

Study	Risk of bias domains							Overall
	D1	D2	D3	D4	D5	D6	D7	
Al-Shahi Salman (2014; Scotland) <sup>S1</sup>	-	+	+	+	+	+	+	-
Bervini (2014; Australia) <sup>S2</sup>	-	+	+	+	+	+	+	-
Ding (2016; USA) <sup>14</sup>	-	+	+	+	+	+	+	-
Ding (2017; USA, Canada) <sup>S5</sup>	-	+	+	+	+	+	+	-
Halim (2004; USA) <sup>S3</sup>	-	+	+	+	+	+	+	-
Hanakita (2016; Japan) <sup>S4</sup>	-	+	+	+	+	+	+	-
Javadpour (2016; UK) <sup>17</sup>	?	+	+	+	+	+	+	?
Jiao (2018; China) <sup>S5</sup>	-	+	+	+	+	+	+	-
Kim (2014; USA, Scotland) <sup>5</sup>	-	+	+	+	+	+	+	-
Koltz (2013; USA) <sup>S6</sup>	?	+	+	+	-	+	+	-
Laakso (2011; Finland) <sup>S7</sup>	-	+	+	+	+	+	+	-
Lang (2018; USA) <sup>S8</sup>	?	+	+	+	+	+	+	?
Link (2018; USA) <sup>13</sup>	?	+	+	+	+	+	+	?
Lv (2010; China) <sup>S9</sup>	?	+	+	+	+	+	?	?
Lv (2012; China) <sup>29</sup>	-	+	+	+	!	+	?	!
Nerva (2015; USA) <sup>S10</sup>	?	+	+	+	+	+	+	?
Nerva (2018; USA) <sup>S11</sup>	-	+	+	+	+	+	+	-
Pollock (2013; USA) <sup>15</sup>	-	+	+	+	+	+	+	-
Potts (2015; USA) <sup>28</sup>	?	+	+	!	+	+	+	!
Rutledge (2014; USA) <sup>11</sup>	-	+	+	+	+	+	+	-
Singfer (2017; Belgium) <sup>S1</sup>	?	+	+	+	?	+	?	?
Thenier-Villa (2017; Spain) <sup>S12</sup>	?	+	+	+	+	+	+	?
Yang (2009; South Korea) <sup>S13</sup>	-	+	+	+	-	+	+	-
Yang (2012; South Korea) <sup>S14</sup>	-	+	+	+	+	+	+	-

Domains:  
D1: Bias due to confounding.  
D2: Bias due to selection of participants.  
D3: Bias in classification of interventions.  
D4: Bias due to deviations from intended interventions.  
D5: Bias due to missing data.  
D6: Bias in measurement of outcomes.  
D7: Bias in selection of the reported result.

Judgement  
! Critical  
- Moderate  
+ Low  
? No information

Supplementary Fig. 1. Risk of bias in non-randomized studies of interventions (ROBINS-I) risk of bias assessment.