Scholar Rock
Q3 Business Update

November 7, 2023

ScholarRock™

Forward-Looking Statements

Various statements in this presentation concerning the future expectations, plans and prospects of Scholar Rock, Inc. (“Scholar Rock”), including without limitation, Scholar Rock’s expectations regarding its strategy, its product candidate selection and development timing, including timing for the initiation of and reporting results from its preclinical studies and clinical trials for SRK-439, apitegromab, SRK-181, and other product candidates and indication selection and development timing, its cash runway, the ability of any product candidate to perform in humans in a manner consistent with earlier nonclinical, preclinical or clinical trial data, and the potential of its product candidates and proprietary platform. The use of words such as “may,” “could,” “might,” “will,” “should,” “expect,” “plan,” “anticipate,” “believe,” “estimate,” “project,” “intend,” “future,” “potential,” or “continue,” and other similar expressions are intended to identify such forward-looking statements for the purposes of the safe harbor provisions under The Private Securities Litigation Reform Act of 1995. All such forward-looking statements are based on management's current expectations of future events and are subject to a number of risks and uncertainties that could cause actual results to differ materially and adversely from those set forth in or implied by such forward-looking statements. These risks and uncertainties include, without limitation, that preclinical and clinical data, including the results from the Phase 2 trial of apitegromab or Part A or Part B of the Phase 1 trial of SRK-181, are not predictive of, may be inconsistent with, or more favorable than, data generated from future or ongoing clinical trials of the same product candidate, including the Phase 3 clinical trial of apitegromab in SMA and Part B of the Phase 1 clinical trial of SRK-181, respectively, Scholar Rock’s ability to provide the financial support, resources and expertise necessary to identify and develop product candidates on the expected timeline, the data generated from Scholar Rock’s nonclinical and preclinical studies and clinical trials, information provided or decisions made by regulatory authorities, competition from third parties that are developing products for similar uses, Scholar Rock’s ability to obtain, maintain and protect its intellectual property, the success of Scholar Rock’s current and potential future collaborations, Scholar Rock’s dependence on third parties for development and manufacture of product candidates including, without limitation, to supply any clinical trials, Scholar Rock’s ability to manage expenses and to obtain additional funding when needed to support its business activities and establish and maintain strategic business alliances and new business initiatives, and the impacts of current macroeconomic and geopolitical events, hostilities in Ukraine, increasing rates of inflation and rising interest rates, on business operations and expectations, as well as those risks more fully discussed in the section entitled "Risk Factors" in Scholar Rock’s Form 10-K for the year ended December 31, 2022, and Quarterly Report on Form 10-Q for the quarter ended September 30, 2023, as well as discussions of potential risks, uncertainties, and other important factors in Scholar Rock’s subsequent filings with the Securities and Exchange Commission. Any forward-looking statements represent Scholar Rock’s views only as of today and should not be relied upon as representing its views as of any subsequent date. All information in this press release is as of the date of the release, and Scholar Rock undertakes no duty to update this information unless required by law. This presentation may also contain estimates and other statistical data made by independent parties and by us relating to market size and growth and other data about our industry. This data involves a number of assumptions and limitations, and you are cautioned not to give undue weight to such estimates. In addition, projections, assumptions, and estimates of our future performance and the future performance of the markets in which we compete are necessarily subject to a high degree of uncertainty and risk. Apitegromab, SRK-181, and SRK-439 are investigational drug candidates under evaluation. Apitegromab, SRK-181, and SRK-439 have not been approved for any use by the FDA or any other regulatory agency and the safety and efficacy of apitegromab, SRK-181 and SRK-439 have not been established.

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Scholar Rock Call Participants

Jay Backstrom, MD, MPH
Chief Executive Officer

Ted Myles, MBA
Chief Operating Officer &
Chief Financial Officer

Mo Qatanani, PhD
SVP, Head of Research

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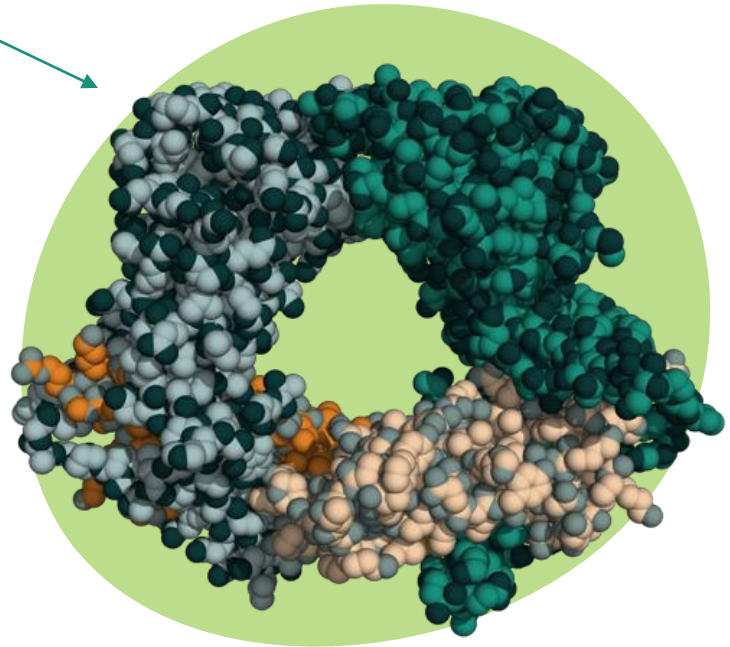
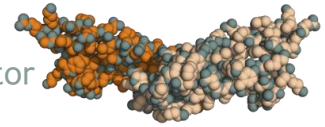
Differentiated Benefits to Selective Targeting

Scholar Rock's Target
Latent Growth Factor



Traditional Target
"mature" active growth factor

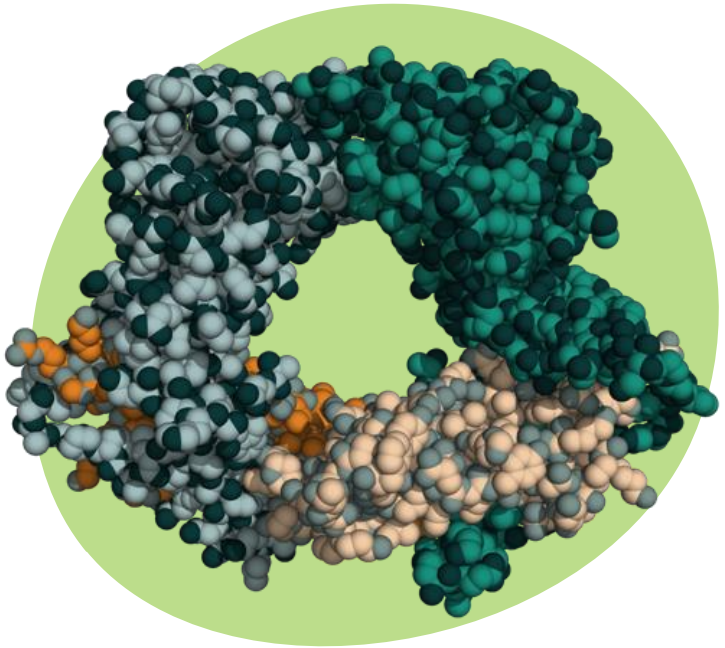


TGFβ Superfamily: Highly Sought-After Targets

- Our uniquely designed antibodies selectively target the latent form of growth factors
- Selectivity can mitigate unintended negative effects that have plagued traditional approaches targeting the mature form

Next Frontier in Antimyostatin

Leveraging our R&D platform to expand into cardiometabolic disorders



Myostatin is a member of the TGFβ superfamily known to be a negative regulator of muscle mass and promotes muscle catabolism

- SRRK's antibodies are engineered to *only* target pro- and latent forms of myostatin, potentially avoiding undesirable off-target effects which plague other approaches
- Leveraging insights from apitegromab, which to date has shown a sustained benefit, well tolerated profile and low discontinuation rate over 36 months in ~250 patients
- Developing a novel, highly potent and selective antibody (SRK-439) for cardiometabolic disorders

