

Supplemental Data

Tubeless insulin pump combined with a cloud-based data management platform: Real-world evidence from 14,765 French people with diabetes

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Table S1. Glycemic Parameters using all available data from IDS users, by type of diabetes and age group in the analyzed population

	T1D				T2D
	Overall	≤17 years	18-25 years	≥26 years	Overall
	(N=13,827)	(N=4,172)	(N=1,700)	(N=7,955)	(≥26 years) (N=930)
TIR (%)					
Mean (SD)	53.3 (14.2)	49.8 (13.0)	48.5 (14.5)	56.1 (14.0)	65.4 (16.3)
Median	52.5	48.3	47.5	55.9	66.9
(Q1-Q3)	(43.4-62.5)	(40.9-56.9)	(38.4-58.0)	(47.0-65.3)	(54.0-77.8)
TAR (%)					
Mean (SD)	42.2 (14.8)	45.6 (13.4)	47.0 (15.3)	39.5 (14.8)	32.3 (16.5)
Median	42.7	46.6	47.8	39.3	30.9
(Q1-Q3)	(32.4-52.2)	(37.7-54.4)	(36.8-57.5)	(29.4-49.2)	(20.4-43.3)
TBR (%)					
Mean (SD)	4.5 (3.2)	4.7 (3.0)	4.5 (3.2)	4.4 (3.4)	2.3 (2.3)
Median	3.7	4.0	3.7	3.6	1.5
(Q1-Q3)	(2.1-6.1)	(2.4-6.3)	(2.1-6.1)	(2.0-6.0)	(0.6-3.2)
TIR target class, n (%)					
<70%	12,088 (87.4)	3,851 (92.3)	1,565 (92.1)	6,672 (83.9)	532 (57.2)
≥70%	1,739 (12.6)	321 (7.7)	135 (7.9)	1,283 (16.1)	398 (42.8)
GMI (%)					
Mean (SD)	7.6 (0.7)	7.8 (0.7)	7.8 (0.8)	7.4 (0.7)	7.2 (0.7)
Median	7.5	7.7	7.7	7.4	7.1
(Q1-Q3)	(7.1 - 8.0)	(7.3 - 8.2)	(7.3 - 8.3)	(7.0 - 7.8)	(6.8 - 7.6)
GMI ≤ 7 %, n (%)	2,788 (20.2)	497 (11.9)	237 (13.9)	2,054 (25.8)	381 (41.0)

GMI, glucose management indicator; SD, standard deviation; TAR, time above range (blood glucose above 180 mg/dL);

TBR, time below range (blood glucose below 70 mg/dL); TIR, time in range (blood glucose between 70 and 180 mg/dL).

Table S2. Insulin delivery patterns from IDS users, by type of diabetes and age group in the analyzed population

	T1D				T2D
	Overall (N=13,827)	≤17 years (N=4,172)	18-25 years (N=1,700)	≥26 years (N=7,955)	Overall (≥26 years) (N=930)
Total daily insulin (UI/day)					
Mean (SD)	33.5 (14.1)	31.3 (14.4)	37.1 (12.6)	33.9 (14.0)	38.9 (16.9)
Median (Q1-Q3)	31.9 (23.4-41.9)	29.8 (19.7-41.1)	35.7 (28.4-44.7)	31.8 (24.0-41.5)	36.9 (27.2-48.2)
Total daily basal insulin (UI/day)					
Mean (SD)	10.1 (5.6)	9.1 (5.2)	11.7 (5.6)	10.3 (5.8)	13.5 (8.9)
Median (Q1-Q3)	9.1 (6.1-12.9)	8.2 (5.2-12.2)	11.0 (7.8-14.7)	9.2 (6.4-12.9)	11.7 (7.3-17.1)
Total daily bolus insulin (UI/day)					
Mean (SD)	23.4 (12.0)	22.2 (11.1)	25.4 (11.5)	23.6 (12.4)	25.4 (15.6)
Median (Q1-Q3)	21.6 (14.9-29.9)	20.5 (13.6-29.1)	24.2 (17.4-32.0)	21.7 (15.1-29.7)	23.7 (14.2-33.4)
Number of boluses (n/day)¹					
Mean (SD)	4.6 (1.6)	4.8 (1.6)	4.1 (1.5)	4.5 (1.6)	3.4 (1.3)
Median (Q1-Q3)	4.3 (3.5-5.4)	4.5 (3.8-5.5)	3.8 (3.0-4.8)	4.3 (3.4-5.4)	3.1 (2.6-3.8)
Average bolus insulin quantity (UI/bolus)¹					
Mean (SD)	5.6 (3.1)	5.2 (3.1)	6.9 (3.2)	5.6 (2.9)	8.1 (3.9)
Median (Q1-Q3)	5.1 (3.4-7.2)	4.6 (2.8-7.0)	6.4 (4.6-8.5)	5.0 (3.6-7.0)	7.4 (5.3-10.3)
Used <60 UI/day, n (%)	13,293 (96.1)	4,040 (96.8)	1,632 (96.0)	7,621 (95.8)	845 (90.9)

