

SUPPLEMENTARY DATA

Supplementary Table 1. HbA1c Outcomes in Subgroups

	N*	HbA1c at Randomization Mean ± SD		N(%) decreased 0.5% with no severe hypo		Change <sup>†</sup> from Randomization to 26 weeks (%) Mean ± SD		% with 26 week HbA1c <7.0%	
		CGM	Control	CGM	Control	CGM	Control	CGM	Control
<b>Overall</b>	69/68	7.9 ± 0.8	7.9 ± 0.8	13 (19%)	19 (28%)	-0.1 ± 0.6	-0.1 ± 0.6	11 (16%)	10 (15%)
<b>Age -yr</b>									
4-5	18/15	8.0 ± 0.8	8.0 ± 0.9	5 (28%)	4 (27%)	-0.2 ± 0.6	0.0 ± 0.7	6 (33%)	2 (13%)
6-7	22/21	7.8 ± 0.9	7.7 ± 0.5	3 (14%)	6 (29%)	0.0 ± 0.5	-0.2 ± 0.7	2 (9%)	4 (19%)
8-9	29/32	7.9 ± 0.8	7.9 ± 0.8	5 (17%)	9 (28%)	-0.1 ± 0.8	0.0 ± 0.6	3 (10%)	4 (13%)
<b>Gender</b>									
Female	31/31	8.0 ± 0.8	7.9 ± 0.6	5 (16%)	8 (26%)	-0.2 ± 0.7	-0.1 ± 0.7	5 (16%)	5 (16%)
Male	38/37	7.9 ± 0.8	7.9 ± 0.9	8 (21%)	11 (30%)	0.0 ± 0.6	-0.1 ± 0.5	6 (16%)	5 (14%)
<b>Race/Ethnicity<sup>‡</sup></b>									
White	51/55	8.0 ± 0.8	7.9 ± 0.8	9 (18%)	17 (31%)	-0.1 ± 0.7	-0.1 ± 0.7	6 (12%)	7 (13%)
Other	18/12	7.7 ± 0.8	7.8 ± 0.7	4 (22%)	2 (17%)	-0.1 ± 0.5	0.0 ± 0.5	5 (28%)	2 (17%)
<b>Insulin Modality<sup>§</sup></b>									
Pump	39/47	7.7 ± 0.6	7.8 ± 0.7	10 (26%)	12 (26%)	-0.1 ± 0.6	-0.1 ± 0.6	7 (18%)	8 (17%)
MDI	26/19	8.3 ± 0.9	8.1 ± 0.9	2 (8%)	7 (37%)	0.0 ± 0.7	0.0 ± 0.7	3 (12%)	1 (5%)
<b>Baseline HbA1c (%)</b>									
<8.0	41/42	7.4 ± 0.4	7.4 ± 0.4	5 (12%)	7 (17%)	0.0 ± 0.5	+0.1 ± 0.6	10 (24%)	9 (21%)
≥8.0	28/26	8.7 ± 0.6	8.6 ± 0.5	8 (29%)	12 (46%)	-0.3 ± 0.8	-0.3 ± 0.7	1 (4%)	1 (4%)
<b>BMI Z score</b>									
<0.5	27/31	7.9 ± 0.7	7.7 ± 0.7	4 (15%)	9 (29%)	0.1 ± 0.5	-0.1 ± 0.6	2 (7%)	6 (19%)
≥0.5	42/37	7.9 ± 0.8	8.0 ± 0.8	9 (21%)	10 (27%)	-0.2 ± 0.7	-0.1 ± 0.7	9 (21%)	4 (11%)
<b>Parent Education level</b>									
Lower than college	19/23	8.0 ± 0.6	8.0 ± 0.5	7 (37%)	7 (30%)	-0.3 ± 0.7	0.0 ± 0.6	5 (26%)	1 (4%)
College or above	50/45	7.9 ± 0.9	7.8 ± 0.9	6 (12%)	12 (27%)	0.0 ± 0.6	-0.1 ± 0.7	6 (12%)	9 (20%)

\* # subjects at 26 wks: CGM/Control † – Negative change denotes a drop in A1c from baseline ‡ – One subject did not report race/ethnicity.

§ Excludes 4 in CGM group and 2 in control group who switched from MDI to pump (n= 5) or pump to MDI (n=1) during study.

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**Supplementary Table 2. CGM-measured Glycemic Indices\***

