Supplementary Files

Figure S1. Patient flow of the rtCGM and isCGM cohorts

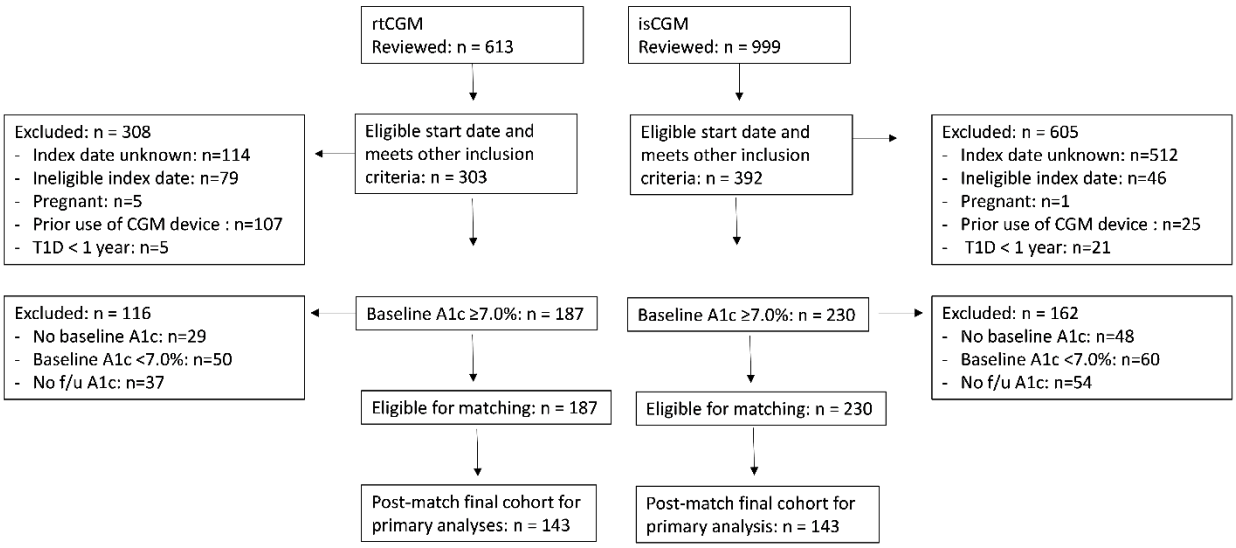
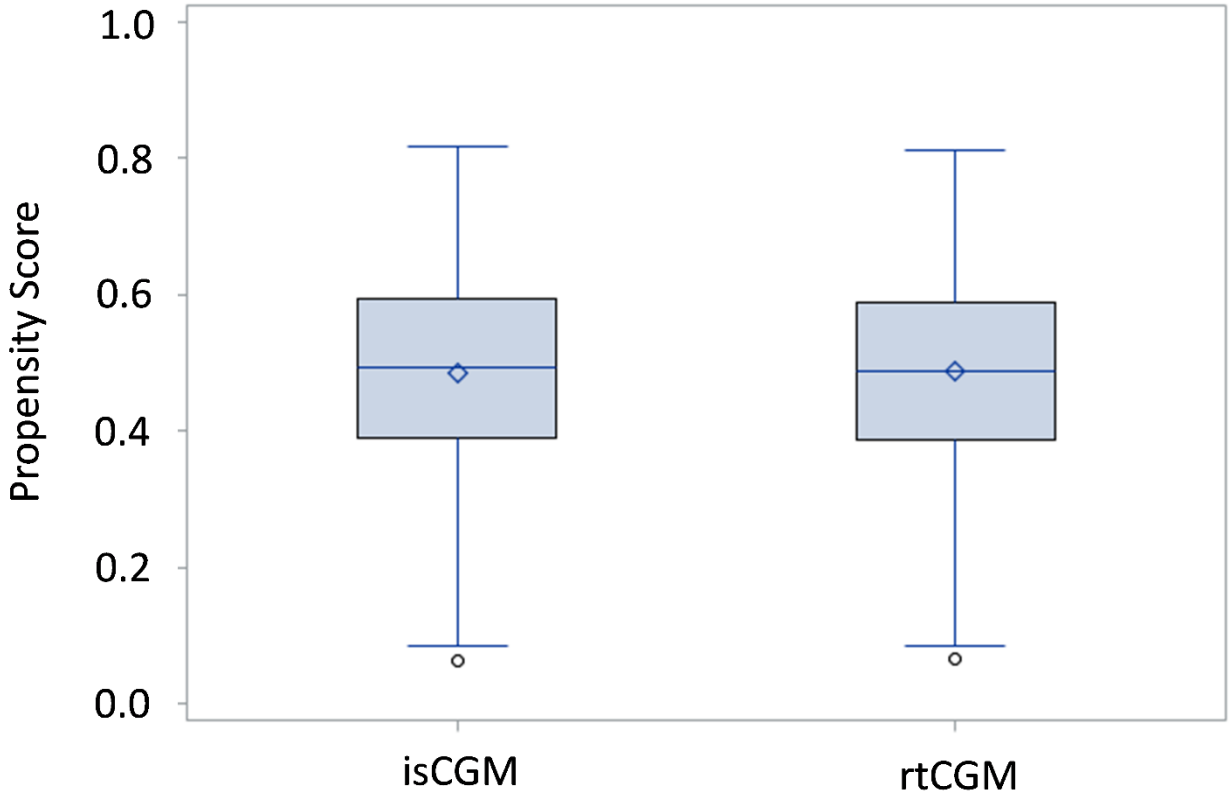


