ROBUST METABOLIC IMPROVEMENT OBSERVED WITH THE ENDOSCOPIC, DUODENAL-JEJUNAL BYPASS LINER: 12 MONTH DATA IN OBESE TYPE 2 DIABETES


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Background: The endoscopically delivered duodenal-jejunal bypass liner (DJBL) exhibits robust metabolic effects in obese subjects with Type 2 diabetes (T2D). We report a composite of most recent results from three studies of DJBL use in T2D.

Methods: DJBL was implanted for 1 year in 87 subjects with T2D in three prospective, single arm studies two of which were conducted in Brazil (studies A and B), and the other in United Kingdom (study C). Study A enrolled 22 subjects (mean A1C 8.9±1.7%, BMI 44.8±7.4 kg/m²), study B enrolled 20 subjects (A1C 8.7±0.9%, BMI 30.0±3.6 kg/m²) and study C enrolled 45 subjects (A1C 8.5±0.9%, BMI of 40.3±5.7kg/m²). Efficacy and safety measures were captured for study duration. Results: At the end of 12 months, the mean change from baseline in HbA1c was -1.3 ± 1.4 with 52% of the subjects achieving A1C 7%, accompanied by profound weight loss (-11.5 ± 10.5kg). Significant improvements were observed for several cardiovascular risk factors: systolic blood pressure -6.4±19.6 mmHg, total cholesterol -0.5±0.8 mmol/L, and triglycerides -0.4±0.9 mmol/L. DJBL was well tolerated with a mean treatment duration of 10.6 months. Adverse events were mostly mild to moderate gastrointestinal symptoms, and dissipated over time. Conclusions: Accumulating data suggests that DJBL provide a novel mechanism for robust cardiometabolic improvements in obese T2D with a favorable safety profile. This metabolic intervention warrants further characterization as an important potential therapeutic approach in T2D.