	Baseline		13 weeks		26 weeks		P-value <sup>†</sup>
	CGM	Control	CGM	Control	CGM	Control	
	N=62	N=67	N=61	N=65	N=62	N=67	
Mean Glucose (mg/dL) <i>mean ± SD</i>	194 ± 36	195 ± 35	190 ± 33	190 ± 36	191 ± 33	193 ± 33	0.30
% values 71-180 mg/dL ( <i>median</i> )	46%	48%	52%	50%	48%	49%	0.60
<b>Hypoglycemia</b> ( <i>median</i> )							
% values ≤70 mg/dL	2.7%	2.0%	2.0%	1.9%	1.5%	2.1%	0.78
% values ≤60 mg/dL	1.0%	0.7%	0.5%	0.7%	0.4%	0.6%	0.31
% values ≤50 mg/dL	0.2%	0.1%	0.0%	0.0%	0.0%	0.1%	0.13
Hypoglycemia Area under the Curve <sup>‡</sup>	0.3	0.2	0.1	0.2	0.1	0.2	0.29
LBGI <sup>§</sup>	0.8	0.6	0.5	0.5	0.5	0.6	0.58
<b>Hyperglycemia</b> ( <i>median</i> )							
% values >180 mg/dL	49%	47%	44%	48%	50%	48%	0.82
% values >200 mg/dL	44%	37%	35%	38%	39%	41%	0.72
% values >250 mg/dL	25%	23%	19%	20%	20%	22%	0.18
Hyperglycemia Area under the Curve <sup>□</sup>	41	39	32	33	33	39	0.16
HBGI <sup>¶</sup>	13.8	12.7	11.4	12.1	11.3	13.2	0.24
CV(%) <sup>#</sup> ( <i>median</i> )	43%	43%	40%	41%	40%	41%	0.07

\* This table is restricted to subjects with at least 24 hours of glucose data at 26 weeks.

† P-value from ANCOVA for the comparison of the treatment groups at 26 weeks adjusted for baseline value, baseline A1c, site and device type, based on the van der Warden transformations.

‡ Total area below 70 mg/dL; reflects both percentage and severity of glucose values in the hypoglycemic range

§ Low blood glucose index (1)

□ Total area above 180 mg/dL; reflects both percentage and severity of glucose values in the hyperglycemic range

¶ High blood glucose index (1)

# Coefficient of variation, a measure of glucose variability, defined as Standard Deviation divided by mean glucose.

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**Supplementary Table 3.** Hypoglycemia Fear Survey\*

	Baseline						26 week					
	Mean score	Never (0)	Rarely (1)	Sometimes (2)	Often (3)	Always (4)	Mean score	Never (0)	Rarely (1)	Sometimes (2)	Often (3)	Always (4)
	CGM/Control (N=69/68)						CGM/Control (N=69/68)					
<b>I worry about.....</b>												
1. Not recognizing that my child's blood sugar is low	2.2/2.2	0%/1%	19%/22%	54%/41%	17%/25%	10%/10%	2.1/1.9	1%/7%	29%/24%	41%/46%	17%/15%	12%/9%
2. Not having food, fruit, or juice with me for my child	1.3/1.6	20%/13%	42%/38%	25%/32%	9%/7%	4%/9%	1.4/1.5	16%/12%	43%/44%	25%/32%	14%/7%	1%/4%
3. Having my child feel dizzy pass out in public because of low blood sugar low blood sugar	1.4/1.5	20%/16%	39%/38%	28%/28%	7%/10%	6%/7%	1.3/1.4	26%/19%	38%/37%	25%/31%	6%/7%	6%/6%
4. Feeling that my child will have a reaction while asleep.	2.5/2.5	1%/0%	20%/18%	28%/37%	25%/22%	26%/24%	2.1/2.3	3%/0%	20%/18%	45%/44%	25%/28%	7%/10%
5. My child embarrassing him/herself because of low blood sugar.	0.8/0.6	48%/60%	33%/24%	12%/10%	3%/4%	4%/1%	0.6/0.7	51%/54%	39%/26%	7%/13%	3%/3%	0%/3%
6. My child having a reaction when he/she is out of my care	2.8/2.8	0%/1%	10%/6%	28%/29%	30%/35%	32%/28%	2.4/2.5	4%/0%	17%/13%	32%/41%	28%/29%	19%/16%
7. My child "not being with it" (disoriented)	1.6/1.8	12%/13%	38%/25%	41%/37%	4%/16%	6%/9%	1.4/1.6	19%/13%	29%/35%	42%/35%	9%/12%	1%/4%
8. My child losing control because of low blood sugar	1.4/1.7	14%/22%	51%/22%	25%/32%	3%/12%	7%/12%	1.2/1.4	25%/21%	41%/34%	26%/32%	6%/7%	3%/6%

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	Baseline						26 week					
	Mean score	Never (0)	Rarely (1)	Sometimes (2)	Often (3)	Always (4)	Mean score	Never (0)	Rarely (1)	Sometimes (2)	Often (3)	Always (4)
	CGM/Control (N=69/68)						CGM/Control (N=69/68)					
<b>I worry about.....</b>												
9. No one being around to help my child during a reaction	2.0/2.2	13%/10%	23%/18%	33%/38%	16%/13%	14%/21%	1.8/1.9	10%/12%	36%/32%	28%/21%	17%/26%	9%/9%
10. My child making a mistake or having an accident at school/daycare	1.2/1.4	26%/26%	42%/26%	22%/31%	4%/10%	6%/6%	1.2/1.2	35%/28%	30%/40%	26%/21%	1%/7%	7%/4%
11. My child getting in trouble at school/daycare because of something that happens when his/her sugar is low something that happens when his/her sugar is low	0.9/1.1	42%/40%	30%/28%	22%/19%	3%/7%	3%/6%	0.8/0.9	46%/47%	33%/31%	13%/12%	6%/7%	1%/3%
12. My child having seizures or convulsions	1.6/1.7	26%/24%	25%/28%	25%/21%	14%/15%	10%/13%	1.0/1.4	36%/29%	36%/29%	20%/21%	3%/16%	4%/4%
13. My child developing long term complications from low blood sugar	2.3/2.3	6%/9%	20%/19%	29%/26%	28%/21%	17%/25%	1.8/1.9	16%/10%	26%/26%	36%/37%	10%/13%	12%/13%
14. My child feeling dizzy or woozy when his/her blood sugar is low	2.0/2.3	4%/1%	30%/22%	41%/40%	6%/24%	19%/13%	1.7/2.0	10%/6%	30%/24%	43%/41%	13%/19%	3%/10%

