Clinical progress update for SAT-3247, a first-of-its-kind, orally administered small molecule drug to address deficits in muscle repair and regeneration in Duchenne.

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BACKGROUND

- Duchenne muscular dystrophy (DMD) is an X-linked recessive neuromuscular disorder caused by mutations in the dystrophin gene
- While existing therapies represent meaningful advances in Duchenne muscular dystrophy, there remains a significant unmet medical need, underscoring the importance of continued innovation to address gaps in treatment across the full disease spectrum
- Loss of dystrophin signalling disrupts skeletal muscle repair and regeneration, leading to progressive muscle loss
- SAT-3247 is an oral small molecule inhibitor of AAK1 designed to restore this required signaling in a dystrophin independent fashion, enhancing repair and regeneration of damaged skeletal muscle
- Preclinical studies have shown that SAT-3247 increases progenitor cell counts, improves muscle pathology, and improves functional muscle strength in Mdx mouse and canine models of DMD
- SAT-3247 was shown to be safe and well tolerated in 72 healthy volunteers, with a consistent pharmacokinetic (PK) profile.
- In five adult participants with DMD, treated for 28 days, SAT-3247 was safe and well tolerated, showed PK comparable to healthy volunteers, and demonstrated an approximate doubling of grip strength (from ~2 kg to ~4 kg).

How SAT-3247 Works:
Supporting the Body's Muscle Repair and Regeneration Process

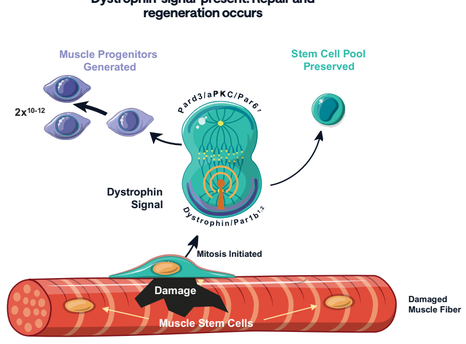
THE PROBLEM

In Duchenne muscular dystrophy, muscles are damaged faster than the body can repair them. Over time, this imbalance leads to a steady decline in muscle strength and function.

HEALTHY MUSCLE REPAIR

In healthy muscle, stem cells respond to damage by dividing in a balanced way — some become new muscle cells to repair tissue, while others stay as stem cells to support future repair. This balance is essential for ongoing muscle health and is illustrated below.

Dystrophin 'signal' present: Repair and regeneration occurs

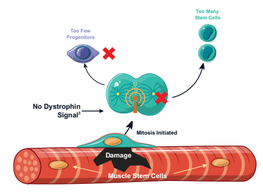


1. *Pard3, APKC, Par6, and Parb form the Par Polarity Complex*
2. *Dystrophin phosphorylates Parb to establish the basal pole of the cell and release Pard3 et al to form the apical pole*
3. *Absent Dystrophin, phosphorylation of Parb does not occur, polarity is impaired and the balance of stem cells to progenitors is distorted*

THE BREAKDOWN

Satellos discovered that in Duchenne, this balance is upset as the process breaks down. Stem cells simply don't divide the way they should. As a result, the body can't keep up with the damage, and muscle regeneration slows down significantly.

Dystrophin 'signal' absent: Repair and regeneration impaired



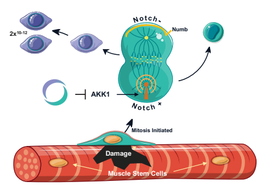
THE INSIGHT

Research at Satellos uncovered an important reason why this process breaks down: A critical signal that muscle stem cells rely upon is missing. In healthy muscle, this signal is normally provided by a protein called dystrophin. Without it, as occurs in Duchenne, stem cells lose their ability to divide properly.

THE APPROACH

Satellos identified an alternative way to provide this needed signal — independent of dystrophin. Doing so can help restore balance in how muscle stem cells divide. SAT-3247 is an oral investigational treatment designed to temporarily block a protein called AAK1. In this way, SAT-3247 helps support a more balanced stem cell response to muscle damage, enabling repair and regeneration.

