Supplementary Table 1. Risk of bias assessment table

Study	Assessment	Risk of bias	Author judgement
Boughton et al. (2021) [11]	Random sequence generation (selection bias)	Low risk	Double-blind, multicentre, multinational, randomized, two period, cross-over design
	Allocation concealment (selection bias)	Low risk	Permuted block randomization was done.
	Blinding of participants & personal (performance bias)	Low risk	Yes, double-blind RCT
	Blinding of outcome assessment (detection bias)	Low risk	Yes, double-blind RCT
	Incomplete outcome data (attrition bias)	Low risk	25 Patients were randomized, of which data from all 25 patients were analysed at the end of study.
	Selective reporting (reporting bias)	Low risk	All pre-specified outcomes were reported.
	Other biases	Low risk	This study was supported by the National Institute for Health Research Cambridge Biomedical Research Centre, and Juvenile Diabetes Research Foundation United States of America (JDRF).
Hsu et al. (2021) [13]	Random sequence generation (selection bias)	Low risk	Randomized, cross-over, double-blind study
	Allocation concealment (selection bias)	Low risk	Randomization done using special coding systems
	Blinding of participants & personal (performance bias)	Low risk	Double-blind RCT
	Blinding of outcome assessment (detection bias)	Low risk	Double-blind RCT
	Incomplete outcome data (attrition bias)	Low risk	19 Participants were randomized and completed the study.
	Selective reporting (reporting bias)	Low risk	All pre-specified outcomes were reported.
	Other biases	Low risk	This work was supported by an investigator initiated research grant funded by the External Research Program of Medtronic, manufacturer of the MiniMed™ 670G.
Klonoff et al. (2019) [12]	Random sequence generation (selection bias)	Low risk	Double-blind, treat-to-target RCT
	Allocation concealment (selection bias)	Low risk	Randomization was done using special codes.
	Blinding of participants & personal (performance bias)	Low risk	Double-blind RCT
	Blinding of outcome assessment (detection bias)	Low risk	Double-blind RCT
	Incomplete outcome data (attrition bias)	Low risk	463 Participants (98.1%) from the initially randomized 472 participants completed the study.
	Selective reporting (reporting bias)	Low risk	All pre-specified outcomes were reported.
	Other biases	High risk	Medical writing and editorial assistance were provided by Steven Barberini and Erin Slobodian of Watermeadow Medical funded by Novo Nordisk A/S. Two authors are from Novo Nordisk A/S.
Ozer et al. (2021) [5]	Random sequence generation (selection bias)	Low risk	Randomized open label active controlled cross-over trial.
	Allocation concealment (selection bias)	Low risk	Randomization codes were prepared by a statistician.
	Blinding of participants & personal (performance bias)	High risk	Open label RCT
	Blinding of outcome assessment (detection bias)	High risk	Open label RCT
	Incomplete outcome data (attrition bias)	Low risk	40 Patients were randomized and completed the study. Two patients missed some of the follow-up.
	Selective reporting (reporting bias)	Low risk	All pre-specified outcomes were reported.
	Other biases	High risk	The authors disclosed the receipt of financial support from Novo Nordisk for the research, authorship, and/or publication of this article.

RCT, randomised controlled trial.