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	Baseline						26 week					
	Mean score	Never (0)	Rarely (1)	Sometimes (2)	Often (3)	Always (4)	Mean score	Never (0)	Rarely (1)	Sometimes (2)	Often (3)	Always (4)
	CGM/Control (N=69/68)						CGM/Control (N=69/68)					
<b>I worry about.....</b>												
15. My child having a low blood sugar during school or sports	2.6/2.6	0%/0%	10%/10%	38%/41%	30%/25%	22%/24%	2.1/2.4	4%/1%	19%/15%	43%/43%	29%/28%	4%/13%

\* Scale 0-4. Higher score denotes more fear.

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**Supplementary Table 4.** Item Responses on the CGM-Satisfaction Scale\* at 26 Weeks (ordered by mean score)

	Mean Score	Percentage				
		Negative †		Neutral	Favorable †	
		1	2	3	4	5
<b>USING THE CONTINUOUS MONITOR:</b>						
Makes me feel safer knowing that I will be warned about low blood sugar before it happens	4.6	0%	1%	3%	33%	62%
► I don't recommend this for other children with diabetes	4.6	0%	0%	6%	33%	61%
I want to use this device when it is approved for sale	4.4	0%	4%	6%	30%	59%
Makes adjusting insulin easier	4.3	0%	3%	6%	51%	41%
Shows patterns in blood sugars that we didn't see before	4.3	1%	0%	6%	55%	38%
► Is more trouble than it is worth	4.3	3%	3%	9%	36%	49%
Helps in adjusting doses of insulin needed through the night	4.3	0%	1%	12%	46%	41%
Helps me to relax, knowing that unwanted changes in blood sugar will be detected quickly	4.2	1%	0%	9%	55%	35%
► Skips too many readings to be useful	4.2	0%	1%	9%	57%	33%
Helps me to be sure about making diabetes decisions	4.2	0%	3%	9%	58%	30%
Has made me worry less about having low blood sugars	4.1	1%	9%	4%	46%	39%
Helps to keep low blood sugars from happening	4.1	1%	6%	7%	51%	35%
Helps prevent problems rather than fixing them after they've happened	4.1	1%	0%	10%	62%	26%
► The feedback from the device is not easy to understand or useful	4.1	0%	4%	12%	57%	28%
Makes it clearer how some everyday habits affect blood sugar levels	4.0	0%	1%	14%	62%	22%
► Gives a lot of results that don't make sense	4.0	0%	4%	17%	52%	26%
► Causes me to be more worried about controlling blood sugars	4.0	3%	10%	7%	46%	33%
Teaches me how eating affects blood sugar	4.0	0%	1%	20%	58%	20%
► Makes it harder to sleep	3.9	3%	7%	14%	43%	32%

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▶ Causes more embarrassment about feeling different from others	3.9	4%	6%	12%	48%	30%
Has taught me new things about diabetes that I didn't know before	3.9	1%	3%	25%	43%	28%
▶ Has caused more family arguments	3.9	4%	6%	17%	38%	35%
Allows more freedom in daily life	3.9	1%	3%	20%	57%	19%
▶ Causes our family to talk about blood sugars too much	3.9	1%	3%	19%	59%	17%
Helps with keeping diabetes under control on sick days	3.9	0%	1%	26%	58%	14%
▶ Interferes a lot with sports, playing outside, etc	3.9	3%	3%	19%	57%	19%
Has helped to adjust pre-meal insulin doses	3.9	1%	4%	16%	64%	14%
▶ Makes me think about diabetes too much	3.8	1%	9%	22%	43%	25%
▶ Causes others to ask too many questions about diabetes	3.8	3%	9%	22%	41%	26%
Has helped me to learn how to treat low sugars better	3.8	1%	7%	13%	68%	10%
▶ Causes too many interruptions during the day	3.8	4%	4%	17%	57%	17%
▶ Causes too many hassles in daily life	3.8	3%	6%	28%	39%	25%
▶ Sometimes gives too much information to work with	3.8	1%	14%	12%	52%	20%
Has helped me to learn about the right amount of exercise	3.7	1%	9%	26%	43%	20%
Makes it easier to complete other diabetes self care duties	3.7	1%	4%	29%	51%	14%
▶ Is too hard to get working right	3.7	6%	7%	17%	48%	22%
▶ Alarms too often for no good reason	3.5	4%	14%	17%	52%	12%
Has helped to control diabetes better even when not wearing it	3.5	0%	14%	35%	41%	10%
Has helped my family to get along better about diabetes	3.4	4%	7%	38%	42%	9%
▶ Has been harder or more complicated than expected	3.4	9%	17%	19%	32%	23%
▶ Shows more "glitches" and "bugs" than it should	3.4	4%	16%	22%	48%	10%
▶ Is uncomfortable or painful	3.3	3%	26%	19%	39%	13%
Has made it easier to accept doing blood sugar tests	3.3	4%	13%	39%	39%	4%

