U					36	1.50	L
Manojlovic et al. [100]															U			U		U					34	1.42	L
Song et al. [94]															U			U		U					34	1.42	L
Zamboti et al. [95]															U			U		U					34	1.42	L
Felicio et al. [88]															U			U		U					33	1.38	L
Negahban et al. [90]															U					U					33	1.38	L
Zeinalzadeh et al. [24]															U					U					32	1.33	L
Akhbari et al. [89]															U					U					31	1.29	L
Gwynne [58]															U			U		U					31	1.29	L
Lee et al. [29]															U			U		U					31	1.29	L
Coelho et al. [98]						U								U	U	U				U		U	U	30	1.25	L	
Saad et al. [27]															U			U		U					29	1.21	L
Aminaka et al. [30]						U								U	U	U		U		U		U	U	26	1.08	L	
Kim et al. [99]															U			U		U					26	1.08	L
Silva et al. [26]						U								U		U		U		U		U	U	26	1.08	L	
Goto et al. [25]						U								U	U	U		U		U		U	U	25	1.04	L	
Stensdotter et al. [104]															U			U		U					25	1.04	L
Loudon et al. [93]						U								U	U	U				U		U	U	24	1.00	H	
Carry et al. [57]						U								U	U	U		U		U		U	U	22	0.92	H	
Nasab et al. [91]						U								U	U	U		U		U		U	U	22	0.92	H	
Ibrahim et al. [86]						U								U	U	U		U		U		U	U	20	0.83	H	
Naserpour et al. [103]						U								U	U	U		U		U		U	U	20	0.83	H	
Arun et al. [96]						U	U					U	U	U	U	U		U		U		U	U	18	0.75	H	
Stensdotter et al. [97]						U								U	U	U		U		U		U	U	18	0.75	H	

Black shading = yes, clear report; White shading = no, not reported; Gray shading = partial; U: unable to determine.

Abbreviations: H = high risk of bias; L = low risk of bias.

Additional file 6B. Risk of Bias for randomized controlled trails (Questions 2 and 3).

Study	1	2	3	4	5	6	Total	Risk of Bias	Items PEDro Scale
Question 2									1. participants randomly allocated to groups
Zarei et al. [110]							6	Low	2. allocation was concealed
Motealleh et al. [62]							5	Low	3. similarity among groups at baseline
Ebrahimi et al. [113]							5	Low	4. blinding of all assessors
Aytar et al. [115]							4	Moderate	5. results from more than 85% of allocated subjects
Chevidikunnnan et al. [116]							4	Moderate	6. intention-to-treat approach
Ferreira et al. [109]							4	Moderate	
Miller et al. [117]							4	Moderate	
Motealleh et al. [108]							4	Moderate	
Sinaei et al. [120]							4	Moderate	
Demirci et al. [118]							3	Moderate	
Mahmoud and Kamel [114]							3	Moderate	
Fang et al. [121]							2	High	
Foroughi et al. [28]							2	High	
Lee et al. [29]							2	High	
Maryam et al. [105,106]							2	High	
Steinberg et al. [107]							2	High	
Ojaghi et al. [119]							2	High	
Song et al. [94]							2	High	
Ahmadi et al. [111]							1	High	
Aminaka et al. [30]							1	High	
Goel and Bhatia [112]							1	High	
Loudon et al. [31]							1	High	
Question 3									
Rabelo et al. [32]							6	Low	
Boitrargo et al. [61]							5	Low	
Clark et al. [124]							5	Low	
Ebrahimi et al. [113]							5	Low	
Emamvirdi et al. [125]							5	Low	
Molgaard et al. [127]							5	Low	
Shadloo et al. [126]							5	Low	
Ferber et al. [122]							4	Moderate	
van Linschoten et al. [123]							4	Moderate	
Foroughi et al. [28]							2	High	
Steinberg et al. [107]							2	High	
Loudon et al. [31]							1	High	
Mahmoud and Kamel [114]							1	High	
Yalfani et al. [128]							1	High	