

Article:

Exercise for patients with major depression: A systematic review with meta-analysis and trial sequential-analysis

Supplementary Table S1

Table S1. Imputation of missing data for trials assessing exercise for patients diagnosed with depression

Outcome	Result from review	Best/worse (1SD)	Best/worse (2SD)	Worse/best (1SD)	Worse/best (2SD)
Depression SMD (95% CI)	-0.66 (-0.86 to -0.45) p < 0.001; I ² = 81%	-0.77 (-1.00 to -0.54) p < 0.001; I ² = 86%	-0.78 (-1.02 to -0.55) p < 0.001; I ² = 86%	-0.60 (-0.81 to -0.39) p < 0.001; I ² = 84%	-0.57 (-0.78 to -0.36) p < 0.001; I ² = 84%
		Good Outcome	Poor outcome	Good/poor outcome	Poor/good outcome
Lack of remission (95% CL)	RR 0.78 (0.68 to 0.90) p < 0.001; I ² = 69%	RR 0.75 (0.64 to 0.89) p = 0.0008; I ² = 73%	RR 0.88 (0.83 to 0.94) p = 0.0002; I ² = 69%	RR 0.71 (0.61 to 0.81) p < 0.001; I ² = 68%	RR 0.86 (0.71 to 1.04) p = 0.12; I ² = 83%
Serious adverse events (95% CL)	RR 2.21 (0.24 to 20.21) p = 0.48; I ² = 0%	RR 2.19 (0.23 to 20.76) p = 0.50; I ² = 50%	RR 0.92 (0.37 to 2.30) p = 0.86; I ² = 60%	RR 0.08 (0.02 to 0.34) p = 0.001; I ² = 5.4%	RR 19.17 (2.64 to 139.2) p = 0.004; I ² = 0%

Imputation of missing data for continuous outcome: 'best-worst' - assumed that all participants lost to follow-up in the intervention group had a beneficial outcome (the group mean minus 1 or 2 SD), and all participants lost to follow-up in the placebo group have had a harmful outcome (the group mean plus 1 SD and 2 SD). The reverse 'worst-best-case' scenario is the reverse of the 'best-worst' scenario.

Missing data for the 'remission' outcome was imputed according to the following scenarios: 1) poor outcome analysis: none of the drop-outs/participants lost from both arms experienced the outcome; 2) good outcome analysis: all of the drop-outs/participants lost from both arms experienced the outcome; 3) extreme case analysis favouring the experimental intervention, all of the drop-outs/participants lost from the experimental arm, but none of the drop-outs/participants lost from the control arm experienced the outcome; and 4) extreme case analysis favouring the control: all drop-outs/participants lost from the experimental arm, but none from the control arm experienced the outcome. Missing data for 'serious adverse events' was calculated with the reverse assumptions.