Robust Portfolio Focused on Serious Diseases

TARGET		DISCOVERY/ PRECLINICAL	PHASE 1	PHASE 2	PHASE 3	ANTICIPATED KEY MILESTONES
Latent Myostatin	**SPINAL MUSCULAR ATROPHY** Apitegromab			TOPAZ	SAPPHIRE	SAPPHIRE Data Readout Q4 2024 Commercial Launch 2025*
	CARDIOMETABOLIC DISORDERS Apitegromab in Obesity**					File IND Initiate Ph 2 POC trial in 2024†
	SRK-439 (novel antimyostatin antibody)					IND-enabling studies in 2024 File IND in 2025
Latent TGFβ-1	**IMMUNO-ONCOLOGY** SRK-181 (selective context-independent, anti-latent TGFβ-1)		DRAGON			Complete enrollment in December 2023
	FIBROSIS Selective context-dependent (LTBP1 & LTBP3) anti-latent TGFβ-1					IND-enabling studies
RGMc	**ANEMIA** Selective anti-RGMc					IND-enabling studies

Potential to transform the lives of people living with a wide range of serious diseases, including neuromuscular disorders, cardiometabolic disorders, oncology, and fibrosis

LTBP3 = Latent transforming growth factor beta binding protein 3; LTBP1 = Latent transforming growth factor beta binding protein 1; RGM = repulsive guidance molecule; TGFβ-1 = Transforming growth factor beta-1; IND = Investigational new drug; POC = Proof of concept
* Contingent upon receipt of regulatory approval.
** Subject to receipt of regulatory authority approval. We plan to utilize data from a previously completed Ph 1 study in healthy volunteers and initiate a Ph 2 POC trial in 2024.
† Potential initiation of Ph 2 POC trial in 2024, subject to IND acceptance.

Clinical Programs Update

SRK-181
Apitegromab

Jay Backstrom – Chief Executive Officer

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SRK-181 | Immuno-Oncology

Transformative backbone for a new era of cancer immunotherapy

DRAGON

Dose Escalation (3+3)

Part A1: SRK-181 Single Agent (80-3000 mg q3w)

All advanced solid tumor n=19

Part A2: SRK-181 (IV) + anti-PD-(L)1 (SRK-181: 240-2400mg q3w)

Advanced solid tumor non responders to prior anti-PD-(L)1 n= 15

Dose Expansion

Part B: SRK-181 (IV) + Pembrolizumab (SRK-181: 1500mg q3w) n=up to 40/ cohort (enrolling)

- Cohort UC
- Cohort ccRCC *
- Cohort melanoma
- Cohort NSCLC
- Cohort HNSCC *

Eligibility for ccRCC Patients

- >18 years old and ECOG 0–1
- Measurable disease per RECIST v1.1
- At least 1 prior line of anti-PD-1 antibody**
- Part A2:
  - Non-responsive to prior anti-PD-1 with a best response of PD or SD
- Part B:
  - Must have had PD on the most recent prior anti-PD-1 treatment
  - Up to 3 lines of treatment are allowed between the last dose of prior anti-PD-1 treatment

Data from Phase 1 DRAGON Proof-of-Concept Trial

- Supports proof-of-concept for SRK-181 in heavily pre-treated patients with ccRCC resistant to anti-PD-1
- Biomarker data from all cohorts in Part B supports proof-of-mechanism in patients with multiple tumor types

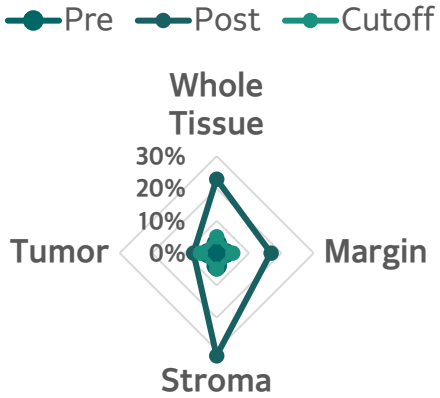
Data as of August 29, 2023

*The clear cell RCC and HNSCC cohorts will also explore the effects of SRK-181 in patients with relapsed response after anti-PD-1 treatment.
1. NCT04291079 on www.clinicaltrials.gov. **ccRCC cohort (n=30): 5 patients received 1 prior line of therapy, 10 patients received 2 prior lines of therapy, and 15 received ≥ 3 lines of therapy. 100% had disease progression from last line of prior therapy.

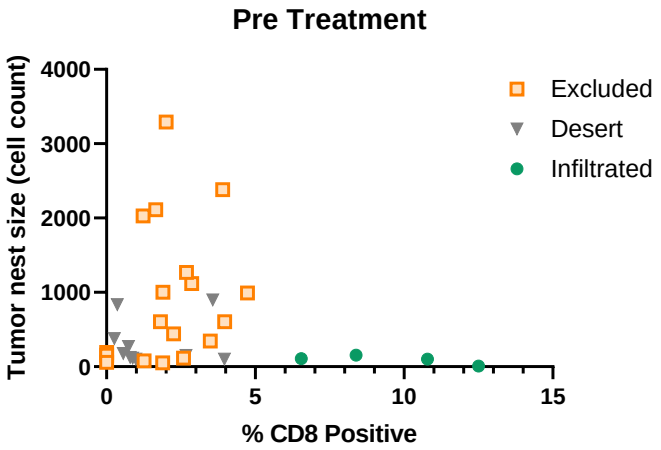
SRK-181 in Combination with Anti-PD1 Increases Infiltration of CD8+ T Cells in Melanoma

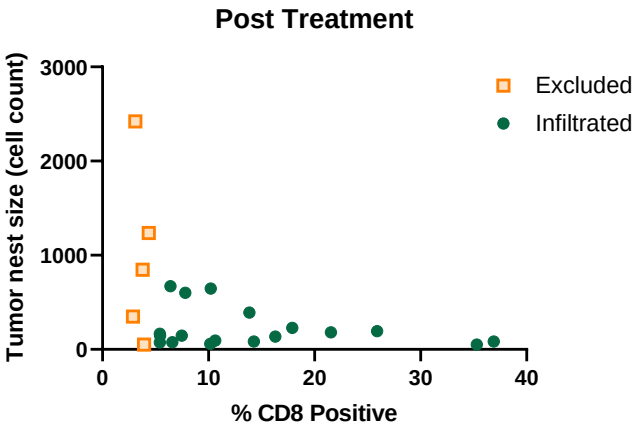
- Paired biopsies from 2 melanoma patients were analyzed for CD8 content.
- An increase in CD8+ T cell infiltration was observed in both biopsy pairs, overcoming an initially excluded or desert phenotype and resulting in more infiltrated tumor nests.
- Shown here is the representative quantification and images from one melanoma patient.

