Supplementary Table S2 Evaluation of the quality of the evidence

The quality of the evidence evaluated according to the Grading of Recommendation, Development and Evaluation (GRADE) approach for each outcome.

cardiorespiratory and strength exercises for inflammatory rheumatic diseases

Patient or population: patients with inflammatory rheumatic diseases

Settings: Intervention: cardiorespiratory and strength exercise

Outcomes	Illustrative comparative risks* (95% CI) Assumed risk Corresponding risk		Relative effect (95% CI)	No of Participants (studies)	evidence	Comments
	Control	Cardiorespiratory and strength exercise	(95% CI)		(GRADE)	
Diagnosis Spesific disease activity scores DAS-28, BASDAI, ASDAS, SLEDAI		The mean diagnosis spesific disease activity scores in the intervention groups was 0.19 standard deviations higher (0.05 to 0.33 higher)		783 (12 studies)	eeee high	
Erythrocyte sedimentation rate Blood sample		The mean erythrocyte sedimentation rate in the intervention groups was 0.20 standard deviations higher (0 to 0.39 higher)		450 (12 studies)	eeee moderate ¹	
C-reactive protein		The mean c-reactive protein in the intervention groups was 0.14 standard deviations lower (0.37 lower to 0.08 higher)		307 (8 studies)	⊕⊕⊕⊚ moderate ²	
Creatine Phoshokinase		The mean creatine phoshokinase in the intervention groups was 1.31 standard deviations higher (0.2 lower to 2.82 higher)		26 (2 studies)	⊕⊕⊜⊜ low ^{3,4}	
Radiographic damage		The mean radiographic damage in the intervention groups was 0.27 standard deviations higher (0.07 to 0.45 higher)		438 (4 studies)	⊕⊕⊕⊜ moderate ⁵	
Pain		The mean pain in the intervention groups was 0.30 standard deviations higher (0.13 to 0.47 higher)		598 (12 studies)	⊕⊕⊕⊜ moderate ⁶	
Fatigue NRS		The mean fatigue in the intervention groups was 0.36 standard deviations higher (0.17 to 0.54 higher)		483 (9 studies)	⊕⊕⊕⊜ moderate ⁷	
Stiffness		The mean stiffness in the intervention groups was 0.47 standard deviations higher (0.26 to 0.68 higher)		406 (7 studies)	⊕⊕⊕⊜ moderate ^{8,9}	
Number of swollen joints		The mean number of swollen joints in the intervention groups was 0.35 standard deviations higher (0.03 to 0.67 higher)		184 (5 studies)	⊕⊕⊜⊜ low ^{10,11}	
Joint tenderness		The mean joint tenderness in the intervention groups was 0.19 standard deviations higher (0.1 lower to 0.48 higher)		187 (4 studies)	⊕⊕⊜⊜ low ^{12,13}	

"The basis for the assumed risk (e.g. the median control group risk across studies) is provided in footnotes. The corresponding risk (and its 95% confidence interval) is based on the assumed risk in the comparison group and the relative effect of the intervention (and its 95% CI).

CI: Confidence interval;

GRADE Working Group grades of evidence High quality: Further research is very unlikely to change our confidence in the estimate of effect.

Moderate quality: Further research is likely to have an important impact on our confidence in the estimate of effect and may change the estimate.

Low quality: Further research is very likely to have an important impact on our confidence in the estimate of effect and is likely to change the estimate. Very low quality: We are very uncertain about the estimate.

¹ The confidence interval goes from 0.01 to 0.44. The total number of patients is 361.

² Small sample size (N=212). CI from -0.19 to 0.35.

³ I-Square = 62%. Large difference between study effect sizes

⁴ Small sample size. Effect size from small negative to large positive.

⁵ Cl goes from almost zero to a medium sized effect.

⁶ 8 of 11 studies are unclear regarding concealment of allocation.

7 Four of nine studies are rated with high risk of bias regarding blinding. Four of nine studies are unclear regarding concealment of allocation.

⁸ 6 of 7 studies unclear allocation concealment. Only 2 have low risk of bias regarding selective reporting.

⁹ CI from 0.26 to 0.68.

¹⁰ All studies unclear on allocation concealment. 3 of unclear on generation of allocation sequence

¹¹ N=184. CI from 0.03 to 0.70.

12 All studies have unclear risk of bias on allocation concealment and selective reporting. 3 of 4 have unclear generation of allocation sequence.

¹³ N=187. CI from -0.10 to 0.48.