



# Endocrinología y Nutrición



## 273 - Once-weekly dulaglutide vs insulin glargine in the control of fasting serum glucose and hypoglycaemia rate in the first 20 weeks in patients with type 2 diabetes mellitus on metformin and glimepiride

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### Resumen

**Introduction:** In the 78-week AWARD-2 study, once-weekly dulaglutide (DU) 1.5 mg was more effective than insulin glargine (GLA) in reducing HbA1c, with lower risk of hypoglycaemia. This *post-hoc* analysis examined the effect in on the control of fasting serum glucose (FSG) and hypoglycaemia rate during the first 20 weeks.

**Methods:** 810 patients were randomised to DU 1.5 mg, DU 0.75 mg, or GLA. Patients with FSG 130 mg/dL were identified at weeks 2, 4, 8, 14 and 20. Mean weekly hypoglycaemia rate (total number of episodes with blood glucose  $\leq$  70 mg/dL in patients with FSG 130 mg/dL) was determined for the interval before each visit. Mean glimepiride and GLA doses were documented at each visit (last available dose at each timepoint).

**Results:** For DU 1.5 mg and 0.75 mg, the percentage of patients with FSG 130 mg/dL was highest at week 2 (58.9% and 53.7%, respectively), stabilising by week 20 (55.0% and 47.2%, respectively). For GLA, the proportion with FSG 130 mg/dL was 44.4% at week 2, increasing to 54.7% at week 20 with GLA dose titration (mean 0.14 IU/kg at week 2, 0.25 IU/kg at week 20). Mean weekly hypoglycaemia rates (episodes/patient/week in patients with FSG 130 mg/dL) at weeks 2 and 20, respectively, were 0.47 and 0.11 (DU 1.5 mg), 0.33 and 0.13 (DU 0.75 mg), and 0.27 and 0.23 (GLA); DU 1.5 mg vs GLA at week 2,  $p = 0.0104$ ; week 20,  $p = 0.0169$ . Severe hypoglycaemia was minimal. Odds ratios (95%CI) for probability of reaching FSG 130 mg/dL without hypoglycaemia (DU 1.5 mg vs GLA with dose titration) were: week 2, 1.31 (0.91-1.89); week 4, 1.78 (1.22-2.60); week 8, 1.69 (1.15-2.48); week 14, 1.46 (0.99-2.17); week 20, 1.36 (0.93-2.00). Mean glimepiride dose in patients with FSG 130 mg/dL: week 2, 4.8 mg (DU 1.5 mg and 0.75 mg), 5.1 mg (GLA); week 20, 4.1 mg (DU 1.5 mg), 4.2 mg (DU 0.75 mg), 4.5 mg (GLA).

**Conclusions:** In this analysis, there was a higher probability of reaching FSG 130 mg/dL without hypoglycaemia with DU 1.5 mg vs GLA in the early weeks of treatment.

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