Primary Compartmental Analysis % CD8+ T cells per compartment

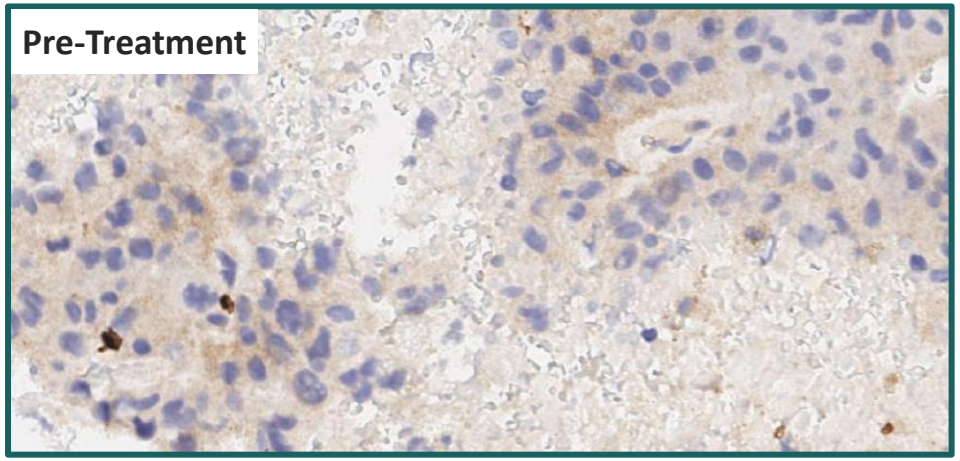


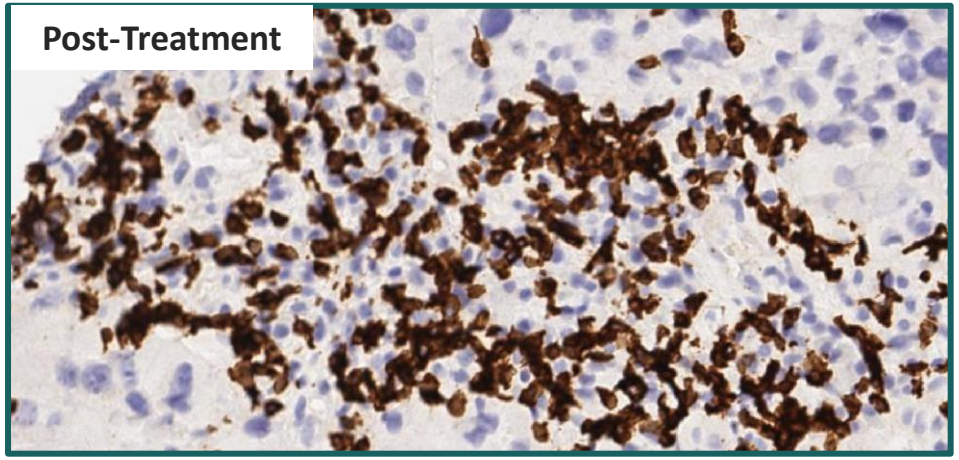
Tumor Nest Analysis



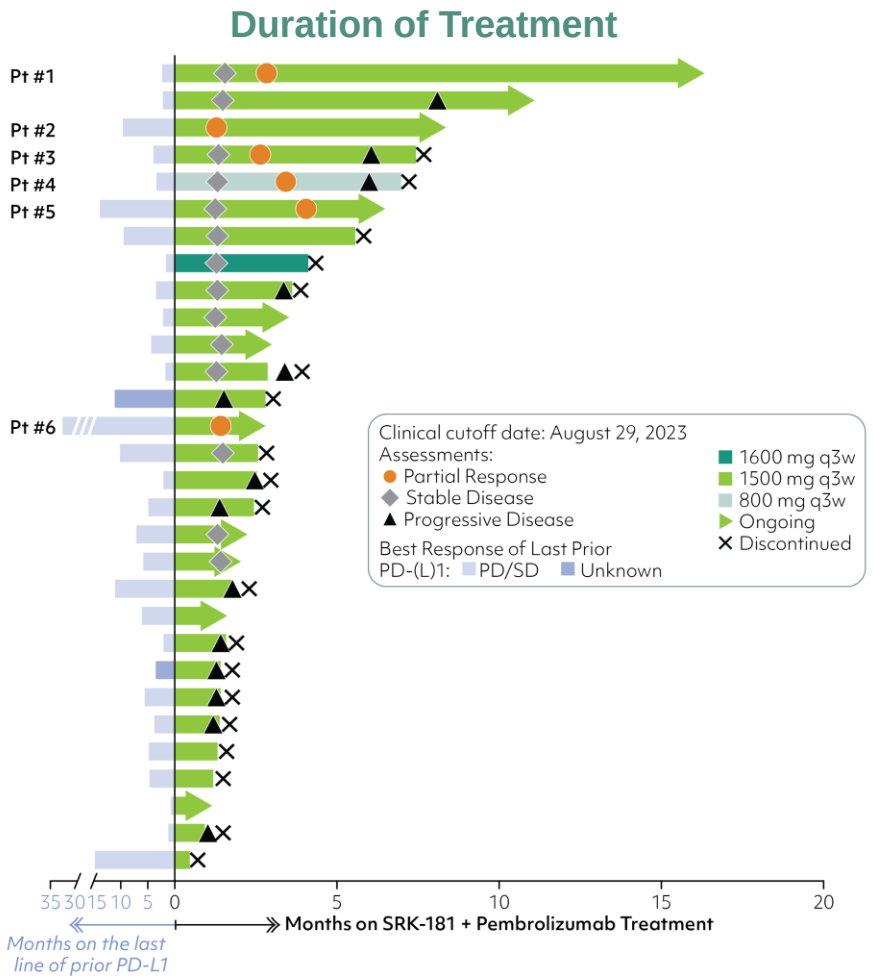


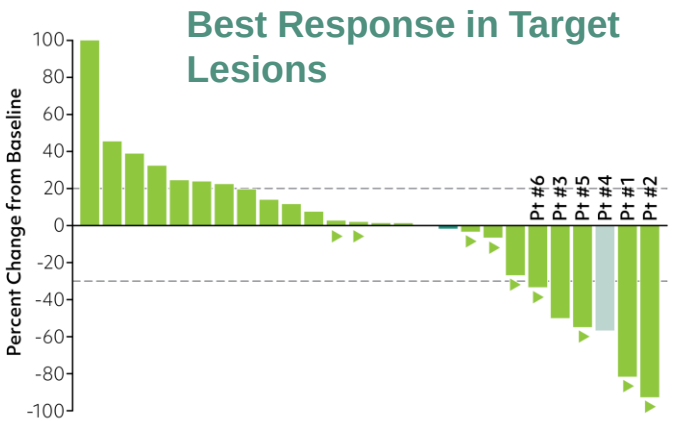
CD8 Stain – Melanoma, Pre and Post Treatment

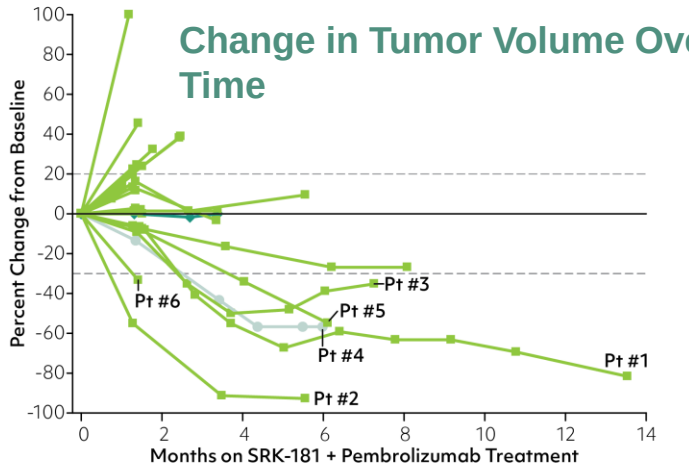




Continued Tolerability & Promising Anti-Tumor Activity | ccRCC Patients







PR=Partial response
SD=Stable disease

SRK-181 + pembrolizumab in ccRCC Patients*

- ORR = **21.4%**
- Disease control rate = **57%**
- **6 PRs** (4 remain on study)
- **33% to 93%** best tumor reduction observed
- **10 SD** patients, 5 of which remain on study
- Combination therapy of SRK-181 + pembrolizumab was **generally well tolerated**

***28 patients; data as of 8/29/23**

Differentiation

- Monoclonal antibody targeting latent and context-independent binding to TGFβ1
- Differentiated from other TGFβ inhibitors by its novel selectivity
- Offers potential to avoid toxicity and dose-limiting challenges of non-selective TGFβ inhibition approaches

SRK-181 Summary

Ph1 DRAGON proof of concept trial achieved study objectives

- **Showed objective, durable clinical responses above what is expected from continuing PD-1 alone[1]**
- **Biomarker data supports proof-of-mechanism**

Next steps

- **Completing enrollment in December 2023**
- **Continue treating patients who remain on study**
- **Present ongoing emerging data at future medical meetings**
- **Conduct an end of Phase 1 meeting with regulatory authorities to inform next steps**