Missing 'signal'replaced: repair and regeneration occures



1. *Notch signaling is a conserved pathway that regulates cell proliferation, cell fate, and differentiation.*
2. *Inhibiting AAK1 establishes a notch gradient across the satellite cell, via Numb inhibition at the apical pole, restoring appropriate cell division*

THE GOAL

Our goal is to restore the body's natural ability to regenerate muscle — from within.

In Duchenne, where muscle repair is disrupted, we aim to restart the cycle of muscle growth and renewal.

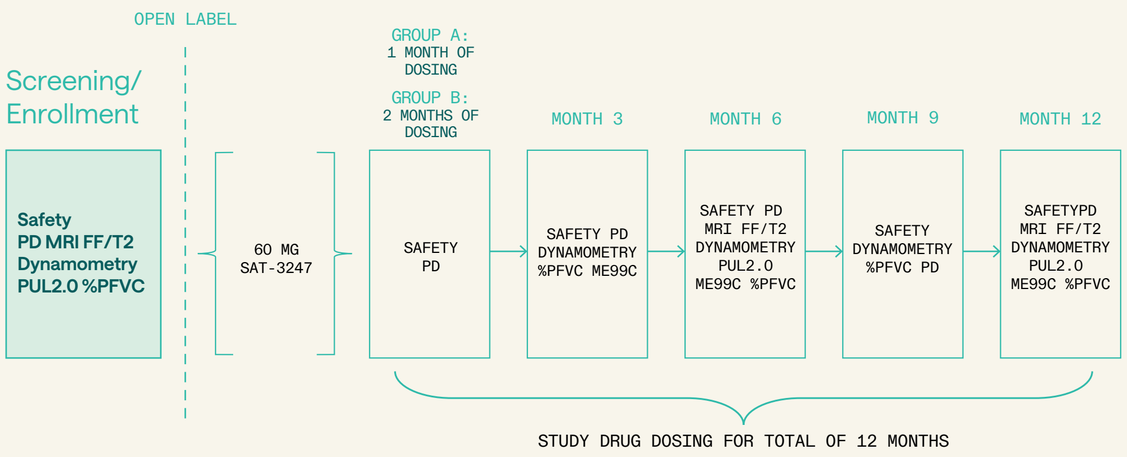
SAT-3247-LT-001 (active and recruiting)

Trial Design and Patient Population

LT-001 is an open-label long-term safety and efficacy study of orally administered SAT-3247 in patients with DMD, including those who previously participated in SAT-3247-CL-101.

The study will assess the long-term safety, tolerability and potential efficacy of long-term dosing of 60 mg of orally administered SAT-3247 in a 5-days on/2-days off (i.e. weekday dosing) regimen. This open-label design includes: Group A - dosing through 11 months, for a total of 12 months of treatment including the duration of the parent study for participants who completed SAT-3247-CL-101; and Group B - 12 months for participants who were not previously enrolled in the SAT-3247-CL-101 study. The study will enroll up to 15 participants, including 5 who previously participated in the SAT-3247-CL-101 study.

Trial Schematic



Primary Endpoints

- **Safety**: to evaluate the long-term safety and tolerability of SAT-3247 in DMD patients ≥ 16 years of age.
- **Efficacy:** to determine SAT-3247 effects on fat fraction in biceps brachii muscle MRI following 12 months of treatment.

Key Secondary Endpoints

- To determine effects of SAT-3247 on fat fraction in biceps brachii muscle MRI following 6 months of treatment
- To determine effects of SAT-3247 on muscle force by dynamometry at 12 months of treatment
- To determine the potential for improvement in muscle function at 12 months of treatment with SAT-3247

Select Inclusion Criteria

- Definitive diagnosis of DMD with a confirmed mutation in the DMD gene
- (Group A) male participants aged ≥ 18 years to 40 years who previously participated in the SAT-3247-CL-101 clinical trial.
- (Group B) Male participants aged ≥ 16 years to 25 years that have not previously received treatment with SAT-3247

