**Supplementary Material**

# Impact of Participant Characteristics on Clinical Outcomes with iGlarLixi in Type 2 Diabetes: Post Hoc Analysis of SPARTA Japan

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**Supplementary Table S1** Baseline demographics and characteristics by dose increase/dose not increased in the not-achieved group

| **Characteristic** | **Insulin naïve** | | | **Insulin experienced** | | |
|---|---|---|---|---|---|---|
| | **Achieved (n=49)** | **Not achieved** | | **Achieved (n=76)** | **Not achieved** | |
| | | **Dose not increased (n=36)** | **Dose increased (n=50)** | | **Dose not increased (n=101)** | **Dose increased (n=78)** |
| Age, years | 66.1 ± 14.9 | 61.9 ± 11.1 | 54.4 ± 11.7***† | 66.5 ± 11.9 | 62.1 ± 13.0* | 60.0 ± 10.9** |
| Age category, n (%) | | | ***† | | * | *** |
| <65 years | 19 (38.8) | 19 (52.8) | 40 (80.0) | 130 (63.7) | 56 (55.5) | 53 (68.0) |
| ≥65 to <75 years | 15 (30.6) | 16 (44.4) | 8 (16.0) | 25 (32.9) | 30 (29.7) | 18 (23.1) |
| ≥75 years | 15 (30.6) | 1 (2.8) | 2 (4.0) | 23 (30.3) | 15 (14.9) | 7 (9.0) |
| Sex, n (%) | | | | | | |
| Male | 30 (61.2) | 24 (66.7) | 31 (62.0) | 55 (72.4) | 58 (57.4) | 50 (64.1) |
| Female | 19 (38.8) | 12 (33.33) | 19 (38.0) | 21 (27.6) | 43 (42.6) | 28 (35.9) |
| Body weight, kg | 67.8 ± 16.3 | 71.4 ± 19.0 | 75.8 ± 14.0* | 70.4 ± 18.3 | 68.2 ± 13.9 | 74.9 ± 14.5† |
| BMI, $kg/m^2$ | 4.7 ± 5.2 | 26.4 ± 5.6 | 27.9 ± 3.9 | 26.4 ± 5.0 | 25.9 ± 4.1 | 27.8 ± 4.4† |
| BMI category, n (%) | | | | | | † |
| <25 $kg/m^2$ | 21 (42.9) | 15 (41.7) | 10 (20.0) | 32 (42.1) | 38 (37.6) | 19 (24.4) |

| | | | | | | |
|---|---|---|---|---|---|---|
| ≥25 to <30 kg/m$^2$ | 19 (38.8) | 11 (30.6) | 26 (52.0) | 94 (46.1) | 46 (45.5) | 33 (42.3) |
| ≥30 kg/m$^2$ | 8 (16.3) | 10 (27.8) | 13 (26.0) | 14 (18.4) | 15 (14.9) | 22 (28.2) |
| Duration of T2D, years | 11.5 ± 9.3 | 14.3 ± 9.0 | 10.1 ± 9.1 | 13.5 ± 12.1 | 14.4 ± 11.0 | 15.4 ± 8.3 |
| Duration of T2D category, n (%) | | | † | | | ** †† |
| <10 years | 25 (51.0) | 11 (30.6) | 31 (62.0) | 35 (46.1) | 46 (45.5) | 18 (23.1) |
| ≥10 years | 24 (49.0) | 25 (69.4) | 19 (38.0) | 41 (54.0) | 55 (54.5) | 60 (76.9) |
| HbA1c, % | 8.91 ± 1.55 | 9.17 ± 1.27 | 9.86 ± 1.71** | 8.21 ± 2.06 | 8.88 ± 1.48* | 8.98 ± 1.37* |
| HbA1c category, n (%) | | | * | | *** | *** |
| <7% | 0 | 0 | 0 | 6 (2.9) | 3 (3.0) | 3 (3.9) |
| ≥7 to <8% | 12 (24.5) | 4 (11.1) | 4 (8.0) | 32 (42.1) | 23 (22.8) | 16 (20.5) |
| ≥8 to <9% | 19 (38.8) | 14 (38.9) | 15 (30.0) | 11 (14.5) | 39 (38.6) | 21 (26.9) |
| ≥8% | 18 (36.7) | 18 (50.0) | 31 (62.0) | 16 (21.1) | 36 (35.6) | 38 (48.7) |
| Prior treatments, n (%) | | | | | | |
| Diet/exercise | 7 (14.3) | 2 (5.5) | 6 (12.0) | 0 | 0 | 0 |
| OAD | 35 (71.4) | 24 (66.7) | 23 (46.0)* | 0 | 0 | 0 |
| GLP-1 RA ± OAD | 7 (14.3) | 10 (27.8) | 21 (42.0)** | 0 | 0 | 0 |
| BOT | 0 | 0 | 0 | 18 (23.7) | 34 (33.7) | 26 (33.3) |

