CLINICAL EFFECTIVENESS OF SWITCHING FROM INSULIN PEN DEVICES TO A 24-HR WEARABLE INSULIN DELIVERY DEVICE IN PATIENTS WITH TYPE 2 DIABETES PRESCRIBED BASAL-BOLUS THERAPY

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EffectiveNess of V-Go WeArable Insulin Delivery for Basal-BoLus ThErapy

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BACKGROUND & AIM

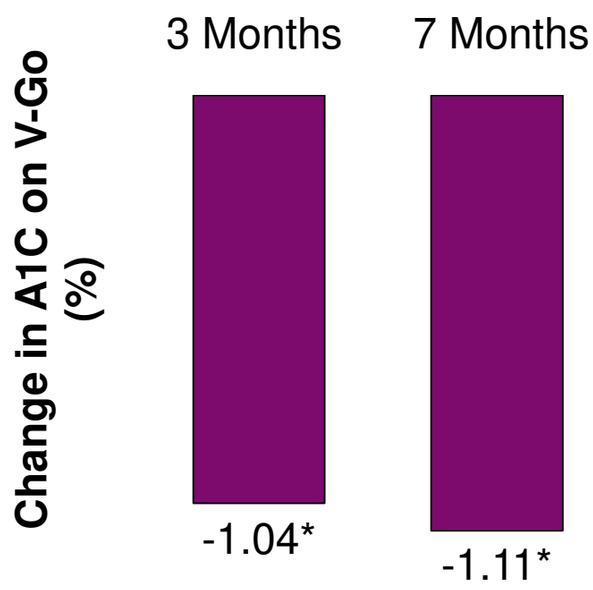
- Insulin pen devices address many of the concerns with vial and syringe therapy and have led to increased adherence.
- However, insulin pens do not address patient concerns of injection frequency, injection embarrassment or the inconvenience of carrying supplies when away from home.
- A novel 24-hr wearable insulin delivery device (V-Go®) offers discreet basal-bolus insulin delivery, without the need for multiple daily injections or additional supplies.
- This analysis evaluated the clinical effectiveness of switching to V-Go for basal-bolus therapy and explored if baseline doses of basal or prandial insulin impacted the effectiveness of V-Go.

