Presentation 240-OR / 240 Faster-Acting Insulin Aspart vs. Insulin Aspart as Part of Basal-Bolus Therapy Improves Postprandial Glycemic Control in Uncontrolled T2D in the Double-Blinded Onset® 2 Trial

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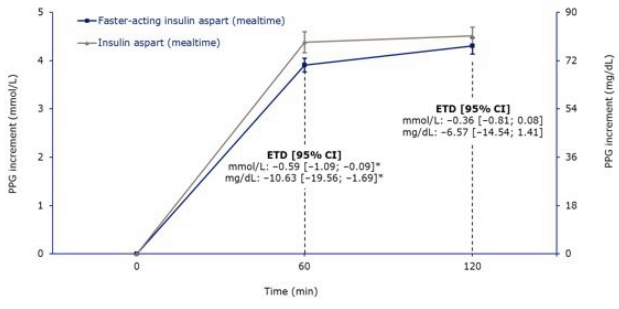
Abstract:
A multicenter, double-blind, treat-to-target trial evaluated the efficacy of faster-acting insulin aspart (faster aspart) vs. insulin aspart (IAsp) in adults with uncontrolled T2D on basal insulin and OADs. After optimizing basal insulin glargine during an 8-week run-in (mean HbA_{1c} 7.9%), subjects were randomized 1:1 to mealtime faster aspart (n=345) or IAsp (n=344), each with glargine and metformin, using a simple daily patient-driven titration algorithm.

Primary endpoint: mean change in HbA_{1c} from baseline (BL) to week 26, was -1.38% and -1.36% for faster aspart and IAsp; mean HbA_{1c} was 6.6% for both arms. Faster aspart demonstrated non-inferiority vs. IAsp in reducing HbA_{1c} (est. treatment difference [95% CI]: -0.02% [-0.15; 0.10]). Both basal-bolus (BB) regimens improved PPG control. The 1-h PPG increment (meal test) was statistically significant in favor of faster aspart (Figure). Rates of overall severe or confirmed hypoglycemia (PG <3.1 mmol/L [56 mg/dL]) were comparable. In T2D, mealtime faster aspart and IAsp in a BB regimen achieved excellent glycemic control and reduced HbA_{1c} from BL to 6.6%, confirming non-inferiority of faster aspart to IAsp, using a simple daily patient-driven titration algorithm. Faster aspart effectively improved 1-h PPG control vs. IAsp without increasing overall hypoglycaemia.

Figure. PPG increment (meal test) at Week 26



Full analysis set; observed data. Error bars: ± standard error (mean). Estimated treatment difference (ETD; faster aspart – IAsp) for PPG increment changes from baseline.
*Statistically significant in favor of faster aspart.

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