\* Scoring on a 5 point Likert scale with a higher value denoting more favorable response towards CGM use; ▶ indicates a negatively worded item, the scoring of which has been reversed so that a higher score denotes a more favorable response towards CGM.

† Favorable denotes agree/strongly agree with a positively worded statement or disagree/strongly disagree with a negatively worded statement. Negative denotes vice-versa.



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**Supplementary Table 5.** Blood Glucose Monitoring System Rating Questionnaire

**A. In the past month, has this been a problem?\***

	Baseline					26 week				
	Mean score	A Lot (1)	Some (2)	Very Little (3)	Not at all (4)	Mean score	A Lot (1)	Some (2)	Very Little (3)	Not at all (4)
	CGM/Control (N=69/68)					CGM/Control (N=69/68)				
1. Worry or fear about high blood sugar	2.0/1.7	23%/41%	59%/49%	12%/7%	6%/3%	2.3/1.9	19%/22%	42%/65%	32%/12%	7%/1%
2. Effort to keep high blood sugars from happening	1.8/1.6	39%/50%	46%/41%	10%/7%	4%/1%	2.1/1.7	20%/40%	52%/49%	25%/12%	3%/0%
3. Worry or fear about low blood sugar	1.8/1.6	45%/44%	30%/49%	20%/6%	4%/1%	2.2/1.9	20%/29%	43%/56%	30%/15%	6%/0%
4. Effort to keep low blood sugars from happening	1.8/1.8	43%/34%	32%/54%	22%/7%	3%/4%	2.3/1.9	20%/31%	42%/47%	29%/21%	9%/1%
5. Worry or fear about low blood sugar during sleep	1.8/1.8	54%/44%	20%/32%	14%/21%	12%/3%	2.3/2.0	23%/29%	36%/47%	32%/22%	9%/1%
6. Trouble sleeping well	2.6/2.5	26%/18%	19%/35%	26%/31%	29%/16%	2.9/2.6	10%/16%	25%/29%	32%/34%	33%/21%
7. Hard to predict blood sugar readings	2.0/1.9	29%/28%	45%/53%	19%/16%	7%/3%	2.7/2.2	9%/12%	32%/57%	45%/26%	14%/4%
8. Feeling different from others	2.7/2.4	10%/19%	33%/38%	35%/28%	22%/15%	3.0/2.6	9%/9%	20%/38%	30%/41%	41%/12%
9. Amount of time spent thinking about diabetes	1.8/1.6	49%/57%	26%/28%	16%/15%	9%/0%	2.1/1.6	26%/51%	42%/34%	26%/13%	6%/1%
10. Not knowing how eating affects your blood sugar	2.5/2.5	12%/13%	33%/38%	45%/34%	10%/15%	2.9/2.7	3%/4%	28%/35%	43%/47%	26%/13%
11. Meal plan is too strict	3.3/3.1	1%/4%	13%/19%	38%/37%	48%/40%	3.3/3.1	3%/4%	14%/16%	33%/41%	49%/38%
12. Amount of time and care needed for diabetes by my family or me	2.0/2.0	35%/35%	41%/44%	14%/10%	10%/10%	2.3/1.8	17%/43%	42%/34%	32%/21%	9%/3%
13. Worry or fear about long term health	2.0/1.8	41%/43%	32%/46%	12%/6%	16%/6%	2.3/1.9	19%/40%	42%/37%	29%/22%	10%/1%