Figure S2. Box-and-whiskers plot of the distribution of the propensity score in the matched rtCGM and isCGM cohorts



The propensity score was estimated with a logistic regression model, with rtCGM as the dependent variable and the following independent variables: age, sex, duration of diabetes, baseline HbA1c, index year, ethnicity, education, insulin mode, history of a macrovascular complication, history of a microvascular complication, chronic kidney disease, use of a statin therapy, use of another type of lipid therapy, use of an angiotensin-converting-enzyme inhibitors or angiotensin II receptor blockers, use of another type of therapy for cardiovascular disease, and an interaction term between age and macrovascular complication.

Table S1. Baseline characteristics of the rtCGM and SMBG cohorts pre- and post-propensity score matching

	Unmatched			Matched		
	rtCGM	SMBG	d	rtCGM	SMBG	d
N	187	759		171	171	
Age (years	41.5 ± 12.7	46.4 ± 16.2	0.332	42.5 ± 12.7	42.0 ± 15.1	0.037
Females, n (%)	112 (59.9)	365 (48.1)	0.239	96 (56.1)	96 (56.1)	0.000
Duration of T1D (years)	21.1 ± 13.1	22.2 ± 14.1	0.086	21.5 ± 13.5	21.9 ± 13.2	0.026
White ethnicity, n (%)	143 (76.5)	496 (65.4)	0.247	127 (74.3)	131 (76.6)	0.054
Education, n (%)						
Post-secondary school	110 (58.8)	402 (53.0)	0.118	96 (56.1)	100 (58.5)	0.047
Secondary school	37 (19.8)	195 (25.7)	0.141	36 (21.1)	34 (19.9)	0.029
HbA1c, mmol/mol (%)	66 ± 11 (8.2 ± 1.0)	69 ± 15 (8.4 ± 1.4)	0.165	67 ± 11 (8.3 ± 1.0)	67 ± 12 (8.3 ± 1.1)	0.021
Insulin mode, n (%)						
MDI	111 (59.4)	479 (63.1)	0.130	104 (60.8)	100 (58.5)	0.024
CSII	76 (40.6)	280 (36.9)	0.130	67 (39.2)	71 (41.5)	0.024
Co-morbidities, n (%)						
Macrovascular complications	6 (3.2)	44 (5.8)	0.125	6 (3.5)	5 (2.9)	0.033
Microvascular complications	31 (16.6)	138 (18.2)	0.042	26 (15.2)	26 (15.2)	0.000
CKD	26 (13.9)	196 (25.8)	0.302	26 (15.2)	26 (15.2)	0.000
Non-diabetes therapies, n (%)						
Statins	78 (41.7)	396 (52.2)	0.211	75 (43.9)	66 (38.6)	0.107
Other lipid therapies	6 (3.2)	53 (7.0)	0.172	6 (3.5)	7 (4.1)	0.031