[1]Sumanta Kumar Pal et al. Atezolizumab plus cabozantinib versus cabozantinib monotherapy for patients with renal cell carcinoma after progression with previous immune checkpoint inhibitor treatment (CONTACT-03): a multicentre, randomised, open-label, phase 3 trial. The Lancet, Volume 402, Issue 10397, 2023, Pages 185-195, https://doi.org/10.1016/S0140-6736(23)00922-4
PD-1/PD-L1)

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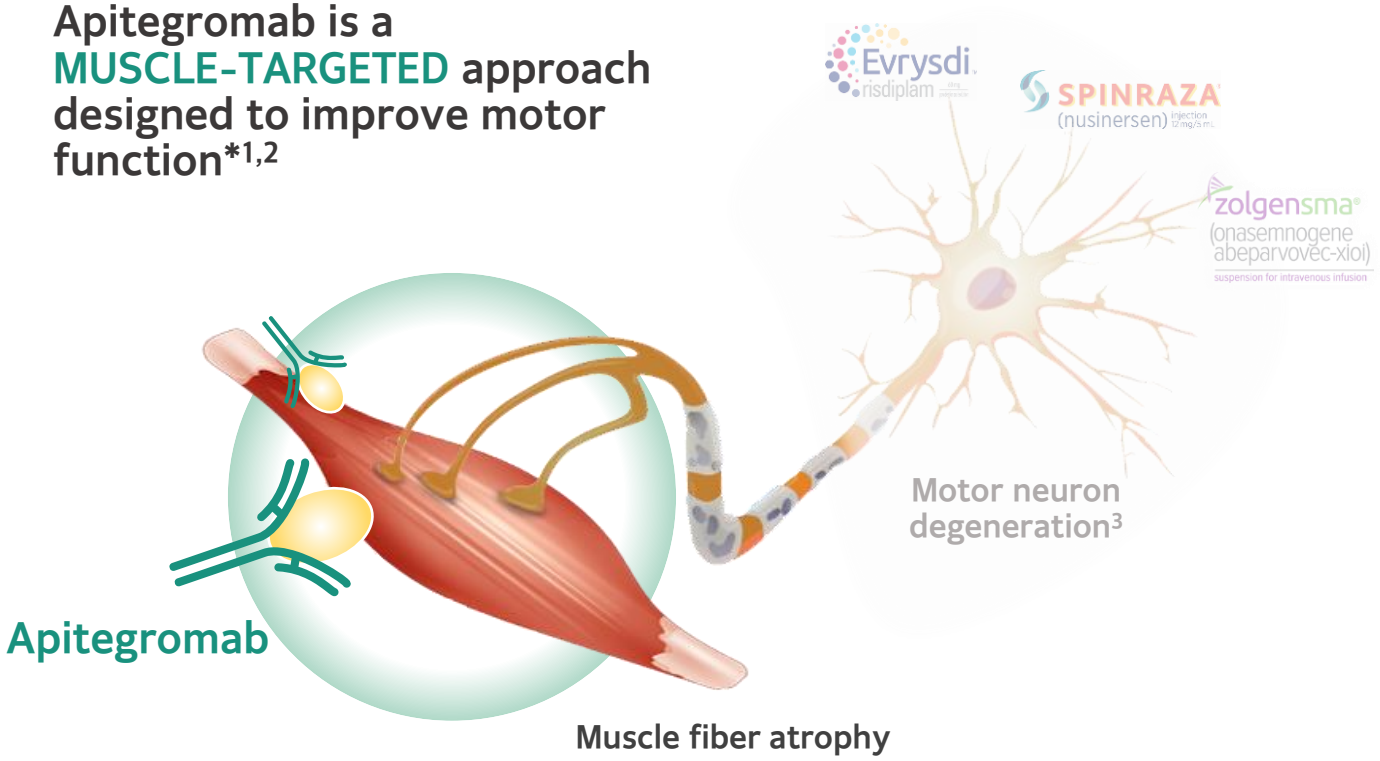
Apitegromab | Spinal Muscular Atrophy

First and only muscle-targeted investigational treatment to demonstrate clinical POC

Apitegromab is a MUSCLE-TARGETED approach designed to improve motor function*[1,2]

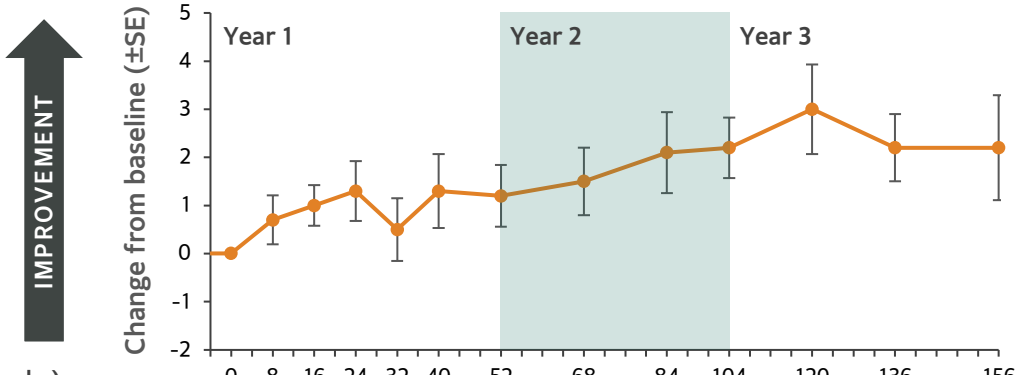


- **Pivotal Ph3 SAPPHIRE trial:**
  - Enrollment completed - Q3 2023
  - Expected **data readout - Q4 2024**
- Ph2 TOPAZ trial showed **sustained motor function gains** over 36 months in patients with nonambulatory Types 2/3 SMA
- FDA has granted **Fast Track, Orphan Drug,** and Rare Pediatric Disease designations
- European Medicines Agency (EMA) has granted **Priority Medicines (PRIME)** and **Orphan designations**

* Based on Animal Model Data; 1. Long KK, et al. Hum Mol Genet. 2019;28(7):1077-1088; 2. Pirruccello-Straub M, et al. Sci Reports. 2018;8(1):2292. doi:10.1038/s41598-018-20524-9 3. Figure adapted from: SMA Foundation Overview. http://www.smafoundation.org/wp-content/uploads/2012/03/SMA-Overview.pdf.; Accessed April 18, 2021. For illustrative purposes only

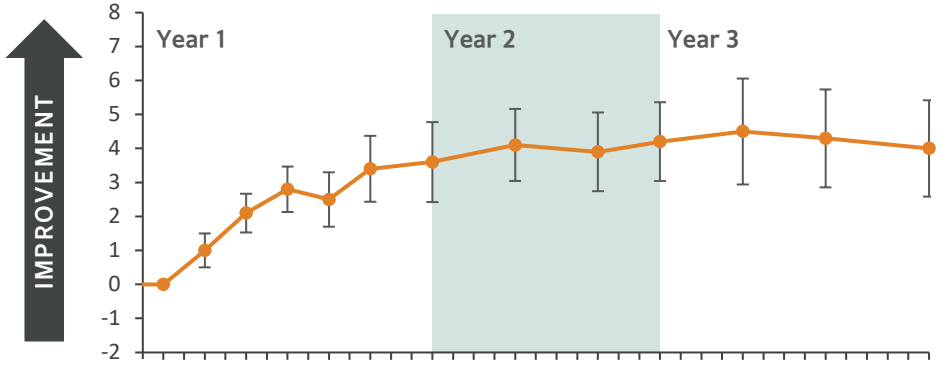
TOPAZ 36M Data: Robust and Consistent Improvements Observed across Motor Function and PRO Measures (Pooled Nonambulatory Patients | Age 2 – 21 | All Doses)