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14. Pain or discomfort from finger sticks or sensors	2.9/2.5	1%/9%	36%/44%	38%/34%	25%/13%	2.7/2.6	7%/9%	32%/34%	43%/46%	17%/12%
15. Pain or discomfort from insulin shots or pump sets	2.5/2.3	7%/9%	46%/60%	38%/22%	9%/9%	2.8/2.5	7%/7%	25%/43%	54%/41%	14%/9%
16. Family arguments or worries about diabetes	2.8/2.5	10%/18%	28%/32%	38%/29%	25%/21%	2.9/2.6	6%/9%	28%/38%	33%/32%	33%/21%
17. Handling work or school along with diabetes	2.5/2.4	13%/21%	39%/31%	33%/35%	14%/13%	2.7/2.3	9%/18%	33%/46%	33%/24%	25%/13%
18. Talking part in sports, exercise or playing	3.0/3.1	7%/3%	26%/24%	28%/34%	39%/40%	3.2/3.0	1%/4%	20%/24%	36%/44%	42%/28%
19. Knowing how much insulin to take	2.6/2.9	7%/4%	39%/32%	36%/37%	17%/26%	3.0/2.9	1%/4%	28%/25%	45%/50%	26%/21%
20. Keeping up with friends or peers who don't have diabetes	3.4/3.2	4%/4%	6%/16%	36%/38%	54%/41%	3.4/3.1	1%/6%	10%/13%	32%/41%	57%/40%
21. Reacting to all of the blood sugar results that I get	2.6/2.6	10%/7%	38%/41%	35%/35%	17%/16%	2.9/2.7	4%/4%	29%/41%	36%/34%	30%/21%
22. Dealing with others who ask about diabetes	3.3/3.1	3%/4%	13%/21%	35%/40%	49%/35%	3.3/3.1	3%/1%	12%/18%	35%/47%	51%/34%

\* Scale 1-4. Higher score denotes fewer problems.

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**B. How has it changed in last 6 months?\***

	Baseline				26 week			
	Mean score	Worse (1)	Same (2)	Better (3)	Mean score	Worse (1)	Same (2)	Better (3)
	CGM/Control (N=69/68)				CGM/Control (N=69/68)			
1. Worry or fear about high blood sugar	2.0/1.9	12%/19%	72%/68%	16%/13%	2.5/2.1	3%/10%	42%/68%	55%/22%
2. Effort to keep high blood sugars from happening	2.1/2.0	9%/13%	75%/74%	16%/13%	2.5/2.1	3%/12%	45%/62%	52%/26%
3. Worry or fear about low blood sugar	2.1/2.0	4%/9%	81%/78%	14%/13%	2.6/2.0	3%/6%	33%/85%	64%/9%
4. Effort to keep low blood sugars from happening	2.1/2.1	3%/3%	81%/85%	16%/12%	2.6/2.1	3%/4%	33%/81%	64%/15%
5. Worry or fear about low blood sugar during sleep	2.1/2.0	9%/13%	77%/74%	14%/13%	2.6/2.1	4%/7%	35%/79%	61%/13%
6. Trouble sleeping well	1.9/2.0	12%/6%	87%/88%	1%/6%	2.4/2.0	4%/3%	54%/91%	42%/6%
7. Hard to predict blood sugar readings	2.0/2.0	7%/9%	90%/82%	3%/9%	2.6/2.1	3%/4%	39%/85%	58%/10%
8. Feeling different from others	2.0/1.9	6%/13%	91%/82%	3%/4%	2.1/2.0	7%/6%	74%/88%	19%/6%
9. Amount of time spent thinking about diabetes	2.0/2.0	12%/12%	80%/81%	9%/7%	2.3/2.0	4%/4%	65%/91%	30%/4%
10. Not knowing how eating affects your blood sugar	2.1/2.1	1%/3%	86%/84%	13%/13%	2.4/2.1	3%/1%	49%/87%	48%/12%
11. Meal plan is too strict	2.0/2.1	0%/3%	97%/84%	3%/13%	2.2/2.1	1%/3%	75%/87%	23%/10%
12. Amount of time and care needed for diabetes by my family or me	1.9/2.0	10%/3%	86%/91%	4%/6%	2.2/2.0	7%/6%	68%/87%	25%/7%
13. Worry or fear about long term health	2.0/1.9	7%/12%	87%/85%	6%/3%	2.2/2.0	6%/7%	68%/85%	26%/7%
14. Pain or discomfort from finger sticks or sensors	2.0/2.0	1%/4%	97%/94%	1%/1%	2.2/2.0	4%/6%	75%/91%	20%/3%
15. Pain or discomfort from insulin shots or pump sets	2.0/2.0	4%/7%	88%/88%	7%/4%	2.1/2.0	7%/6%	80%/91%	13%/3%

## SUPPLEMENTARY DATA

16. Family arguments or worries about diabetes	2.0/1.9	6%/16%	87%/79%	7%/4%	2.1/2.0	10%/4%	72%/87%	17%/9%
17. Handling work or school along with diabetes	2.0/1.9	10%/15%	75%/81%	14%/4%	2.2/2.1	10%/7%	57%/79%	33%/13%
18. Talking part in sports, exercise or playing	2.1/2.0	0%/3%	91%/90%	9%/7%	2.3/2.0	1%/6%	65%/91%	33%/3%
19. Knowing how much insulin to take	2.1/2.1	3%/4%	87%/81%	10%/15%	2.4/2.0	3%/1%	55%/94%	42%/4%
20. Keeping up with friends or peers who don't have diabetes	2.0/2.0	4%/1%	90%/94%	6%/4%	2.3/2.0	1%/3%	71%/96%	28%/1%
21. Reacting to all of the blood sugar results that I get	2.0/2.0	4%/7%	87%/87%	9%/6%	2.3/2.0	3%/6%	61%/84%	36%/10%
22. Dealing with others who ask about diabetes	2.0/2.0	4%/3%	91%/93%	4%/4%	2.1/2.1	4%/1%	78%/90%	17%/9%