Select Exclusion Criteria

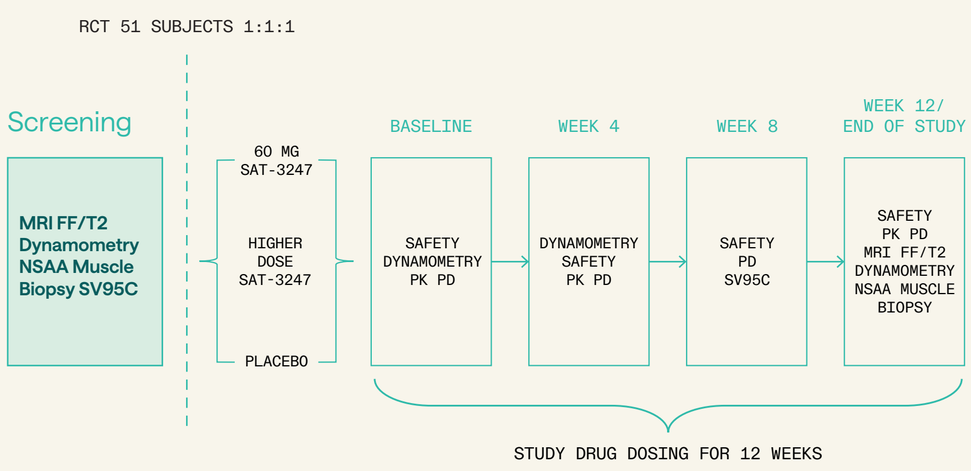
- Group B: Entry item score on the Performance of Upper Limb (PUL2.0) assessment > 5.
- Group B: Requirement for daytime ventilator assistance. *Night ventilator assistance and use of bi-level positive airway therapy is allowed.*
- Participants for whom upper extremity MRI is contraindicated.
- Receipt of an investigational product (including prescription medicines and investigational devices) as part of another clinical trial since completion of the SAT-3247-CL-101 study or in the follow-up period of another clinical trial at the time of Screening for this study.

SAT-3247-CL-201 (planned study subject to regulatory review)

Trial Design and Patient Population

CL-201 is a Phase 2a, randomized, double-blind, placebo-controlled dose comparison and exploratory efficacy study of orally administered SAT-3247 in ambulatory DMD patients. Enrollment of up to 51 pediatric ambulatory DMD participants is planned. Each participant will receive once daily doses of SAT-3247, or matched placebo, for five consecutive days, followed by matched placebo for two consecutive days of each week (i.e. weekday dosing) for 12 weeks.

Trial Schematic



Primary Endpoints

- **Safety**: to evaluate the safety and tolerability of SAT-3247 in ambulatory DMD patients.
- **Efficacy**: to determine SAT-3247 effects on muscle force as determined by dynamometry at 12 weeks.

Key Secondary Endpoints

- SAT-3247 effects on muscle quality: change from baseline in intramuscular fat fraction in quantitative MRI in vastus lateralis
- SAT-3247 effects on muscle function: changes from baseline in north star ambulatory assessment
- SAT-3247 effects on muscle function: changes from baseline in stride velocity 95th Centile (SV95C)
- SAT-3247 effects on muscle regeneration: changes from baseline in the regeneration index as measured from an open biopsy of biceps brachii

Select Inclusion Criteria

- Definitive diagnosis of DMD with a confirmed mutation in the DMD gene
- Male DMD patients who are ambulatory at the time of screening.
- Completed two four-stair climb assessments at Visit 1 with a mean of 8 seconds or less (≤1 s variance).
- Have a time to rise of at least 3 seconds but less than 10 seconds.

Select Exclusion Criteria

- Ambulatory patients expected to experience loss of ambulation within ≤ 12 months.
- Individuals for whom MRI or open muscle biopsy are contraindicated.
- A forced vital capacity < 60% predicted at the Screening Visit.
- Ongoing participation in any other therapeutic clinical trial or follow-up study for a therapeutic intervention
- Prior treatment with an investigational gene therapy product < 24 months prior to screening
- Individuals that have received a commercially available gene therapy product < 18 months prior to screening
- Individuals receiving a stable dose of givinostat < 18 months prior to screening