

ACE-083 FSHD Trial

Myostatin+ Inhibitor

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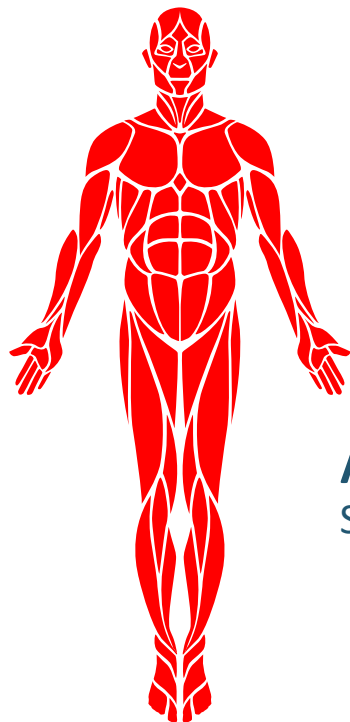
VP, Medical Research, Acceleron Pharma



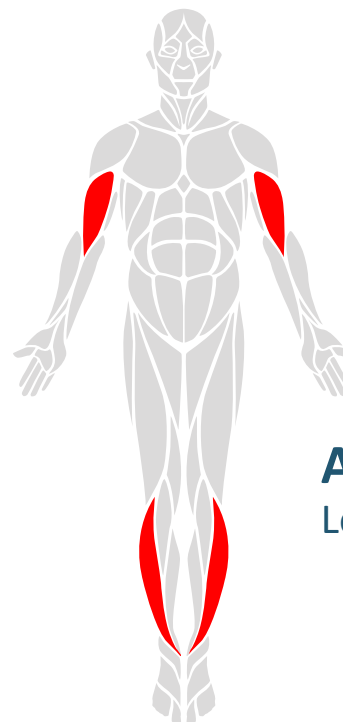
2018 FSHD CONNECT

The FSH Society's International
Network Meeting

Accelaron Pharma's Approach to Drugs Targeting Muscle



ACE-2494
Systemic Agent



ACE-083
Local Agent

- Atrophy and weakness of specific muscles can have a devastating impact on activities of daily living and a patient's overall quality of life



Weakness of the Tibialis Anterior (TA)

- Causes foot drop
- Impairs mobility/walking
- Increases risk of falls



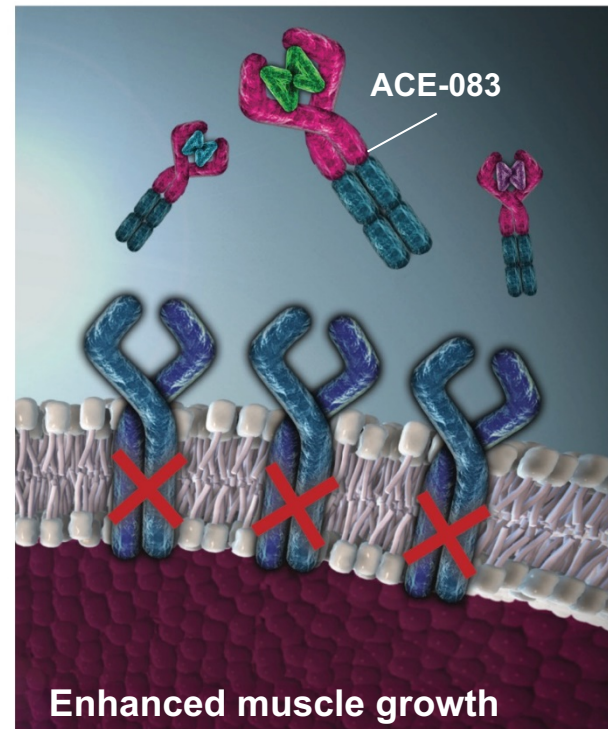
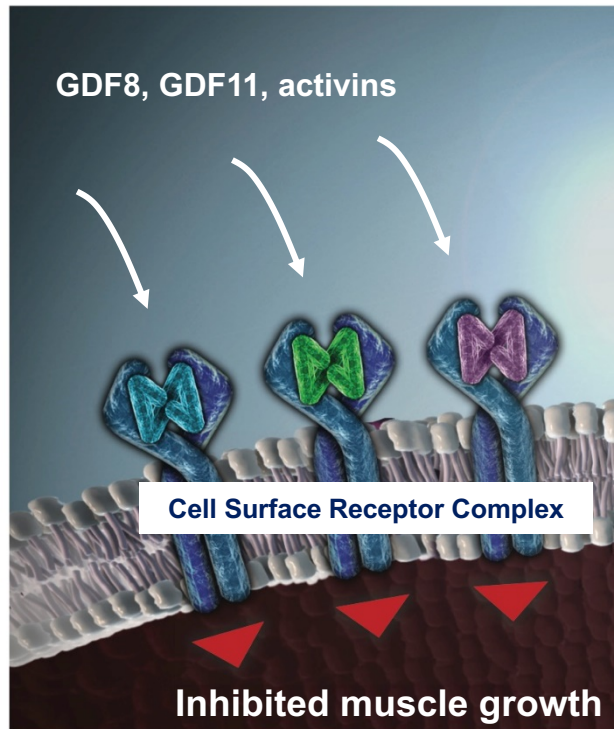
Weakness of the biceps brachii (BB)

