Treatment Satisfaction and Quality of Life (QoL) in Insulin-naïve People with Type 2 Diabetes (T2D) Treated with Insulin Glargine 300 U/mL (Gla-300): ATOS Study

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Patients' satisfaction is a key determinant of treatment adherence and persistence, for optimal management of T2D. ATOS, a 12-month prospective observational study conducted in Asia, Middle East, North Africa, Latin America, and Eastern Europe, showed that initiation of Gla-300 in insulin-naïve people with T2D resulted in improved glycemic control with low rates of hypoglycemia. This analysis evaluated changes in treatment satisfaction and health status among participants. Data was collected using PRO questionnaires – Diabetes Treatment Satisfaction Questionnaire status (DTSQs) and change versions (DTSQc), EuroQoL 5-dimension scale version 3L (EQ-5D-3L) at baseline, Month 3, 6 and 12. Overall, 3931 participants completed the questionnaires. Mean ±SD age was 57.5 ±10.6 years, duration of diabetes was 10.1 ±6.2 years and baseline HbA_{1c} was 9.3 ±1.0 %. Treatment satisfaction improved over time (DTSQs score of 21.7 at baseline to 29.8 and 31.3 at Month 6 and 12, respectively) and perceived frequency of hyperglycemia decreased over 12 months. DTSQc results were aligned with DTSQs. EQ-5D-3L results showed that proportion of people with better health status increased over time (**Table**). Results showed that initiating Gla-300 in insulin-naïve people with T2D across multiple geographic regions improved treatment satisfaction and health status.

Disclosures

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Table: Changes in patient-reported outcomes between baseline and months 3, 6 and 12

	Baseline	Month 3	Month 6	Month 12
DTSQs				
Treatment satisfaction score, n	3818	3730	3779	3653
Mean (SD)	21.7 (7.4)	28.0 (5.5)	29.9 (5.0)	31.3 (4.7)
LS mean change from baseline, 95% CI		6.4 (6.3; 6.6)	8.2 (8.1; 8.4)	9.7 (9.6; 9.9)
Perceived frequency of hyperglycemia score, n	3831	3723	3781	3652
Mean (SD)	4.1 (1.5)	2.5 (1.6)	1.9 (1.7)	1.5 (1.7)
LS mean change from baseline, 95% CI		-1.7 (-1.7; -1.6)	-2.3 (-2.3; -2.2)	-2.7 (-2.7; -2.6)
Perceived frequency of hypoglycemia score, n	3820	3727	3775	3646
Mean (SD)	1.6 (1.6)	1.4 (1.5)	1.2 (1.5)	1.0 (1.4)
LS Mean change from baseline, 95% CI		-0.3 (-0.3; -0.2)	-0.5 (-0.5; -0.4)	-0.7 (-0.7; -0.6)
DTSQc, n			3743	3641
Mean (SD) Treatment satisfaction score			13.2 (4.6)	14.3 (4.3)
Mean (SD) Perceived frequency of hyperglycemia score			-0.9 (1.8)	-1.2 (1.9)
Mean (SD) Perceived frequency of hypoglycemia score			-1.2 (1.7)	-1.3 (1.7)
EQ-5D-3L*				
Mobility, n	3828	3722	3765	3635
I have no problems walking around, n (%)	2505 (65.4%)	2663 (71.5%)	2940 (78.1%)	2969 (81.7%)
Selfcare, n	3822	3727	3753	3634
I have no problems with self-care, n (%)	3260 (85.3%)	3306 (88.7%)	3417 (91.0%)	3363 (92.5%)
Usual Activities, n	3819	3714	3753	3621
I have no problems with performing my usual activities, n (%)	2533 (66.3%)	2902 (78.1%)	3146 (83.8%)	3121 (86.2%)
Pain/Discomfort, n	3821	3717	3753	3633
I have no pain or discomfort, n (%)	1929 (50.5%)	2447 (65.8%)	2720 (72.5%)	2803 (77.2%)
Anxiety/Depression, n	3824	3721	3763	3636
I am not anxious or depressed, n (%)	2482 (64.9%)	2928 (78.7%)	3236 (86.0%)	3219 (88.5%)
VAS, n	3568	3513	3574	3449
Mean (SD) total score, n (%)	60.8 (18.5)	71.2 (15.1)	76.6 (13.5)	81.4 (13.0)

- The DTSQs consisted of 8-item questionnaire conducted at baseline, and Months 3, 6 and 12, each item scored on a scale from 0 (very dissatisfied) to 6 (very satisfied). Treatment satisfaction total score was determined from summing the scores on items 1, 4, 5, 6, 7, and 8 (minimum score 0, maximum score 36). Perceived frequency of hyperglycemia was determined from item 2, and hypoglycemia from item 3; each could have a minimum score of 0 (none of the time), maximum score of 6 (most of the time).
- The DTSQc was conducted after the DTSQs at Months 6 and 12, was the same as DTSQs but with a small alteration to the wording of item 7, which assessed the relative change in treatment satisfaction with respect to a prior treatment, the items scored on a scale from 3 (much more) to -3 (much less). Therefore, treatment satisfaction total score (items 1, 4, 5, 6, 7 and 8) could have a minimum score of -18 and a maximum of 18. DTSQc noted at Month 6 and 12 only.
- Health status was measured by EQ-5D-3L and VAS. The EQ-5D-3L consisted of 5 descriptive dimensions (mobility, self-care, usual activities, pain/discomfort, and anxiety/depression; with the patients' self-rated responses coded as 1 [no problem], 2 or 3 [extreme problems]), and VAS recorded the respondent's health on a vertical scale from 0 (worst imaginable health state) to 100 (best imaginable health state). *Code 1 [no problem] is presented in the table and code 2 or code 3 [extreme problems]) were measured and will be presented in the poster.

DTSQc Diabetes Treatment Satisfaction Questionnaire change version; DTSQs Diabetes Treatment Satisfaction Questionnaire status version; EQ-5D-3L, EuroQol 5-dimension scale version 3L; LS, Least-squares; SD, standard deviation; SE, standard error; VAS, Visual Analogue Scale

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