BASELINE BODY MASS INDEX (BMI) DOES NOT INFLUENCE THE HBA\textsubscript{1c}-LOWERING EFFICACY OF LIRAGLUTIDE IN PATIENTS WITH TYPE 2 DIABETES

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The LEAD clinical trial programme demonstrated glycaemic improvement and weight loss with liraglutide in patients with type 2 diabetes. However, these studies did not determine whether glycaemic response with liraglutide is dependent on baseline BMI. The relationship between HbA\textsubscript{1c} response and baseline BMI was explored in this post-hoc, pooled analysis of 26/28-week liraglutide trials (LEAD-1–6 and Lira–DPP-4i, n=5100). Models used change in HbA\textsubscript{1c} from baseline in the ITT population, LOCF, to generate estimates of correlation with 95%CI for each trial, in addition to pooled analyses of liraglutide 1.2 mg, 1.8 mg and placebo. Models accounted for baseline HbA\textsubscript{1c}, country, trial and prior treatment as covariates. Mean BMI at baseline was 29.8–33.7 kg/m\textsuperscript{2} (maximum 45 kg/m\textsuperscript{2}). A weak relationship was observed between baseline BMI and HbA\textsubscript{1c} change for pooled liraglutide 1.8 mg data (–0.011 [95%CI: –0.020, –0.002]). However, the effect was small, 10 kg/m\textsuperscript{2} higher BMI at baseline corresponded to greater HbA\textsubscript{1c} reduction of only 0.11%, considered not clinically relevant. No significant correlation between HbA\textsubscript{1c} and baseline BMI was observed for pooled groups for liraglutide 1.2 mg (–0.002 [95%CI: –0.013, 0.009]) or placebo (–0.009 [95%CI: –0.028, 0.010]). Similar lack of correlation was observed for exenatide twice-daily in LEAD-6 (–0.012 [95%CI: –0.031, 0.010]) and sitagliptin in Lira–DPP-4i (0.000 [95%CI: –0.025, 0.025]). In summary, there was a small and probably clinically irrelevant greater HbA\textsubscript{1c} reduction with liraglutide 1.8 mg associated with higher baseline BMI, when compared with lower baseline BMI.