Criteria		1	2	3	4	5	6	7	8	9	10	11	12	Overall
Ali et al[10]		Y	Y	Y	Y	Y	Y	Y	CD	Y	Ν	Ν	NA	Fair
Alla et al[40]		Y	Ν	Y	CD	Y	Ν	NR	CD	NR	Y	CD	NA	Poor
Billey <i>et al</i> [9]		Y	Y	Y	Y	Y	Y	Y	CD	NR	Y	Ν	NA	Fair
Filiet al[43]		Ν	Y	Ν	Y	Ν	Y	Ν	CD	NR	Y	Ν	NA	Poor
Laurenzano et al[39]		Y	Y	Y	Y	Y	Ν	Ν	CD	NR	Y	Ν	NA	Fair
Luo <i>et al</i> [44]		Y	Y	CD	CD	Y	Y	Ν	CD	NR	CD	CD	NA	Poor
Modha et al[45]		Y	Ν	NR	Y	Ν	Y	CD	CD	NR	Y	Ν	NA	Poor
Nguyen <i>et al</i> [47]		Y	Ν	Y	CD	Y	Y	Ν	CD	Y	Y	CD	NA	Poor
Schneider et al[11]		Y	Ν	Y	Y	Y	Y	Y	CD	NR	Y	Ν	NA	Fair
Vanderschueren e	t	Y	Ν	Y	CD	Y	Y	Ν	CD	NR	Y	Ν	NA	Fair
al[41]														
Venner <i>et al</i> [46]		Y	Ν	Y	CD	Ν	Ν	Y	CD	NR	Y	Ν	NA	Poor
Debernardi Venon e	t	Y	Y	Y	Y	Ν	Y	Ν	CD	NR	Y	Y	NA	Poor
al[49]														
Wade <i>et al</i> [48]		Y	Ν	Y	CD	Ν	Ν	Ν	CD	NR	Y	CD	NA	Poor

Supplementary Table 1 National heart, lung, and blood institute: Quality assessment tool appraising the selected studies

NHBLI Quality Assessment Tool for Before-After (Pre-Post) Studies With No Control Group Criteria: (1) Was the study question or objective clearly stated? (2) Were eligibility/selection criteria for the study population prespecified and clearly described? (3) Were the participants in the study representative of those who would be eligible for the test/service/intervention in the general or clinical

population of interest? (4) Were all eligible participants that met the prespecified entry criteria enrolled? (5) Was the sample size sufficiently large to provide confidence in the findings?(6) Was the test/service/intervention clearly described and delivered consistently across the study population? (7) Were the outcome measures prespecified, clearly defined, valid, reliable, and assessed consistently across all study participants? (8) Were the people assessing the outcomes blinded to the participants' exposures/interventions? (9) Was the loss to follow-up after baseline 20% or less? Were those lost to follow-up accounted for in the analysis? (10) Did the statistical methods examine changes in outcome measures from before to after the intervention? Were statistical tests done that provided p values for the pre-to-post changes? (11) Were outcome measures of interest taken multiple times before the intervention and multiple times after the intervention? (12) If the intervention was conducted at a group level, did the statistical analysis take into account the use of individual-level data to determine effects at the group level?[1] Abbreviations: Y – yes; N - No; CD – cannot determine; NA – not applicable; NR – not reported.