INTRODUCTION

Genetic studies and mouse models provides the rational for GIPR inhibition as a mechanism for weight loss. The incretins, GLP-1 and GIP, have effects on satiety and increase in insulin secretion and has effects on lipogenesis. AMG 133 mimics the agonist effects of GLP-1 and GIP.

METHODS

Subjects with a BMI ≥25 kg/m² and ≥12 years old without other medical conditions were enrolled. Subjects with BMI ≥30 kg/m² or ≥2 years history of weight loss were excluded. Pharmacokinetic samples were collected using a venous sample (VAD) or multiple sampling devices (MDA). VAD 3 days, EGC 3 days, and treatment-emergent adverse events (TEAEs) were monitored to assess safety, tolerability, and pharmacokinetic effects in subjects with obesity and obesity-related disease.

RESULTS

AMG 133 is a bispecific GIPR antagonist and GLP-1 receptor agonist molecule. The pharmacokinetics of AMG 133 support dosing frequency of AMG 133 once daily in this patient population. The pharmacokinetics of AMG 133 supports its potential use in the treatment of obesity through weight loss, glycemic improvements, and reduction in triglycerides.

DISCUSSION

The pharmacokinetics of AMG 133 support dosing frequency of AMG 133 once daily in this patient population. Further, the reduction in weight loss at the highest dose tested in multiple dose cohorts supports the potential use of AMG 133 in the treatment of obesity through weight loss, glycemic improvements, and reduction in triglycerides.