Supplementary Data

SUPPLEMENTARY TABLE S1. EFFECTS OF 26 WEEKS OF CONTINUOUS GLUCOSE MONITORING ON QUALITY OF GLYCEMIC CONTROL, HYPOGLYCEMIA, HYPERGLYCEMIA, AND GLYCEMIC VARIABILITY

Parameter	%Change after 26 weeks of CGM	*t* value for change, baseline to 26 weeks	p value (calculated, 2- sided, df ~ 100)	Description
Average glucose level				
HbA1c (mmol/mol) (%)	**-3.28**	**-5.4**	**4.5×10^{-7}**	Hemoglobin A1c, reflecting Average Glucose
Mean Glucose (mmol/L)	**-3.69**	**-3.9**	**1.7×10^{-4}**	Average Glucose, measured directly by CGM
Hyper- and Hypoglycemia				
HBGI	**-14.9**	**-6.7**	**1.2×10^{-9}**	Hyperglycemia
LBGI	**-24.5**	**-6.0**	**3.2×10^{-8}**	Hypoglycemia
Overall Quality of Glycemic Control				
M-value	**-25.8**	**-8.0**	**2.3×10^{-12}**	Overall Quality
GRADE	**-16.5**	**-6.4**	**5.1×10^{-9}**	Overall Quality
J-Index	**-9.96**	**-5.1**	**1.6×10^{-6}**	Overall Quality and Variability: utilizes (mean and SD)^2 (sensitive to hyperglycemia, relatively insensitive to hypoglycemia)
Glycemic Variability				
MODD	**-8.16**	**-6.0**	**3.2×10^{-8}**	Variability: between days, for each time of day
SD	**-6.46**	**-5.3**	**6.9×10^{-7}**	Variability: overall, within and between days
$CONGA_1$	**-5.18**	**-4.9**	**3.7×10^{-6}**	Variability: hour to hour
MAGE	**-6.81**	**-4.0**	**1.2×10^{-4}**	Variability: major changes during the day (? postprandial)
%CV	**-3.61**	**-3.9**	**1.7×10^{-4}**	Variability: SD as percentage of mean
ADRR	**-6.27**	**-3.6**	**5.0×10^{-4}**	Variability: Greatest Risk of Highs + Greatest Risk of Lows, for each day, averaged over days

Based on analysis by El Laboudi et al. (Table 5 of El Laboudi et al.[11] using data from JDRF-CGM study[6,7]). Parameters have been rearranged by category; *P*-values are calculated from the paired *t* tests without truncation.

The significance level for changes in HbA1c following introduction of CGM was greater than for the changes in mean glucose by 2.5 orders of magnitude, even though the latter was based on CGM. The level of significance for SD was three orders of magnitude greater than for MAGE, %CV, or ADRR, implying that SD is one of the most sensitive indicators of changes in glycemic variability. There were unusually high levels of significance for quality of glycemic control M, GRADE, J index, risks of hypo- and hyperglycemia, and glycemic variability (MODD, SD, and $CONGA_1$). These *P*-values are based on comparisons between 26 weeks and baseline within the same individual, not considering the between-subject variability involved when making comparisons with a control group.

CGM, continuous glucose monitoring.