\* Scale 1-3. Higher score denotes improvement

SUPPLEMENTARY DATA

**Supplementary Table 6.** Pediatric Assessment In Diabetes Survey (PAID)\*

	Baseline						26 week					
	Mean Score	Favorable †		Neutral (2)	Negative †		Mean Score	Favorable †		Neutral (2)	Negative †	
		(0)	(1)		(3)	(4)		(0)	(1)		(3)	(4)
	CGM/Control (N=69/68)						CGM/Control (N=69/68)					
1. I have clear and concrete goals for my child's diabetes care.	0.5/0.4	61%/63%	30%/34%	7%/1%	1%/1%	0%/0%	0.5/0.4	57%/63%	36%/32%	4%/4%	3%/0%	0%/0%
2. ►I feel discouraged with my child's diabetes treatment plan.	1.0/1.1	48%/49%	23%/21%	14%/9%	13%/18%	1%/4%	0.6/0.9	57%/50%	29%/28%	12%/9%	3%/10%	0%/3%
3. ►I feel scared when thinking about my child having/living with diabetes.	3.0/3.1	3%/3%	9%/7%	10%/12%	42%/29%	36%/49%	2.4/2.8	13%/7%	13%/10%	14%/12%	38%/34%	22%/37%
4. ►I have difficulty dealing with school staff (e.g., nurses, teachers, principals).	1.2/1.1	48%/50%	12%/19%	22%/10%	14%/15%	4%/6%	0.9/0.9	52%/56%	20%/19%	14%/12%	9%/7%	4%/6%
5. ►I feel that my child is deprived regarding food and meals.	1.3/1.5	43%/34%	16%/16%	13%/18%	26%/26%	1%/6%	0.9/1.3	46%/38%	28%/26%	12%/10%	14%/21%	0%/4%
6. ►I feel that my child is excluded from activities/events because of his/her diabetes.	1.0/1.4	43%/40%	29%/19%	14%/10%	10%/26%	3%/4%	0.8/1.0	54%/53%	30%/18%	4%/7%	10%/21%	1%/1%

SUPPLEMENTARY DATA

	Baseline						26 week					
	Mean Score	Favorable †		Neutral (2)	Negative †		Mean Score	Favorable †		Neutral (2)	Negative †	
		(0)	(1)		(3)	(4)		(0)	(1)		(3)	(4)
	CGM/Control (N=69/68)						CGM/Control (N=69/68)					
7. I know whether the mood or behavior my child is displaying is related to his/her blood sugar level.	1.1/1.2	22%/22%	57%/50%	12%/16%	6%/7%	4%/4%	1.3/1.3	23%/19%	49%/51%	9%/13%	14%/15%	4%/1%
8. ► I feel upset when my child's blood sugars are out of range.	3.2/3.1	1%/3%	4%/3%	12%/12%	38%/44%	45%/38%	2.9/2.9	4%/1%	9%/13%	20%/10%	29%/44%	38%/31%
9. ► I worry about my child having a low blood sugar.	3.5/3.6	1%/0%	3%/0%	6%/9%	23%/22%	67%/69%	2.9/3.3	3%/0%	9%/1%	13%/12%	42%/41%	33%/46%
10. ► I feel angry when I think about my child having/living with diabetes.	2.1/2.4	22%/16%	17%/9%	14%/21%	25%/25%	22%/29%	2.1/2.0	19%/25%	17%/12%	17%/19%	29%/26%	17%/18%
11. ► I feel constantly concerned about what my child eats.	2.6/3.0	10%/3%	12%/15%	13%/7%	36%/31%	29%/44%	2.2/2.9	19%/4%	12%/6%	20%/15%	28%/49%	22%/26%
12. ► I worry about the future and the possibility of serious complications for my child.	3.3/3.6	6%/0%	4%/1%	4%/6%	23%/22%	62%/71%	3.0/3.2	6%/3%	9%/3%	7%/6%	36%/46%	42%/43%

SUPPLEMENTARY DATA

	Baseline						26 week					
	Mean Score	Favorable †		Neutral (2)	Negative †		Mean Score	Favorable †		Neutral (2)	Negative †	
		(0)	(1)		(3)	(4)		(0)	(1)		(3)	(4)
	CGM/Control (N=69/68)						CGM/Control (N=69/68)					
13. ► I feel upset when my child's diabetes management is "off track."	3.3/3.4	1%/1%	4%/1%	10%/6%	33%/35%	51%/56%	2.9/3.2	3%/3%	12%/4%	7%/9%	45%/38%	33%/46%
14. ► I worry that my child will not be taken care of when away from home.	2.9/2.6	7%/12%	10%/15%	10%/7%	33%/31%	39%/35%	2.3/2.3	13%/10%	19%/24%	10%/10%	38%/38%	20%/18%
15. ► I feel like the "diabetes police."	2.7/2.9	9%/6%	9%/6%	17%/18%	38%/38%	28%/32%	2.3/2.4	19%/15%	12%/10%	12%/19%	39%/34%	19%/22%
16. ► I feel that diabetes takes up too much mental and physical energy.	2.1/2.5	17%/15%	19%/6%	23%/22%	22%/25%	19%/32%	1.9/2.3	17%/18%	28%/10%	19%/24%	19%/26%	17%/22%
17. ► I feel alone in managing my child's diabetes.	1.3/1.5	38%/37%	23%/18%	12%/9%	22%/28%	6%/9%	1.2/1.2	42%/50%	25%/12%	10%/10%	19%/21%	4%/7%
18. ► I feel that other family members are not supportive in managing my child's diabetes.	1.2/1.3	46%/43%	17%/18%	10%/10%	20%/25%	6%/4%	1.1/1.3	42%/49%	30%/12%	6%/12%	20%/18%	1%/10%
19. ► I worry whether or not my child will remember to eat his/her snack.	1.5/1.5	36%/41%	17%/13%	16%/12%	20%/21%	10%/13%	1.2/1.4	28%/32%	42%/25%	17%/16%	9%/21%	4%/6%