PEDI-CAT Daily Activities



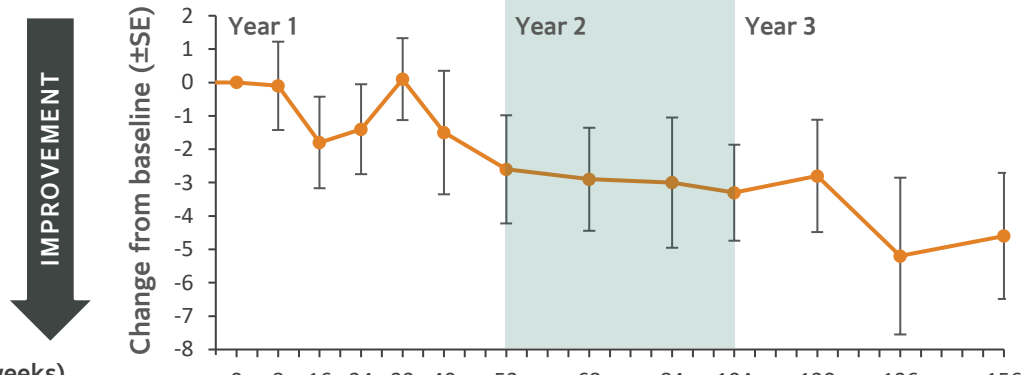
Time (weeks)	0	8	16	24	32	40	52	68	84	104	120	136	156
No. of observations	31	29	30	21	23	25	25	27	22	23	16	15	17

HFMSE



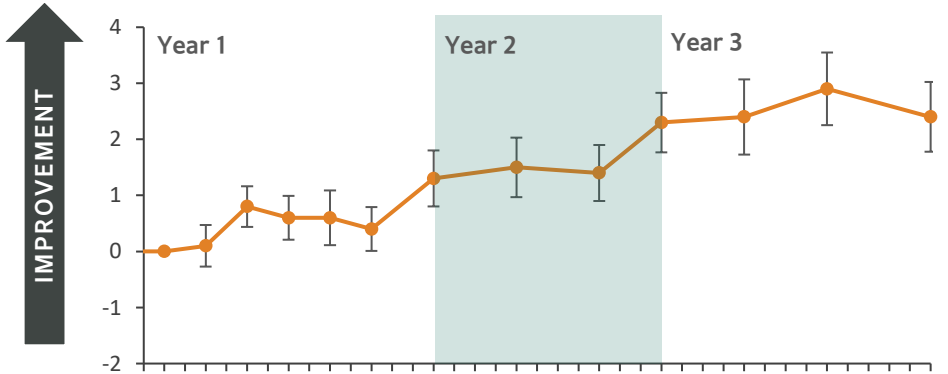
Time (weeks)	0	8	16	24	32	40	52	68	84	104	120	136	156
No. of observations	35	35	34	29	28	29	32	32	32	29	27	27	28

PROMIS Fatigue (Proxy)



Time (weeks)	0	8	16	24	32	40	52	68	84	104	120	136	156
No. of observations	25	23	22	19	19	22	16	18	19	19	16	14	14

RULM

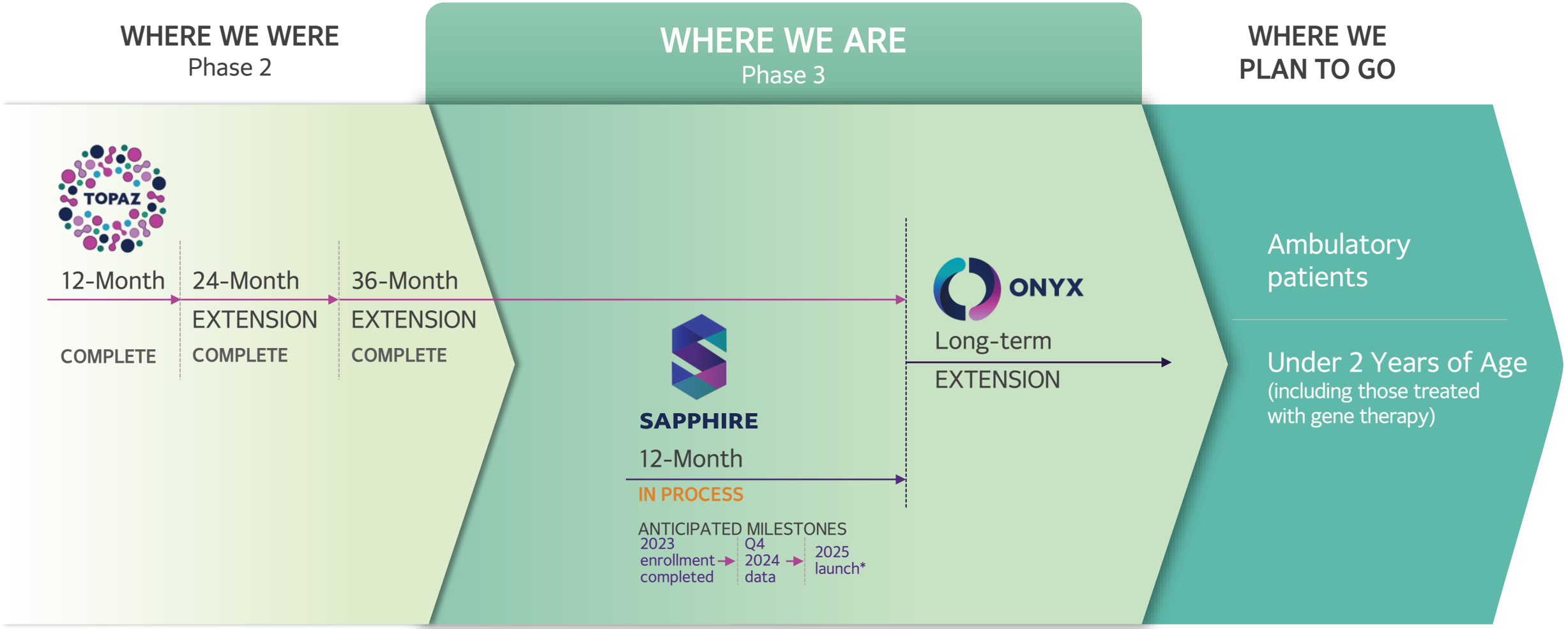


Time (weeks)	0	8	16	24	32	40	52	68	84	104	120	136	156
No. of observations	34	34	34	28	27	29	31	32	32	31	27	27	27

N = 35; Baseline mean age=7.3 | **Time on SMN Rx=24.1m**

HFMSE=Hammersmith Functional Motor Scale Expanded; OC=observed case; PEDI-CAT=Pediatric Evaluation of Disability Inventory Computer Adaptive Test; PROMIS=Patient Reported Outcome Measurement Information System; RULM=Revised upper limb module; SE=standard error of the mean. SMN Rx=SMN therapy. Data on File. Scholar Rock, Inc. Cambridge, MA. Data cutoff date as of March 13, 2023. The updated PEDI-CAT analysis included additional records (2 at 12 months and 1 at 24 months) that were not available at the time of previous analysis. Apitegromab is an investigational drug candidate being evaluated for the treatment of spinal muscular atrophy. Apitegromab has not been approved for any use by the US FDA or any other health authority, and its safety and efficacy have not been established.

