Early weight loss responders to liraglutide 3.0mg had greater weight loss, regression

to normoglycaemia, and reduced Type 2 diabetes development at three years vs

early non-responders: SCALE Obesity and Prediabetes

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Aims: The SCALE Obesity and Prediabetes (NCT01272219) trialrandomised adults with prediabetes and obesity (BMI ≥30kg/m²)or overweight (≥27kg/m²; with dyslipidaemia/hypertension) to liraglu-

tide 3.0mg or placebo, adjunct to diet and exercise for three years.

Methods: This post-hoc analysis compared liraglutide 3.0mg early responders (ERs; ≥5% weight loss [WL] at week 16) and early non-responders (ENRs; < 5% WL at week 16). Efﬁcacy outcomes are estimated means in ERs (n = 580) and ENRs (n = 210) who completed 160 weeks’ treatment. Development of Type 2 diabetes/regression to normoglycaemia were analysed using the full analysis set with last observation carried forward. Safety analysis was based on all individuals with an early response status.

Results: Of those with Week 16 data: for liraglutide 3.0mg (n = 1,302) 68.0% were ERs and 32.0% ENRs; for placebo (n = 640), 22.3% were ERs and 77.7% ENRs. At Week 160, greater WL (–8.6% and –9.1kg in ER vs –2.9% and –3.1kg for ENRs), reduced proportions developing Type 2 diabetes (0.5% ERs, 3.2% ENRs) and greater regression to normoglycaemia (69.8% in ERs, 55.4% in ENRs), and greater clinical and patient-reported improvements were observed in ERs to liraglutide 3.0mg vs ENRs. Adverse events (AEs) and gastrointestinal AEs were similar between groups (87.1%, 75.3% for ERs; 95%, 71.6% for ENRs) while serious AEs and gallbladder disorders were more frequent in ERs (17.7% and 6.3% vs 12.7% and 2.2% for ENRs).

Conclusions: Among those treated with liraglutide 3.0mg for 160 weeks, greater beneﬁts were seen in ERs vs ENRs; overall AE rates were similar.