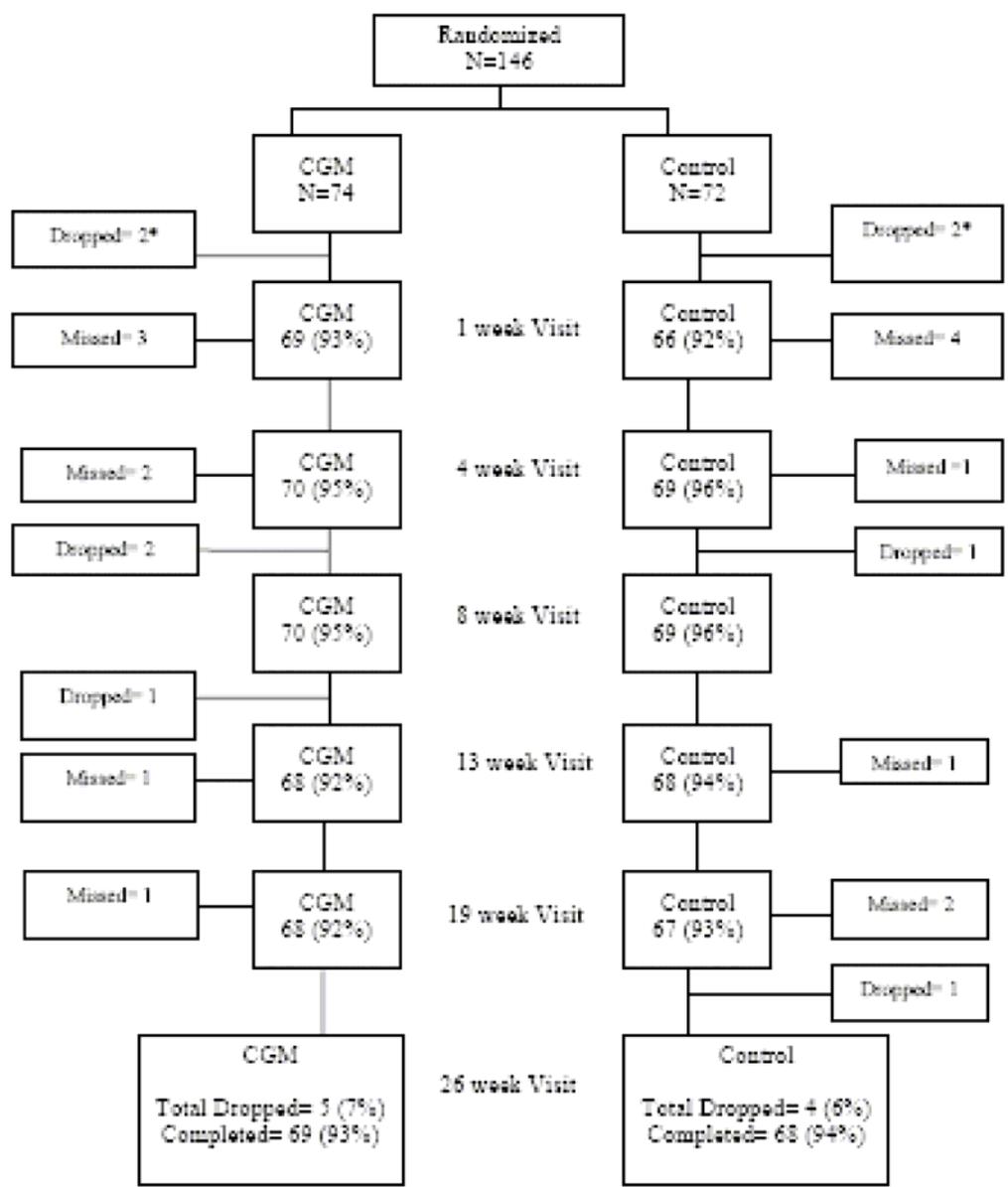
SUPPLEMENTARY DATA

	Baseline						26 week					
	Mean Score	Favorable †		Neutral (2)	Negative †		Mean Score	Favorable †		Neutral (2)	Negative †	
		(0)	(1)		(3)	(4)		(0)	(1)		(3)	(4)
	CGM/Control (N=69/68)						CGM/Control (N=69/68)					
20. ► I feel “burned out” by the constant effort to manage diabetes.	2.0/2.4	23%/18%	13%/7%	22%/15%	22%/38%	20%/22%	1.8/2.0	20%/25%	28%/10%	14%/21%	23%/26%	14%/18%