Executing on the Promise of Apitegromab



SMA=Spinal Muscular Atrophy
*Subject to regulatory approval

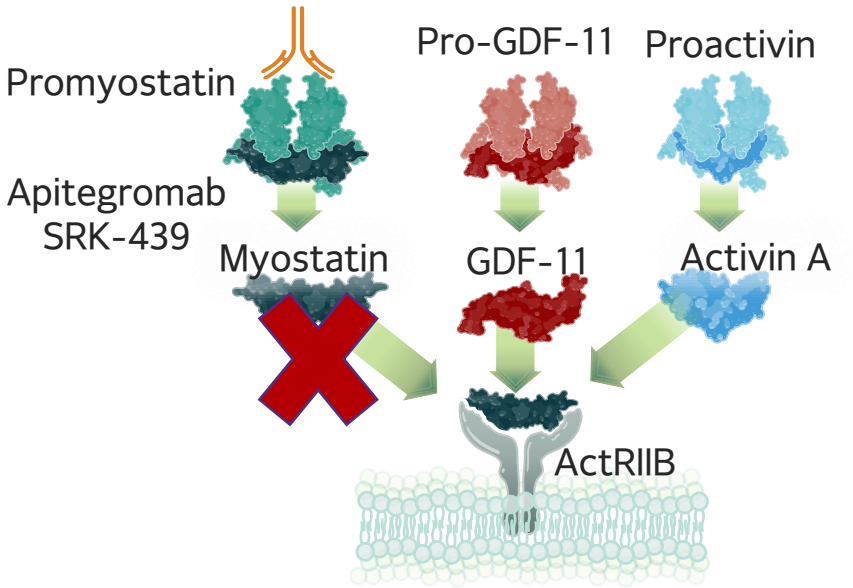
Cardiometabolic Program

Mo Qatanani– SVP, Research

ScholarRock™

Our Antibodies Selectively Inhibit Activation of Myostatin

Selective Targeting of Proforms of Myostatin



SRRK antibodies do not bind to mature myostatin or any form of GDF11, Activin A, or other TGF-β family members

Selectivity is critical to avoid safety concerns

- Mature myostatin and mature GDF11 have 90% sequence conservation
- Most prior myostatin approaches bind/inhibit both myostatin and GDF11
- GDF11 loss leads to embryonic lethality, skeletal and kidney formation defects[1]
- GDF11 signaling inhibition may have negative impacts on bone[2]

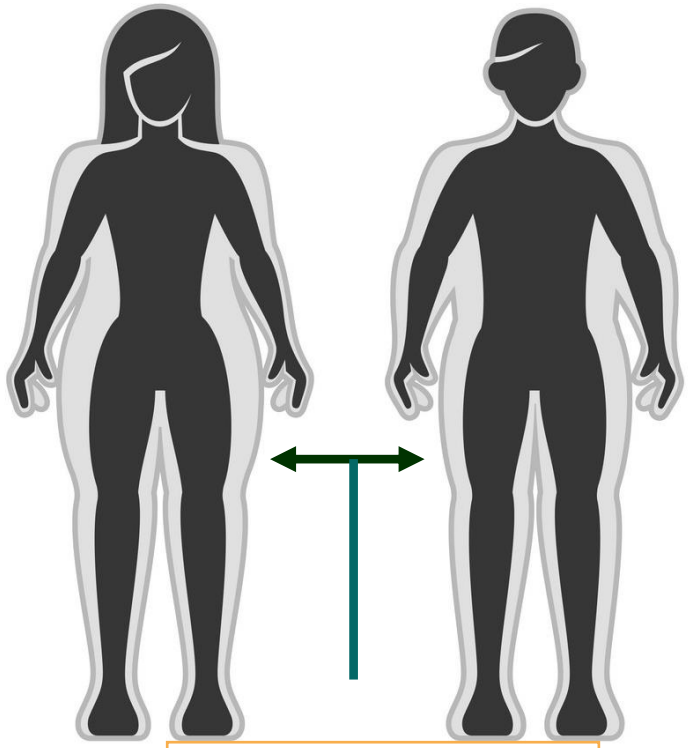
Broad inhibition of ActRIIb signaling may be problematic

- ActRIIB knockout animals die shortly after birth with developmental defects in respiratory and cardiac organs[3]
- Activins are critical in reproductive biology, and inhibition was shown to reduce FSH levels in women[4]

1. McPherron AC et al Nat Genet 1999, 22(3):260-264. 2. Joonho Suha et al Proc Natl Acad Sci U S A . 2020 Mar 3;117(9):4910-4920; 3. Oh SP & Li E. Genes Dev. 997 Jul 15;11(14):1812-26 4. Garito T, et al. Clin Endocrinol (Oxf) . 2018 Jun;88(6):908-919
GDF11: Growth and Differentiation factor 11; ActRIIB: Activin Receptor IIB

Loss of Lean Muscle Significant with GLP-1 RA Rx

Lean muscle is essential to healthy metabolic function & body composition



Significant proportion of weight loss due to loss of lean muscle mass

- **Current weight loss** strategies challenged by **tolerability, lack of durability and significant muscle loss**[1,2,3]
- Recently **approved GLP-1 receptor agonists** (GLP-1 RAs) are highly effective in weight loss & experiencing rapid uptake
- However, **25%-40% of total body weight loss** mediated by GLP-1 RA therapy **may be attributed to loss of lean muscle mass**[2,3]
- **Preserving lean muscle mass** is important to promote long-term metabolic benefits, sustainable weight management and health outcomes[4,5,6,7]

1. Muller TD, et al Anti-obesity drug discovery: advances and challenges. Nature Reviews Drug Discovery 2022; 21, 201–223 ; 2. Wilding JPH, Batterham RL, Calanna S, et al. Once-Weekly Semaglutide in Adults with Overweight or Obesity. N Engl J Med. 2021;384(11):989-1002; 3. Jastreboff AM, et al Tirzepatide Once Weekly for the Treatment of Obesity. NEJM 2022; 387 (3): 205-216; 4. Cava et al. Preserving healthy muscle during weight loss. Adv Nutr 2017;8:511-19.; 5. Lundgren JR et al. Healthy Weight Loss Maintenance with Exercise, Liraglutide or Both Combined. NEJM 2021;384:1719-30.; 6. Beal JW et al. Dietary weight loss-induced improvements in metabolic function are enhanced by exercise in people with obesity and prediabetes. Nat Metab. 2022;5(7):1221-1235; 7. Dulloo AG, et al How dieting makes some fatter: from a perspective of human body composition autoregulation. Proc Nutr Soc. 2012 Aug;71(3):379-89
GLP-1: glucagon-like peptide-1

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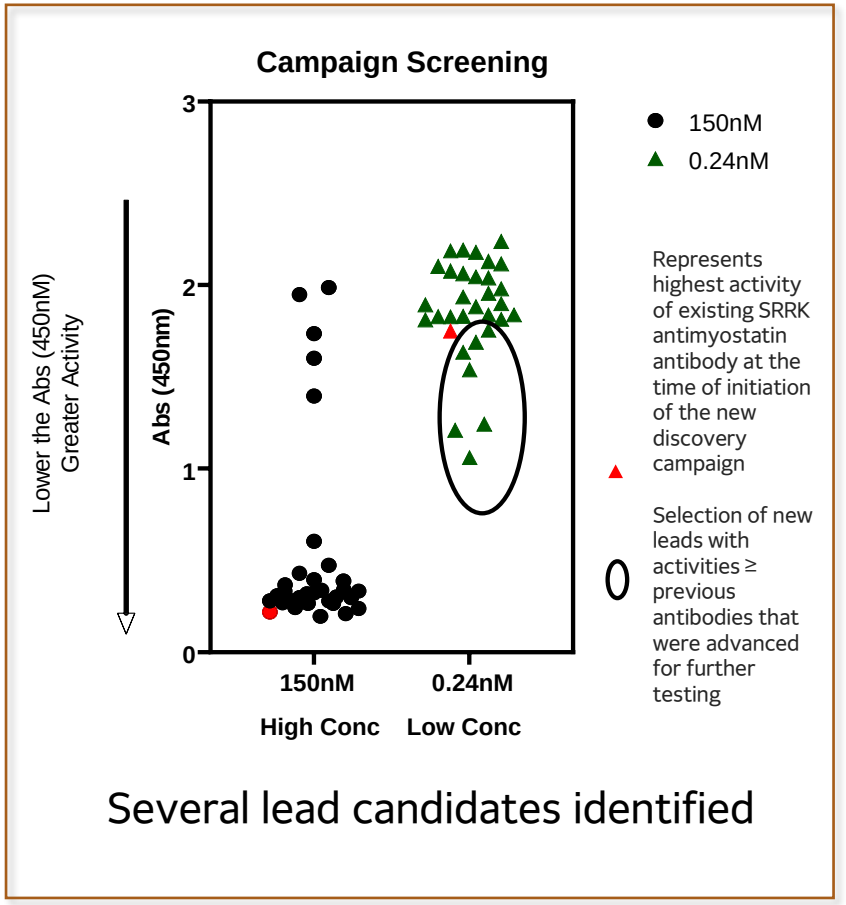
SRK-439: Novel Myostatin Inhibitor