- Impairs ability to feed oneself
- Reduces ability to maintain hygiene
- Limits ability to lift objects

ACE-083 – A Locally-Acting Muscle Therapeutic



- ACE-083 is a locally-acting drug based on follistatin, a naturally occurring stimulator of muscle (myostatin+ inhibitor)
- Designed to be locally injected in affected muscles, to increase muscle mass and strength
- Increased muscle first demonstrated in healthy volunteers¹



¹ Glasser CE, et al. Muscle Nerve. 2018; 57:921-926

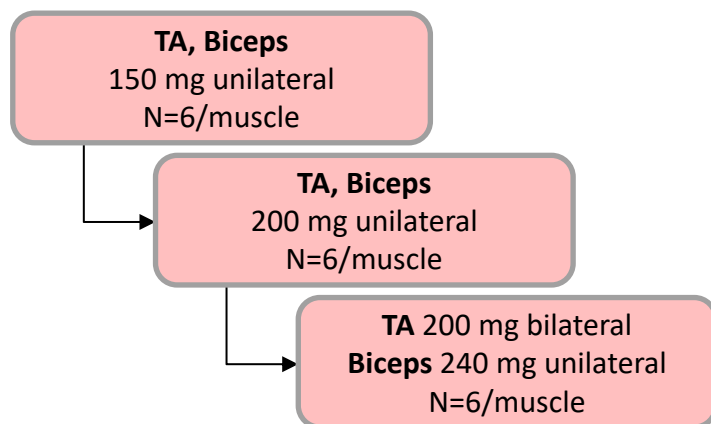
ACE-083 FSHD Phase 2 Study Design



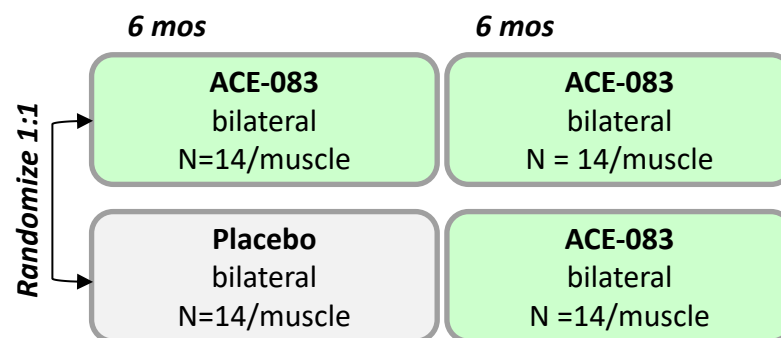
Treatment

- ACE-083 is injected into tibialis anterior (TA) or biceps muscle(s)

Part 1 – 3 mos open-label, N=36



Part 2 – 6 mos placebo-controlled → 6 mos open-label, N=56



Key Eligibility Criteria

- Age ≥ 18 years
- FSHD1 or FSHD2
- Mild to moderate weakness in ankle dorsiflexion or elbow flexion
- No medications affecting muscle