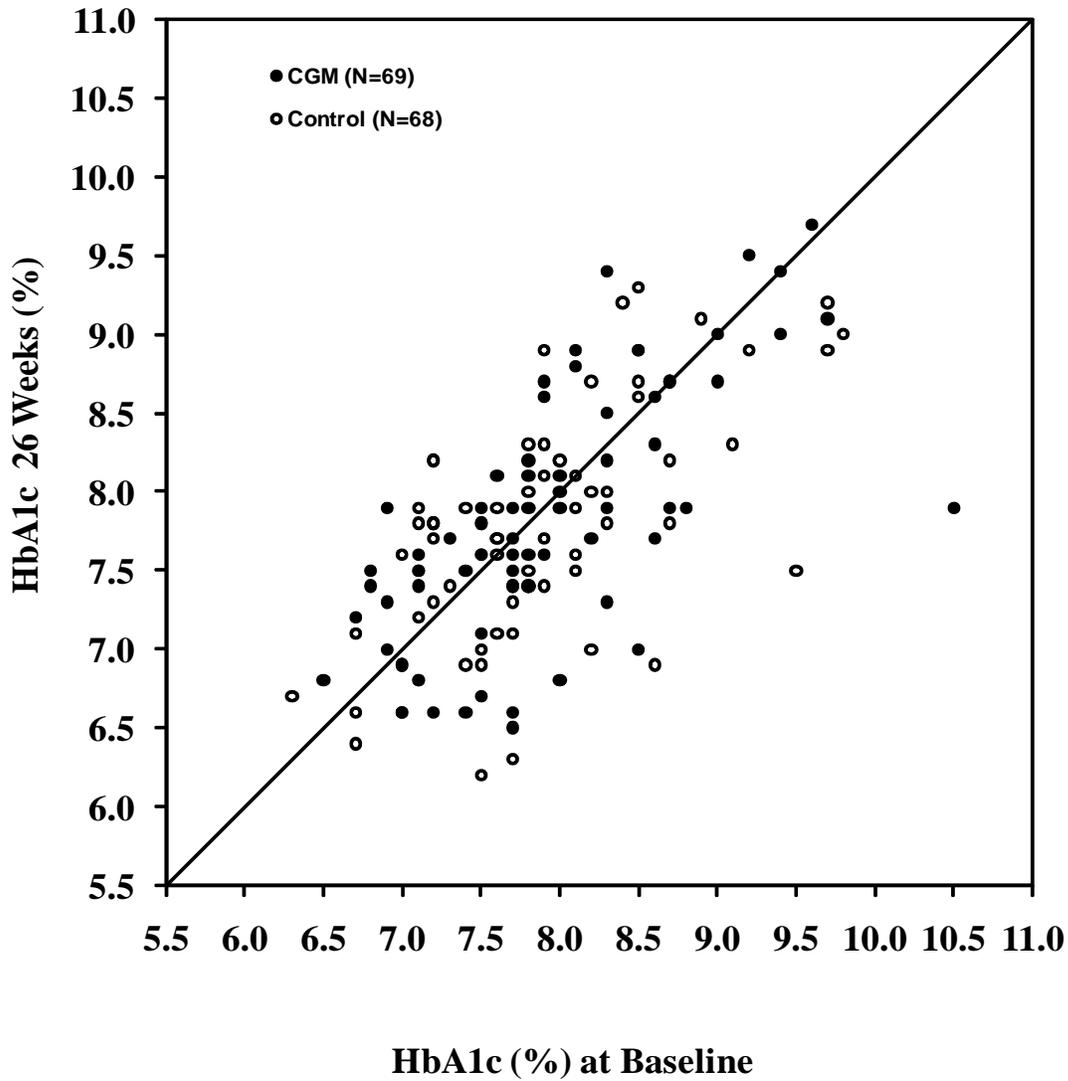
\* Scale 0-4. Higher score denotes worse condition. ► indicates a negatively worded item, the scoring of which has been reversed so that a higher score denotes worse condition.

† Favorable denotes agree/somewhat agree with a positively worded statement or disagree/somewhat disagree with a negatively worded statement. Negative denotes vice-versa.

**Supplementary Figure 1. Participant Flow Chart**



**Supplementary Figure 2.** HbA1c at Baseline Versus HbA1c at 26 Weeks



**REFERENCES**

1. Kovatchev, B, Clarke, W, Breton, M, Brayman, K, McCall, A. Quantifying Temporal Glucose Variability in Diabetes via Continuous Glucose Monitoring: Mathematical Methods and Clinical Application. *Diabetes Technol Ther* 2005;7:849-862