DiabetesTherapy



- This was a Phase I, randomized, double-blind, parallel, nested crossover thorough QT study that investigated the effect of treatment with albiglutide 30 or 50 mg SC injections given weekly over 6 weeks on cardiac repolarization (the QTc interval) in healthy male and female subjects; moxifloxacin (400 mg), a positive control, or moxifloxacin placebo was given on Days -1 and 40 in a nested crossover design to demonstrate the ability of the study to detect small QTc changes.
- Demographics were generally similar between albiglutide and placebo subjects. A total of 174 subjects were randomized, of whom 85 were enrolled in the albiglutide group and 89 in the placebo/moxifloxacin group, with a mean age of 29.5 years (range 18-45 years) and a mean BMI of 25.2 kg/m² (range 19.3-30.0 kg/m²).
- Mean change-from-baseline QTcI (Δ QTcI) on Day 4 after a single dose of albiglutide 30 mg and on Day 39 after repeat dosing with albiglutide 50 mg once weekly was similar to the placebo response. The placebo-corrected Δ QTcI ($\Delta\Delta$ QTcI) on both albiglutide doses was small with the largest $\Delta\Delta$ QTcI of 1.1 msec (upper bound of 90% CI: 3.8 msec) on Day 4 and -0.6 msec (upper bound of CI: 1.8 msec) on Day 39. Concentration/QTc analysis revealed a negative relationship between albiglutide plasma concentrations and $\Delta\Delta$ QTcI, thereby demonstrating that albiglutide will not cause QTc prolongation at higher plasma levels.
- Moxifloxacin caused the largest mean effect on $\Delta\Delta$ QTcI of 10.9 msec and the lower bound of the CI was above 5 msec at all preselected timepoints, thereby demonstrating assay sensitivity.
- Albiglutide at doses up to 50 mg in healthy subjects did not prolong the QTc interval, was welltolerated, and there were no clinically relevant differences in treatment safety data between albiglutide and placebo.

This summary slide represents the opinions of the authors. Sponsorship for this study was funded by GlaxoSmithKline. For a full list of acknowledgments and conflicts of interest for all authors of this article, please see the full text online. Copyright © The Authors 2014. Creative Commons Attribution Noncommercial License (CC BY-NC).