Objectives

- Safety and tolerability
- Dose selection
- Muscle mass, fat fraction (MRI)
- Measures of strength, function, quality of life, gait

ACE-083 FSHD Study – Safety Summary

Part 1 Cohorts 1 and 2



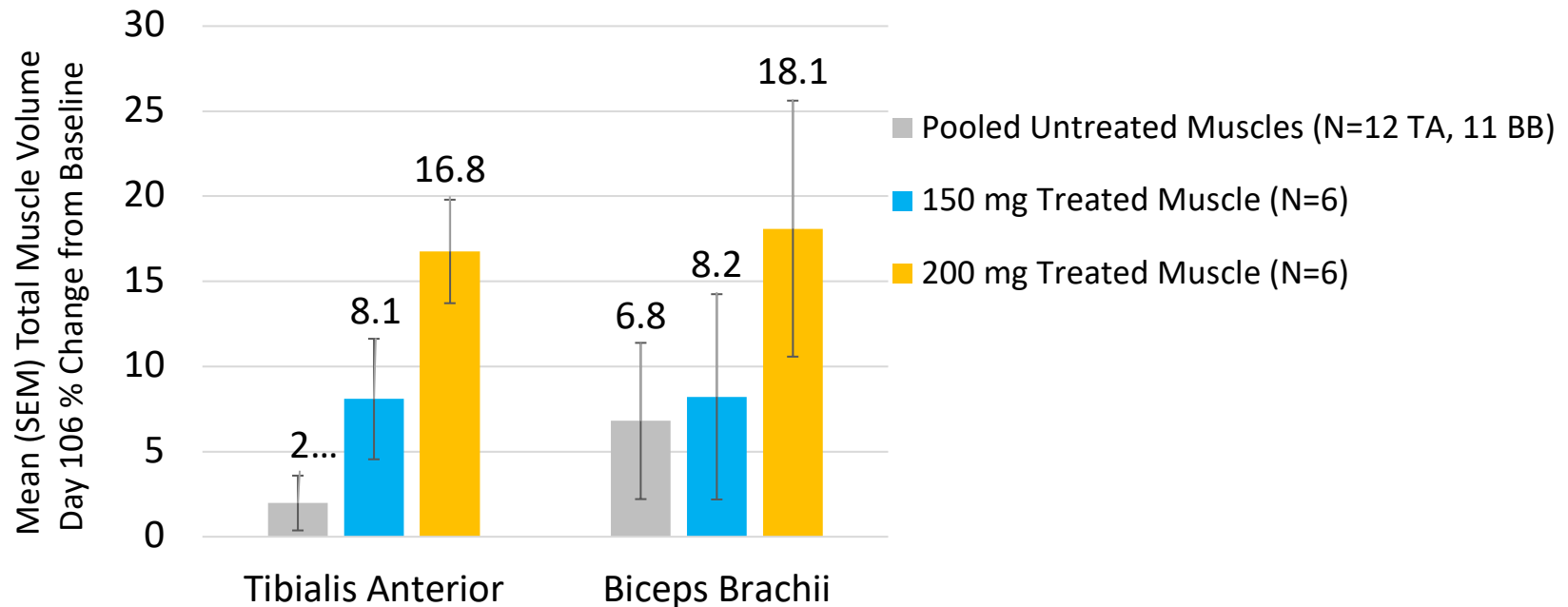
- ACE-083 was safe and generally well tolerated in patients who were treated for up to 3 months
- No serious adverse events
- Most common adverse events were injection site reactions and muscle pain
- No clinically significant laboratory abnormalities on treatment

ACE-083 FSHD Study – Changes in Muscle and Fat (by MRI)

Part 1 Cohorts 1 and 2



- Increases in *muscle volume* were dose dependent
- Decreases in *fat fraction* in the tibialis anterior indicate leaner muscle



ACE-083 Multi-National Phase 2 Trial – US Sites

- Placebo–controlled Part 2 of FSHD study now enrolling (NCT02927080)
- Participating sites in US, Canada, and Spain