ACEi/ARB	58 (31.0)	316 (41.6)	0.222	56 (32.8)	53 (31.0)	0.038
Other CVD therapies	21 (11.2)	152 (20.0)	0.244	21 (12.8)	18 (10.5)	0.055
Index year						
2018	64 (34.2)	115 (15.2)	0.454	54 (31.6)	53 (31.0)	0.013
2019	75 (40.1)	168 (22.1)	0.396	69 (40.4)	65 (38.0)	0.048
2020	48 (25.7)	476 (62.7)	0.804	48 (28.1)	53 (31.0)	0.064

d = standardized mean difference. d <0.1 indicates a variable is balanced between cohorts. MDI = multiple daily injections, CSII = continuous subcutaneous insulin infusion; CKD = chronic kidney disease; ACEi/ARB = angiotensin converting enzyme inhibitor/angiotensin II receptor blockers; CVD = cardiovascular disease.

Table S3. Between treatment difference in HbA1c in the matched rtCGM and SMBG cohorts

rtCGM			SMBG				
n	Baseline HbA1c, mmol/mol (%)	Follow-up HbA1c, mmol/mol (%)	n	Baseline HbA1c, mmol/mol (%)	Follow-up HbA1c, mmol/mol (%)	adjusted mean difference (95% CI)	adjusted p-value
171	67 ± 11 (8.3 ± 1.0)	60 ± 11 (7.6 ± 1.0)	171	67 ± 12 (8.3 ± 1.1)	64 ± 13 (8.0 ± 1.2)	-5 (-7 to -3) (-0.4 [-0.6 to -0.3])	<0.001
Baseline HbA1c < 69 mmol/mol (8.5%)							
108	60 ± 5 (7.7 ± 0.4)	55 ± 8 (7.2 ± 0.7)	111	60 ± 5 (7.7 ± 0.4)	60 ± 9 (7.6 ± 0.8)	-5 (-7 to -2) (-0.4 [-0.6 to -0.2])	<0.001
Baseline HbA1c ≥ 69 mmol/mol (8.5%)							
63	78 ± 10 (9.3 ± 0.9)	68 ± 10 (8.3 ± 1.0)	60	80 ± 11 (9.4 ± 1.0)	73 ± 14 (8.9 ± 1.3)	-5 (-9 to -1) (-0.4 [-0.5 to -0.3])	0.01
MDI therapy							
104	67 ± 11 (8.3 ± 1.0)	59 ± 12 (7.6 ± 1.1)	100	69 ± 13 (8.4 ± 1.2)	66 ± 14 (8.2 ± 1.3)	-5 (-8 to -3) (-0.5 [-0.7 to -0.3])	<0.001
CSII therapy							
67	66 ± 12 (8.2 ± 1.1)	60 ± 9 (7.7 ± 0.8)	71	62 ± 12 (8.0 ± 0.9)	64 ± 9.5 (7.9 ± 1.1)	-3 (-6 to 0) (-0.3 [-0.6 to 0.0])	0.04

Data presented as mean ± SD. The multivariate linear regression model was adjusted for baseline HbA1c for follow-up HbA1c for all participants, MDI therapy and CSII therapy. rtCGM = real-time continuous glucose monitor; SMBG = self-measured blood glucose; LS = least squares; MDI = multiple daily injections; CSII = continuous subcutaneous insulin infusion.