¹3 missing values in adults with T1D (≥26 years old) and 4 missing values in adults with T2D (≥26 years old).

SD, standard deviation; UI, unit of insulin.

Figure S1. Characteristics of the continuous glucose monitoring (CGM) analysis period in the full analysis population (T1D and T2D). **A.** Histogram showing the number of users according to the duration of the CGM analysis period (in days). **B.** Histogram showing the number of users according to percentage of days of CGM use (i.e., days with $\geq 70\%$ of data captured over 24 hours) within the CGM analysis period (in %). **C.** Stacked bar chart showing the proportion of users by categorical percentage of days of CGM use within the analysis period, according to the duration of the analysis period (in days).

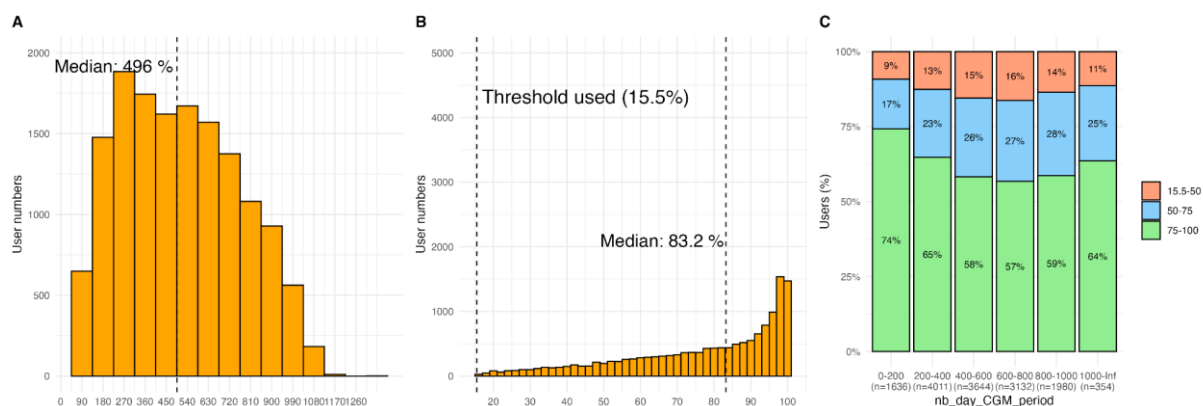


Figure S2. Characteristics of the Omnipod DASH analysis period in the full analysis population (T1D and T2D). **A.** Histogram showing the number of users according to the duration of the Omnipod DASH analysis period (in days). **B.** Histogram showing the number of users according to percentage of days of use (i.e., days with at least one insulin data recorded) within the analysis period (in %). **C.** Stacked bar chart showing the proportion of users by categorical percentage of days of use within the analysis period, according to the duration of the analysis period (in days).

