Table S1. Risk of bias in risk of bias version 2.0 (ROB 2.0) for randomized controlled trials

Author	Random generating	Allocation concealment	Blindness	Lost to follow-up	Selective reporting	Overall
Bhansali (2014)	Unclear	Unclear	Low	Low risk	Unclear	High
Bhansali (2017)	Unclear	Unclear	Low	Low	Unclear	High
Cai (2016)	Unclear	Unclear	High	Low	Low	High
Carlsson (2015)	Low	High	High	Low	Low	High
Chen (2016)	Unclear	Unclear	Unclear	Low	Low	High
Ghodsi (2012)	Unclear	Unclear	Low	Low	Unclear	High
Haller (2013)	Unclear	Unclear	High	Low	Low	High
Hu (2013)	Unclear	Unclear	Low	Low	Unclear	High
Hu (2016)	Unclear	Unclear	Low	Low	Unclear	High
Skyler (2015)	Low	Unclear	Low	Low	Low	High
Wu (2014)	Unclear	Unclear	High	Low	Low	High

Table S2. Risk of bias in non-randomized studies of interventions (ROBINS-I) for non-randomized controlled trials

Author	Bias due to confounding	Bias in selection	Bias in classification	Bias due to deviations from intended interventions	Bias due to missing data	Bias in measurement of outcomes	Bias in selection of the reported result	Overall
Giannopoulou (2014)	Serious	Moderate	Low	Low	Low	Moderate	Low	Moderate
Hu (2012)	Low	Moderate	Serious	Low	Low	Moderate	Low	Serious
Ulyanova (2016)	Serious	Serious	Serious	Low	Low	Moderate	Low	Serious

Table S3. Subgroup analysis

Subgroup	Number of studies	Mean difference (95%CI)	I^2
DM type			
T1DM	5	0.32 (−0.33 to 0.97)	40.3%
T2DM	9	1.23 (0.43 to 2.04)	59.7%
Cell origin			
Auto	7	0.50 (−0.16 to 1.17)	46.7%
Allo	7	1.23 (0.14 to 2.33)	46.0%
Cell culture			
Yes	5	1.39 (0.24 to 2.53)	39.6%
No	9	0.51 (−0.06 to 1.06)	60.4%
Route of delivery			
Systemic	9	0.68 (−0.22 to 2.02)	59.9%
Local	2	0.73 (−0.55 to 2.02)	14.6%
Both	4	1.17 (0.72 to 1.61)	25.4%
Study design			
RCT	13	0.93 (0.36 to 1.52)	87.8%
NRCT	2	0.28 (−1.75 to 2.32)	12.2%

DM: diabetes mellitus, Auto: autologous, Allo: allogeneic.

Table S4. Meta-regression analysis

Characteristics	Mean difference (95%CI)	p-value
DM type	0.925 (−0.207 to 2.056)	0.109
Cell origin	0.448 (−0.493 to 1.388)	0.351
Cell culture	0.865 (−0.259 to 1.989)	0.132
Route of delivery	0.305 (−0.345 to 0.959)	0.361
Study design	−0.669 (−0.374 to 1.036)	0.442

DM: diabetes mellitus.