Preclinical candidate in development to address cardiometabolic patient population

Antibody/ Variant	mTLL2 IC_{50} (nM)	mAb K_D (nM)
SRK-439	0.145	0.579

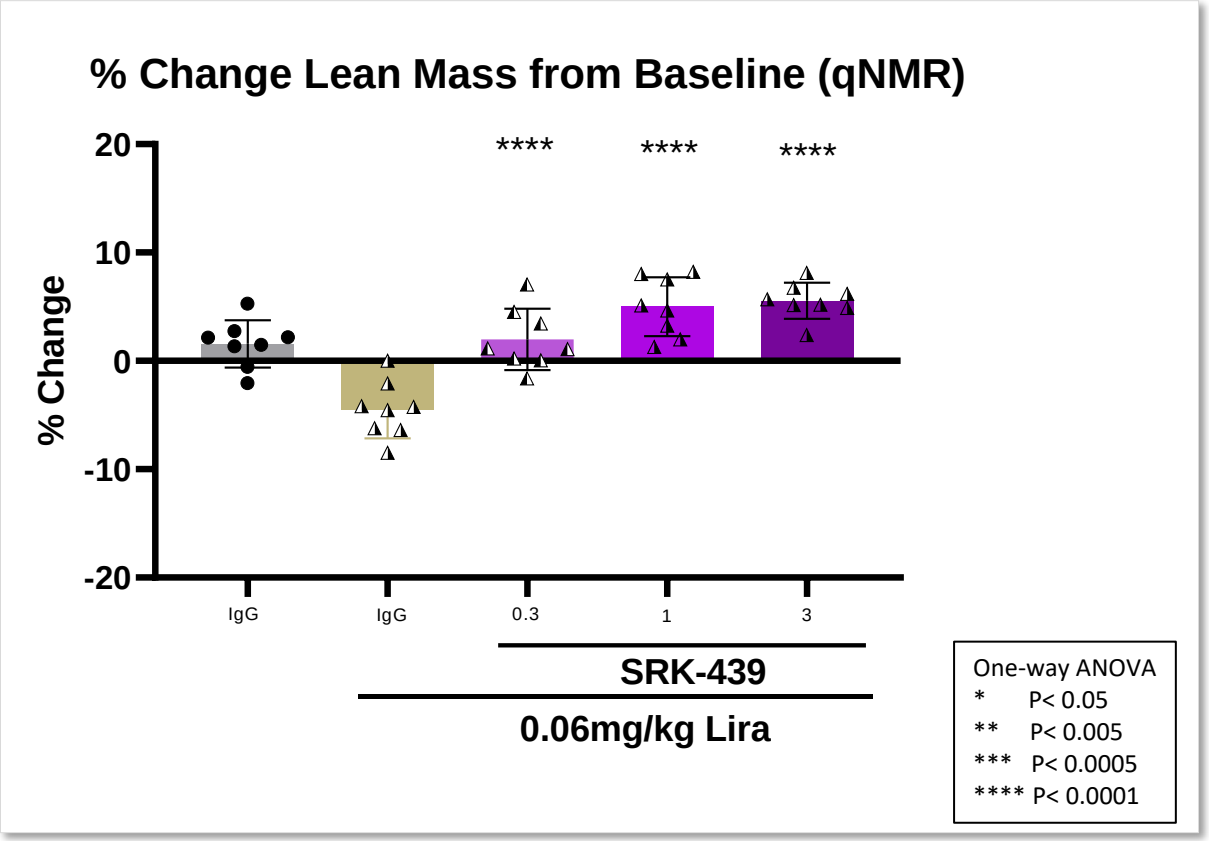
- **SRK-439**: A novel preclinical antimyostatin antibody with **attractive properties** and **potential to address muscle loss associated with weight loss**
  - High *in vitro* affinity for pro- and latent myostatin
  - Maintained myostatin specificity (No GDF11 or Activin-A binding)
  - Maintained good developability profile
- Amenable to **subcutaneous formulation** and **dosing**
  - High concentrations achieved with unoptimized standard buffer

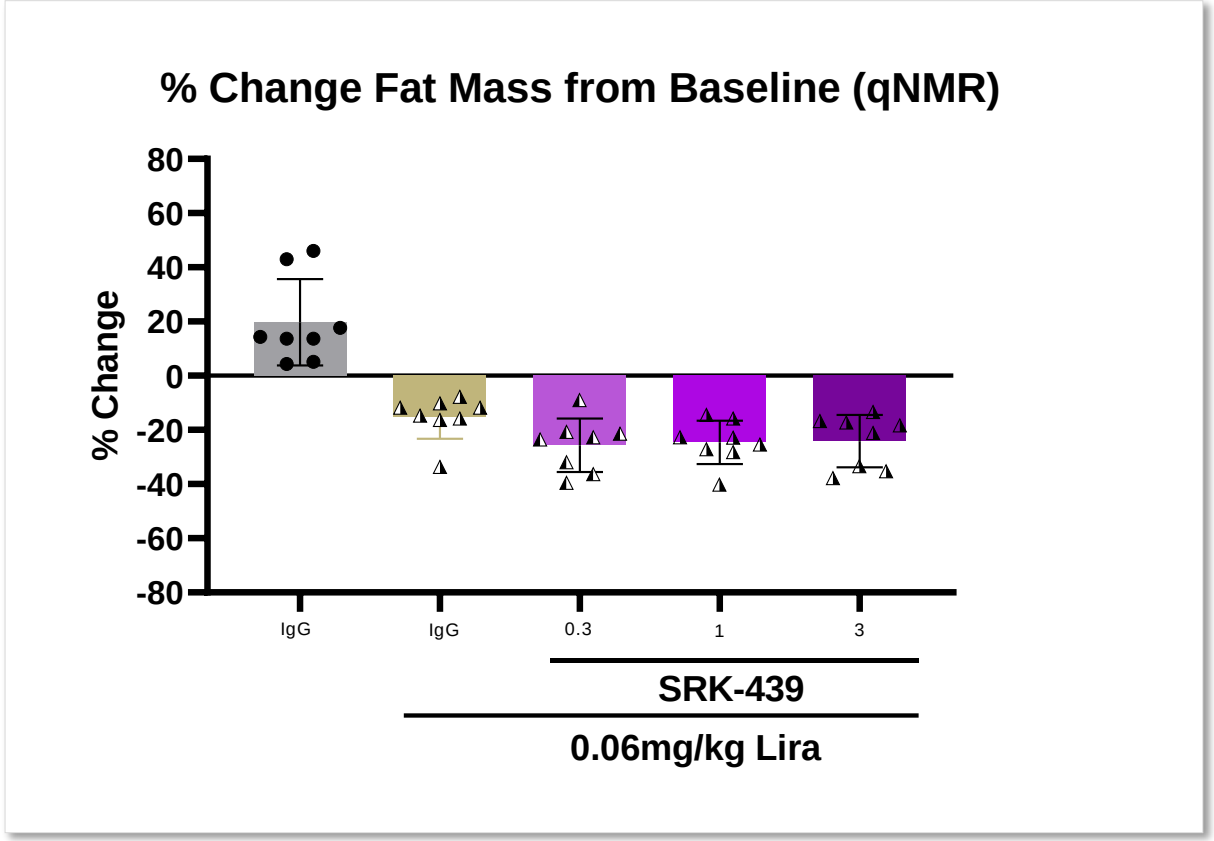


Several lead candidates identified

mTLL2 IC50: Inhibitory concentration at 50% as measure of in vitro potency of the antibody in its ability to inhibit the activation of latent myostatin by its activating enzyme mammalian tolloid like protease 2 | KD: Equilibrium dissociation constant as a measure of binding affinity of the antibody to latent myostatin.

