

Similar Variability of Fasting and 24-h Self-Measured Plasma Glucose (SMPG) with Insulin Glargine 300 U/mL (Gla-300) vs Insulin Degludec 100 U/mL (IDeg-100) in Insulin-Naïve Adults with T2DM: the Randomised BRIGHT Trial

Cheng A; Ritzel R; Bosnyak Z; Boëlle-Le Corfec E; Cali A; Wang X; Frias J; Roussel R; Bolli GB

Department of Medicine, University of Toronto, Toronto, Canada

Klinikum Schwabing, Städtisches Klinikum München GmbH, Munich, Germany

Sanofi, Paris, France

Sanofi, Tokyo, Japan

Sanofi, Beijing, China

National Research Institute, Los Angeles, California, USA

INSERM, UMR_S 1138, Centre de Recherche des Cordeliers, Paris, France

Perugia University School of Medicine, Perugia, Italy

BRIGHT was an open-label, randomised, parallel-group, 24-week study in insulin-naïve participants with uncontrolled T2DM, investigating efficacy and safety of Gla-300 and IDeg-100. Participants were randomised to Gla-300 or IDeg-100, titrated to a target fasting SMPG of 4.4–5.6 mmol/L. The primary objective (non-inferiority of Gla-300 vs IDeg-100 in HbA1c change from baseline to week 24) was met. Secondary endpoints, presented here, included change in variability of fasting and 24-h SMPG. Eight-point SMPG profiles were similar for both groups at week 24. Mean baseline coefficient of variation (CV) of ≥ 3 fasting SMPG measurements over 7 days was 13.73% and 14.63% for Gla-300 and IDeg-100, respectively. Change in fasting SMPG variability (SE) to week 24 was 1.49% (0.39) and 1.97% (0.39) for Gla-300 and IDeg-100 (least squares [LS] mean difference [95% CI] -0.48 [-1.49 to 0.53]). Mean baseline CVs for 8-point profiles (24-h SMPG) were 22.60% and 23.41% for Gla-300 and IDeg-100. Mean change in 24-h SMPG variability (SE) was 3.70% (0.59) and 3.95% (0.60) for Gla-300 and IDeg-100 at week 24 (LS mean difference -0.25 [-1.72 to 1.22]). In summary, Gla-300 and IDeg-100 had similar variability of fasting and 24-hr SMPG over the 24-week treatment period in BRIGHT.