

Supplementary Table 4. Summary of quality of evidence for all outcomes based on the GRADE

Outcomes	Certainty assessment							Number of patients		Effect		Certainty
	No. of comparisons	Study design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	Automated insulin delivery systems	Control treatment	Relative (95% CI)	Absolute (95% CI)	
TIR	62	Randomized trials	Not serious ^a	Serious ^b	Not serious	Not serious ^c	None	2,292	2,008	-	MD 11.74% (9.37 to 14.12)	⊕⊕⊕○ Moderate
TBR	60	Randomized trials	Not serious ^a	Serious ^b	Not serious	Not serious ^c	None	2,242	1,958	-	MD -1.20% SD (-1.62 to -0.79)	⊕⊕⊕○ Moderate
TAR	54	Randomized trials	Not serious ^a	Serious ^b	Not serious	Not serious ^c	None	1,979	1,684	-	MD -10.17% (-13.18 to -7.16)	⊕⊕⊕○ Moderate
CV	41	Randomized trials	Not serious ^a	Serious ^b	Not serious	Not serious ^c	None	1,682	1,402	-	MD -1.31% (-2.16 to -0.47)	⊕⊕⊕○ Moderate
HbA1c	25	Randomized trials	Not serious ^a	Not serious	Not serious	Not serious ^c	None	1,453	1,171	-	MD -0.36% (-0.44 to -0.28)	⊕⊕⊕○ High
GRI	6	Randomized trials	Not serious ^a	Serious ^b	Not serious	Not serious ^c	None	139	139	-	MD -3.74 (-6.34 to -1.14)	⊕⊕⊕○ Moderate
Insulin dose	44	Randomized trials	Not serious ^a	Serious ^b	Not serious	Not serious ^c	None	1,538	1,376	-	SMD 0.03 (-0.08 to 0.15)	⊕⊕⊕○ Moderate
Severe hypoglycemia	21	Randomized trials	Not serious ^a	Not serious	Not serious	Not serious ^c	None	53/1,134 (4.7%)	48/977 (4.9%)	RR 0.92 (0.65 to 1.31)	-	⊕⊕⊕⊕ High
Diabetic ketoacidosis	9	Randomized trials	Not serious ^a	Not serious	Not serious	Not serious ^c	None	8/554 (1.4%)	5/445 (1.1%)	RR 1.15 (0.47 to 2.80)	-	⊕⊕⊕⊕ High

GRADE, Grading of Recommendations Assessment, Development, and Evaluation; CI, confidence interval; TIR, time in range; MD, mean difference; TBR, time below range; SD, standard deviation; TAR, time above range; CV, coefficient of variation; HbA1c, glycosylated hemoglobin; GRI, glycemia risk index; SMD, standardized mean difference; RR, relative risk.

^aAlthough all 65 studies were unblinded, the certainty of the evidence was not rated down for risk of bias because the nature of the intervention precludes blinding of patients and personnel, ^bThe I^2 was more than 50% indicating significant heterogeneity, ^cEffect size is precise enough not to warrant rating down and the 95% CI is narrow.