Apitegromab, a Novel High-Affinity Anti-proMyostatin Monoclonal Antibody for Treating Spinal Muscular Atrophy: Results of a Phase 2 Interim Analysis

Amy Place1 on behalf of the Apitegromab Development Team

1 Scholar Rock Inc. 301 Binney Street, Cambridge, MA 02142. Aplase@ScholarRock.com. MedicalInquiry@ScholarRock.com

Abstract
Apitegromab (SRK-015) is a fully human, high-affinity anti-proMyostatin monoclonal antibody that binds to human proMyostatin and latent myostatin and inhibits the toll-like-mediated prekinetics for myostatin activation. It is an investigational monoclonal antibody (mAb) currently under evaluation in patients with spinal muscular atrophy (SMA).

The primary endpoints of this 52-week phase 2 trial (TOPAZ; NCT03831726) were to assess safety and tolerability of apitegromab, administered intravenously every 4 weeks, in subjects with SMA Type 1 and Type 3 spinal muscular atrophy (SMA) and changes in motor function. Secondary endpoints were to characterize the pharmacokinetic (PK) and pharmacodynamic (PD) effects of apitegromab, therapeutic effects of low (2 mg/kg), mid (20 mg/kg), high (20 mg/kg + approved SMN up-regulator), immunogenicity and other exploratory motor function measures. Subjects received apitegromab as monotherapy or as an approved SMN up-regulator (nusinersen) in a double-blind, randomized, controlled manner.

Methods
Apitegromab is an investigational highly selective inhibitor of the activation of myostatin, based on in vitro data. Apreldegib is an investigational drug candidate being developed and studied for SMA. The effectiveness and safety of apitegromab have not been established and apitegromab has not been approved by the FDA or any other regulatory authority.

Introduction
Apreldegib is an investigational drug candidate being developed and studied for SMA. The effectiveness and safety of apreledigib have not been established and apreledigib has not been approved by the FDA or any other regulatory authority.

Table 2: TOPAZ Interim Analysis Results; mean improvements from baseline in HFMSE/RHS observed in each of the 3 cohorts

Table 3: Treatment Emergent Adverse Events (TEAEs; All cohorts: most frequently reported)

Table 3: TOPAZ Timelines

Results
Figure 1: TOPAZ Study Design

Figure 2: TOPAZ Phase 2 Treatment Period Study to Evaluate the Efficacy and Safety of Apitegromab in Patients with Later-Onset Spinal Muscular Atrophy

Figure 3: TOPAZ Interim Analysis Results; change from baseline in primary efficacy endpoints (Hammersmith scale scores; mean +/- 1 SEM)

Declaration: Apitegromab is an investigational drug candidate being developed and studied for SMA. The effectiveness and safety of apitegromab have not been established and apitegromab has not been approved by the FDA or any other regulatory authority.

Copyright © 2021 Scholar Rock

https://scholarrockour.com/pipeline/