An Update on Scholar Rock's Progress in SMA

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Introduction

Currently approved SMN treatments* have helped those living with SMA by slowing motor neuron degeneration, however muscle atrophy and associated weakness remains a continued challenge for many.

Scholar Rock is researching apitegromab, which aims to address muscle atrophy and associated weakness in SMA. After several years of clinical studies, Scholar Rock is anticipating having phase 3 clinical study results in 2024.

Apitegromab is an investigational treatment and the efficacy and safety have not been evaluated by the U.S. Food and Drug Administration (FDA). If successful, Scholar Rock intends to submit an application to the FDA for approval.

Where We Were

PHASE I

STATUS

Complete

WHO PARTICIPATED?

Healthy volunteers (Volunteers not living with SMA)

WHAT WAS THE GOAL?

Safety and how the body responds to apitegromab

PHASE 2: TOPAZ STUDY

Complete



Type 2 & Type 3 SMA split into three groups:

- 1 Type 3, ambulatory*, ages 5-21 years
- 2 Types 2 & 3, nonambulatory*, ages 5-21 years, who started an SMN therapy at or after age 5
- 3 Type 2, nonambulatory, age 2 years or older, who start edan SMN therapy before age 5

WHAT WAS THE GOAL?

Safety and effectiveness of apitegromab in Type 2 and 3 SMA

Where We Are

PHASE 3: SAPPHIRE TRIAL



STATUS Ongoing topline results expected in Q4, 2024



WHO IS PARTICIPATING?

Types 2 & 3 SMA nonambulatory*, divided into two groups:

- 1 Those aged 2 12, in people using SMN therapy
- 2 Those aged 13 21, in people using SMN therapy

WHAT IS THE GOAL?

Compare the effect of apitegromab with placebo*. Gather additional data to support an application to the Food and Drug Administration (FDA) for approval.

ONYX OPEN-LABEL EXTENSION STUDY

STATUS Ongoing



WHO IS PARTICIPATING?

Participants who have completed the TOPAZ or SAPPHIRE study had the opportunity to enroll

WHAT IS THE GOAL?

Long-term safety of apitegromab

SMN treatments include Spinraza,

have defined nonambulatory as the inability to walk more than 10 steps without assistance.

Ambulatory: for the purposes of our studies, we have 10 steps without assistance.

Placebo: a substance that has no therapeutic effect, used as a control in testing new drugs.

What We're Looking Forward To

SAPPHIRE STUDY INITIAL RESULTS (2024)

We anticipate having a readout of initial study data this year.

Exploring apitegromab in other SMA populations such as ambulatory SMA and younger people living with SMA.

The Role Of Muscle In SMA SMA affects both nerves and muscles

- Current approved treatments target motor neurons, slowing further motor neuron deterioration.
- Motor neurons are nerve cells that connect to and communicate with skeletal muscle, letting them know when to contract.
- The goal of Scholar Rock's approach is to strengthen the muscle component.
- This approach presents an opportunity to increase muscle mass, with the aim of improving motor function.

Increasing muscle mass in SMA may support many different activities:



Muscle Fatigue

Withstand activities for longer like writing their notes at university or typing on a phone or computer

ting Muscl

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Myostatin is a protein that every person has in their body, including those living with SMA. It regulates the breakdown of muscle, as part of a natural system that regulates muscle growth. Preventing the activation of myostatin reduces this breakdown and can increase the size of skeletal muscle throughout the body.

Reducing myostatin activation, in addition to addressing SMN deficiency, may be an approach that leads to increased muscle mass and improved motor function in those living with SMA. This is the approach used by apitegromab, which is currently under investigation.

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Hand Control

Drinking a glass of water, operating a wheelchair, pressing an elevator button



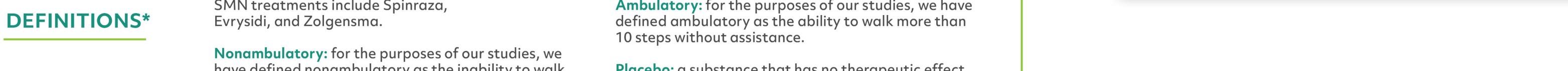
Muscle Tone

Sitting, turning sides in bed, lifting a blanket



Chewing

Being able to eat different and tougher foods





Going from bed to the bathroom, wheelchair to toilet, etc.