| | | | | | | |
|---|---|---|---|---|---|---|
| GLP-1 RA + BI | 0 | 0 | 0 | 15 (19.7) | 20 (19.8) | 17 (21.8) |
| Intensive insulin therapy | 0 | 0 | 0 | 26 (34.2) | 19 (18.8) | 13 (16.7)* |
| Other insulin therapies | 0 | 0 | 0 | 17 (22.4) | 28 (27.7) | 22 (28.2) |
| History of DPP-4 inhibitor use, n (%) | 19 (38.8) | 9 (25.0) | 12 (24.0) | 23 (30.3) | 28 (27.7) | 14 (18.0) |
| Type of concomitant OADs, n (%) | | | | | | |
| Biguanide | 28 (57.1) | 27 (75.0) | 36 (72.0) | 35 (46.1) | 61 (60.4) | 60 (76.9)*** |
| SGLT2 inhibitors | 12 (24.5) | 22 (61.1)** | 32 (64.0)*** | 30 (39.5) | 70 (69.3)*** | 49 (62.8)* |
| Sulfonylureas | 15 (30.6) | 7 (19.4) | 8 (16.0) | 5 (6.6) | 12 (11.9) | 11 (14.1) |
| Glinides | 9 (18.4) | 10 (27.8) | 9 (18.0) | 14 (18.4) | 26 (25.7) | 19 (24.4) |
| α-Glucosidase inhibitors | 11 (22.5) | 5 (13.9) | 7 (14.0) | 11 (14.5) | 15 (14.9) | 12 (15.4) |
| Thiazolidinediones | 1 (2.0) | 3 (8.3) | 2 (4.0) | 6 (7.9) | 5 (5.0) | 2 (2.6) |
| Number of concomitant OADs, n (%) | | | | | ** | *** |
| None | 9 (18.4) | 4 (11.1) | 5 (10.0) | 17 (22.4) | 13 (12.9) | 12 (15.4) |
| 1 | 19 (38.8) | 9 (25.0) | 9 (18.0) | 27 (35.5) | 20 (19.8) | 11 (14.1) |
| 2 | 9 (18.4) | 10 (27.8) | 26 (52.0) | 26 (34.2) | 45 (44.6) | 33 (42.3) |
| ≥3 | 12 (24.5) | 13 (36.1) | 10 (20.0) | 6 (7.9) | 23 (22.8) | 22 (28.2) |

Data are presented as mean ± SD or n (%). Age-defined glycaemic targets were HbA1c <7.0% for participants aged <65 years, HbA1c <7.5% for participants aged ≥65 to <75 years and HbA1c <8.0% for participants aged ≥75 years

*BI* basal insulin, *BMI* body mass index, *BOT* basal insulin-supported oral therapy, *GLP-1 RA* glucagon-like peptide 1 receptor agonist, *HbA1c* glycated haemoglobin, *OAD* oral antidiabetic agent, *SD* standard deviation, *SGLT2* sodium-glucose transport protein 2, *T2D* type 2 diabetes

*p<0.05, **p<0.01, ***p<0.001 vs achieved group

†p<0.05, ††p<0.01 vs dose-not-increased group

The Tukey test was used for pair-wise comparisons of continuous variables and Steel-Dwass test for multiple comparisons of categorical variables