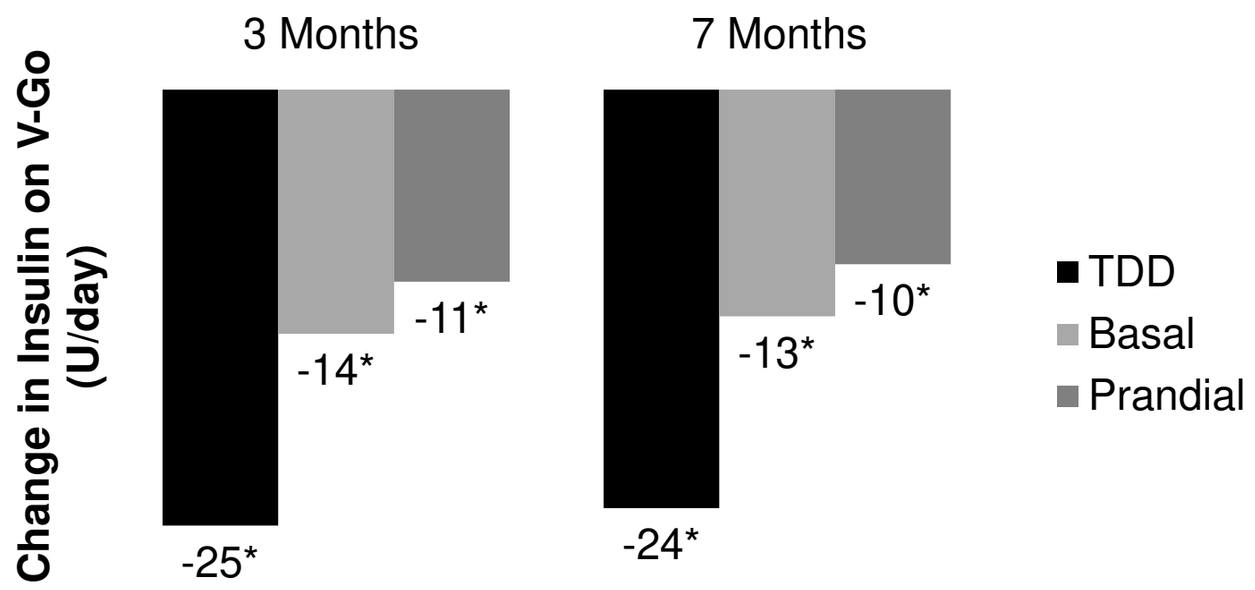
METHODS

- Nine diabetes centers in the United States participated in this retrospective study using electronic medical records to extract data.
- Patients with uncontrolled (A1C ≥ 7.0%) type 2 diabetes and prescribed basal-bolus therapy administered by pen devices prior to V-Go were included in the evaluation.
- Change in A1C and insulin dosing compared to baseline were evaluated and based on baseline basal and prandial doses (≤50 or > 50 U/day).

RESULTS & CONCLUSIONS

- Patients (N=148) were evaluated.
- Mean baseline characteristics were A1C 9.1%, weight 218 lbs, insulin basal, prandial and total U/day were 47, 35 and 82, respectively.

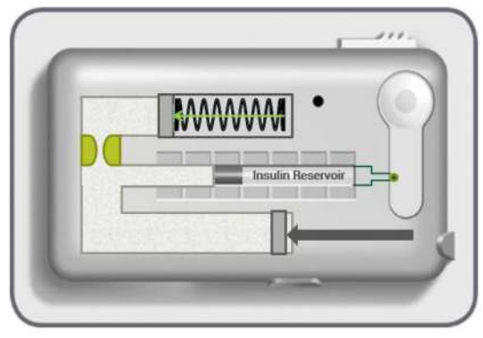




N=148
*p<0.0001 compared to baseline
Change in insulin is rounded to the nearest whole number

Change Based on Baseline Basal and Prandial Doses	Stratified by Baseline Basal U/day		Stratified by Baseline Prandial U/day	
	≤ 50 U/day	> 50 U/day	≤ 50 U/day	> 50 U/day
	n=99	n=49	n= 119	n= 29
Baseline A1C, %	9.0 ± 1.4	9.1 ± 1.5	9.0 ± 1.4	9.4 ± 1.5
△ at 3 Mo of V-Go Use	-1.1*	-1.0*	-1.0*	-1.2*
△ at 7 Mo of V-Go Use	-1.1*	-1.2*	-1.0*	-1.3*
Baseline Basal Dose, U/day	31 ± 11	79 ± 30	43 ± 27	63 ± 37
△ at 3 Mo of V-Go Use	-1	-40*	-12*	-24*
△ at 7 Mo of V-Go Use	-1	-38*	-10*	-25*
Baseline Prandial Dose, U/day	30 ± 20	43 ± 32	25 ± 11	74 ± 29
△ at 3 Mo of V-Go Use	-9*	-14*	-3*	-45*
△ at 7 Mo of V-Go Use	-9*	-13*	-2	-44*
Baseline Total Dose, U/day	62 ± 25	122 ± 48	68 ± 30	137 ± 53
△ at 3 Mo of V-Go Use	-11*	-54*	-14*	-69*
△ at 7 Mo of V-Go Use	-9*	-54*	-12*	-66*
Data are mean or mean ± SD; *p<0.05 compared to baseline				

- After 3 and 7 months of V-Go use, A1C and insulin doses were significantly reduced compared to baseline.
- Significant reductions in A1C and total insulin were also observed when stratified based on baseline dosing.
- Basal-bolus therapy with V-Go resulted in significant reductions in A1C and insulin compared to prior pen therapy.



V-Go Insulin Delivery Device

1. First State Endocrinology, Newark, DE • 2. Endocrinology Specialists, Greensburg, PA • 3. Dr. Jane 360, Marietta, OH • 4. The Endocrine Center, Houston, TX • 5. Wheeling Hospital Endocrinology, Wheeling, WV • 6. Progressive Diabetes Care, Erwin, NC • 7. The Jones Center for Diabetes, Macon, GA • 8. Innovative Health Solutions, Picayune, MS • 9. The Diabetes and Endocrine Center of Mississippi, Jackson, MS • 10. Valeritas, Inc. Bridgewater, NJ