LIRAGLUTIDE MONOTHERAPY PROVIDES SUPERIOR POSTPRANDIAL PLASMA GLUCOSE (PPG) CONTROL AFTER ALL THREE DAILY MEALS VERSUS SULPHONYLUREA MONOTHERAPY

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In type 2 diabetes (T2D), optimal glucose management requires fasting and postprandial plasma glucose (PPG) control. We compared PPG effects across three daily meals with liraglutide versus glimepiride (both as monotherapy) in subjects with T2D. This post-hoc analysis used 28-week LEAD-3 data, which compared liraglutide 1.2 mg (n=251), 1.8 mg (n=247) and glimepiride 8 mg (n=248) monotherapy. The proportion of subjects below ADA PPG target (10 mmol/L) 90 min after individual meals, and across all meals overall was analysed using 8-point self-measured plasma glucose (SMPG) profiles. Time below target was also measured from pre-breakfast until 3 am: ~20 hours. Comparisons used regression analyses with treatment, previous treatment and baseline value as covariates (ITT, LOCF). At Week 28, the proportion of subjects below PPG target across all three meals overall was greater with liraglutide 1.2 mg (44%) and 1.8 mg (62%) versus glimepiride (32%); odds of being below PPG target were significantly greater for liraglutide 1.2 mg versus glimepiride (odds ratio [OR]=1.67 [95%CI: 1.05–2.66]; p<0.05), liraglutide 1.8 mg versus glimepiride (OR=3.42 [2.15–5.45]; p<0.001) and liraglutide 1.2 versus 1.8 mg (OR=0.49 [0.31–0.76]; p=0.002). Subjects taking liraglutide were also more likely to achieve PPG target compared to glimepiride after individual meals (p<0.05 for each meal). The proportion of time with PPG 10 mmol/L increased significantly more with liraglutide (77.7% and 85.4%) versus glimepiride (65.5%; p<0.001); differences between liraglutide doses were also significant (p<0.024). Liraglutide monotherapy provides superior PPG control versus glimepiride at individual meals and across all meals overall.