

## Supplementary file 5

Table 3: Summary of appraisals

Grading of risk of bias for non-randomised controlled trials for non-pharmacological interventions									
Category	n	Total n (Intervention)	Risk of bias	Consistency	Directness	Precision	Publication bias	Total GRADE rating	Athlete
<b>Exercise and rehabilitation</b>									
Arhos et al		204 (149)	Serious (1)	Serious (1)	The evidence answers the review question (0)	Participants from multiple populations (1)	High	Low	Yes
<b>TOTAL</b>	<b>1</b>	<b>204 (149)</b>							
<b>Surgery</b>									
Pioger et al		599 (599)	No (0)	No inconsistency detected (0)	The evidence answers the review question (0)	Large participant number (0)	High	High	Yes
Cohen et al		59 (59)	No (0)	No inconsistency detected (0)	The evidence answers the research question (0)	Participants from multiple populations (1)	High	Moderate	Yes
Owen et al		92 (92)	Serious (1)	No inconsistency detected (0)	The evidence answers the research question (0)	Participants from multiple populations (1)	High	Moderate	Yes
O' Reilly et al		149 (149)	No (0)	No inconsistency detected (0)	The evidence answers the research question (0)	Participants from multiple populations (1)	High	Moderate	Yes
Larson et al		63 (63)	No (0)	No inconsistency detected (0)	The evidence answers the research question (0)	Participants from one populations (1)	High	High	Yes
Perets et al		49 (49)	No (0)	No inconsistency detected (0)	The evidence answers the research question (0)	Participants from multiple populations (1)	High	Moderate	Yes
Snaebjornson et al		84 (84)	Serious (1)	Inconsistency detected (1)	The evidence answers the research question (0)	Participants from multiple populations (1)	High	Moderate	Yes
Caubere et al		40 (40)	Serious (1)	No inconsistency detected (0)	The evidence answers the research question (0)	Participants from multiple populations (1)	High	Moderate	Yes
Chalmers et al		13 (13)	Serious (1)	Inconsistency detected (1)	The evidence answers the research question (0)	Participants from multiple populations (1)	High	Moderate	Yes
Marcacci et al		12 (12)	Serious (1)	Inconsistency detected (1)	The evidence answers the research question (0)	Participants from one populations (0)	High	Moderate	Yes
Pestka et al		130 (130)	No (0)	No inconsistency detected (0)	The evidence answers the research question (0)	Participants from multiple populations (1)	High	Moderate	Yes

Van Yperen et al		50 (25)	No (0)	Inconsistency detected (1)	The evidence answers the research question (0)	Participants from multiple populations (1)	High	Moderate	Yes
Hoffelner et al		28 (28)	No(0)	No inconsistency detected (0)	The evidence answers the research question (0)	Participants from same populations (0)	High	High	Yes
Hiyama et al		826 (826)	No (0)	No inconsistency detected (0)	The evidence answers the research question (0)	Participants from same population (0)	High	High	Yes
Gobi et al		61 (61)	Serious (1)	Inconsistency detected (1)	The evidence answers the research question (0)	Participants from multiple populations (1)	High	Low	No
Nakanyama et al		46 (46)	No (0)	No inconsistency detected (0)	The evidence answers the research question (0)	Participants from same populations (1)	High	High	Yes
Sonnery-Cottett et al		8 (8)	Serious (1)	Inconsistency detected (1)	The evidence answers the research question (0)	Participants from multiple populations (1)	High	Low	Yes
Keszeg et al		24 (24)	No (0)	No inconsistency detected (0)	The evidence answers the research question (0)	Participants from same populations (0)	High	High	Yes
Bouveua et al		40 (40)	Serious (1)	No inconsistency detected (0)	The evidence answers the research question (0)	Participants from multiple populations (1)	High	Moderate	Yes
Valdeberanno et al		26 (26)	Serious (1)	No inconsistency detected (0)	The evidence answers the research question (0)	Participants from multiple populations (1)	High	Moderate	Yes
<b>TOTAL</b>	<b>20</b>	<b>2399 (2374)</b>							
<b>Injection</b>									
Fernandes et al		1207 (1207)	No (0)	Inconsistency detected (1)	The evidence answers the research question (0)	Participants from same populations (0)	High	High	Yes
Tamburino et al		30 (30)	Serious (1)	Inconsistency detected (1)	The evidence answers the research question (0)	Participants from same populations (0)	High	Moderate	Yes
Rando et al		30 (30)	Serious (1)	Inconsistency detected (1)	The evidence does not answer the research question (1)	Participants from same populations (0)	High	Low	Yes
<b>TOTAL</b>	<b>3</b>	<b>1267</b>							
<b>Early identification</b>									
Bedi et al		29 (29)	No (0)	No inconsistency detected (0)	The evidence answers the research question (0)	Participants from multiple populations (1)	High	Moderate	Yes
Nepple et al		107 (107)	No (0)	No inconsistency detected (0)	The evidence answers the research question (0)	Participants from same populations (0)	High	High	Yes

Marquez et al		42 (42)	No (0)	Inconsistency detected (1)	The evidence answers the research question (0)	Participants from same populations (0)	High	Moderate	Yes
Farrel et al		40 (20)	Serious (1)	Inconsistency detected (1)	The evidence answers the research question (0)	Participants from same populations (0)	High	Moderate	Yes
Nepple et al		594 (594)	No (0)	No inconsistency detected (0)	The evidence answers the research question (0)	Participants from same populations (0)	High	High	Yes
Ahmad et al		122 (122)	No (0)	No inconsistency detected (0)	The evidence answers the research question (0)	Participants from multiple populations (1)	High	Moderate	Yes
Eckstein		40 (20)	Serious (1)	No inconsistency detected (0)	The evidence answers the research question (0)	Participants from multiple populations (1)	High	Moderate	Yes
Okazaki et al		6 (6)	Serious (1)	Inconsistency detected (1)	The evidence answers the research question (0)	Participants from multiple populations (1)	High	Low	Yes
Shen et al		67 (17)	No (0)	No inconsistency detected (0)	The evidence answers the research question (0)	Participants from multiple populations (1)	High	Moderate	Yes
Golditz et al		36 (36)	No (0)	No inconsistency detected (0)	The evidence answers the research question (0)	Participants from multiple populations (1)	High	Moderate	Yes
Heiss et al		89 (89)	No (0)	Inconsistency detected (1)	The evidence answers the research question (0)	Participants from multiple populations (1)	High	Moderate	Yes
<b>TOTAL</b>	<b>11</b>	<b>1172 (1082)</b>							

Grading of Recommendations, Assessment, Development and Evaluation (GRADE) system