

**Supplementary Table 2.** Summary of sensitivity analysis for studies with parallel design

Outcomes and subgroups	No. of comparisons	No. of patients		Mean difference between automated insulin delivery systems and other insulin therapy (95% CI), %	Z value for overall effect	P value for overall effect	I <sup>2</sup> , %	Chi <sup>2</sup>	df	P value	Tau <sup>2</sup>
		Intervention	Control								
TIR	22	1,245	962	12.290 (9.441 to 15.139)	8.45	<0.001	84.7	136.86	21	<0.001	36.6519
TBR	22	1,245	962	-0.794 (-1.242 to -0.345)	-3.47	0.001	83.2	125.26	21	<0.001	0.7736
TAR	18	1,187	893	-11.495 (-14.708 to -8.282)	-7.012	<0.001	83.9	105.83	17	<0.001	38.5441
CV	19	1,064	785	-1.079 (-2.102 to -0.055)	-2.066	0.039	75.2	72.57	18	<0.001	3.5708
GRI	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
HbA1c	16	1,145	863	-0.413 (-0.516 to -0.311)	-7.907	<0.001	36.1	23.46	15	0.075	0.0147
Insulin dose	14	671	509	0.003 (-0.150 to 0.156)	0.037	0.970	36.8	20.55	13	0.082	0.0301

CI, confidence interval; TIR, time in range; TBR, time below range; TAR, time above range; CV, coefficient of variation; GRI, glycemia risk index; NA, not applicable; HbA1c, glycosylated hemoglobin.

**Supplementary Table 3.** Summary of publication bias for all outcomes by Egger's test

Outcome	T value	P value
TIR	1.28	0.204
TBR	-0.70	0.488
TAR	-0.82	0.418
CV	1.37	0.178
GRI	-1.00	0.373
HbA1c	-1.58	0.128
Insulin dose	-1.13	0.264
Severe hypoglycemia	1.91	0.072
Diabetic ketoacidosis	1.04	0.334

TIR, time in range; TBR, time below range; TAR, time above range; CV, coefficient of variation; GRI, glycemia risk index; HbA1c, glycosylated hemoglobin.