SRK-439 Maintained Lean Mass When Combined with GLP-1 RA Therapy*

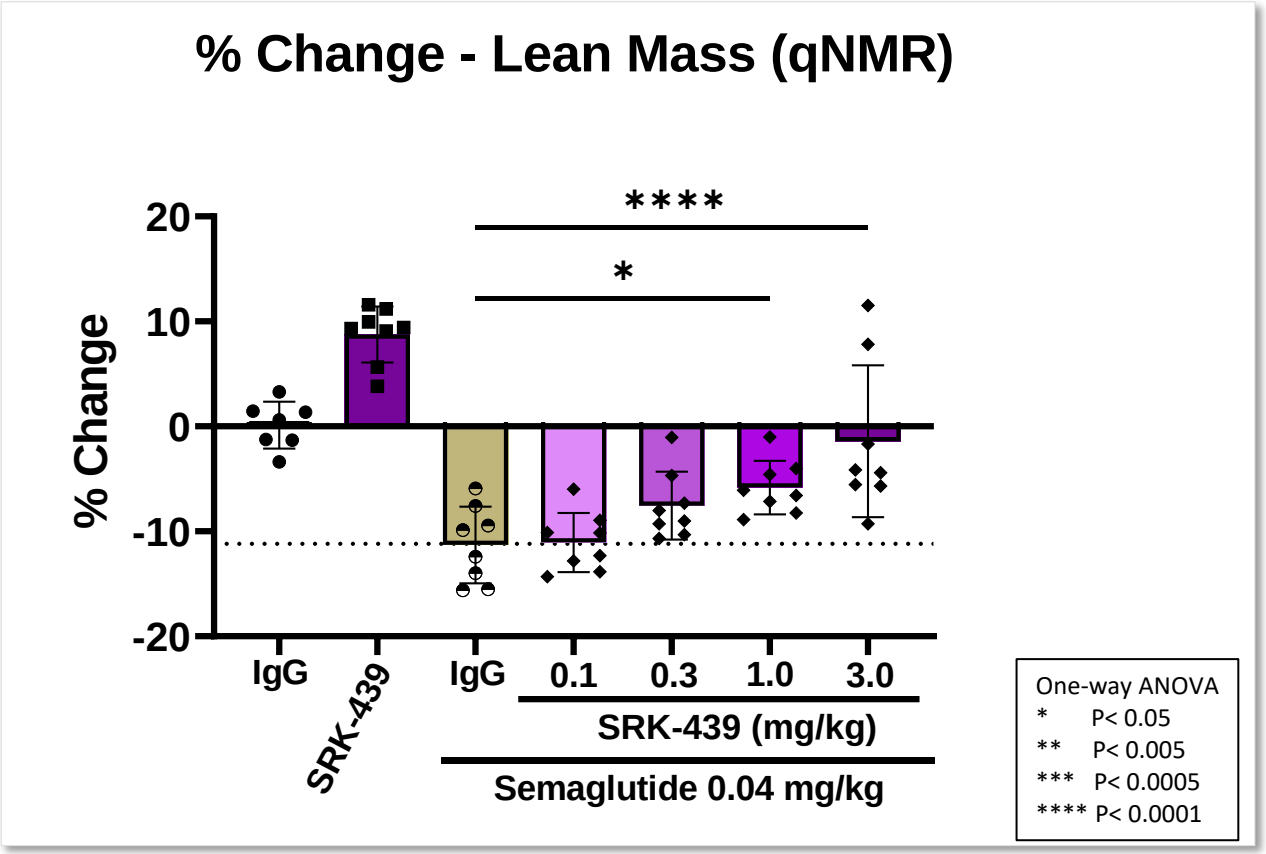


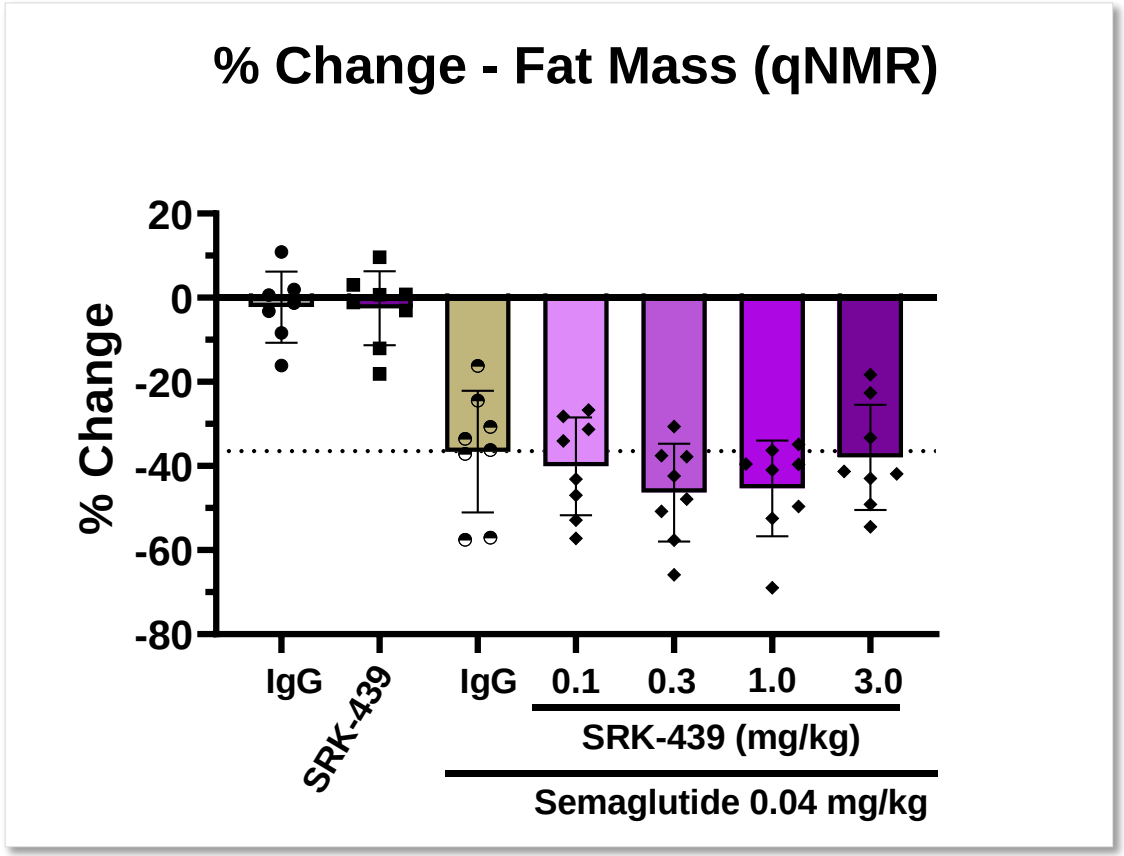


- Increased lean mass gain vs GLP-1 RA alone
- Improved fat mass loss vs GLP-1 RA alone

*in Mouse Diet Induced Obesity (DIO) Model
Figure shows the effects of increasing doses of SRK-439 in combination with liraglutide on lean mass (left panel) and fat mass (right panel) in a 28-day DIO mouse model as measured by qNMR; statistical analysis was done using one-way ANOVA (Dunnett's multiple comparison test).

SRK-439 Reversed Lean Mass Loss and Enhanced Fat Mass Loss Induced by Semaglutide Treatment*





Dose-dependent preservation of lean mass with effects seen as low as 0.3mg/kg

Additional fat mass loss vs semaglutide alone

*in Mouse Diet Induced Obesity (DIO) Model
Figure showed the effects of increasing doses of SRK-439 in combination with semaglutide on lean mass (left panel) and fat mass (right panel) in DIO mouse model as measured by qNMR; statistical analysis was done using one-way ANOVA (Dunnett's multiple comparison test).

Highly Selective Antimyostatin to Preserve Lean Muscle

Opportunity for safe, durable weight loss

Exquisite Selectivity

Strong evidence has indicated upstream targeting of structurally differentiated pro- and latent myostatin leads to exquisite selectivity and avoids undesirable off-target effects [2-4]

Myostatin Inhibition

Preclinical models demonstrated increased muscle mass and beneficial metabolic effects (insulin sensitivity, basal metabolic rate, reduction in fat mass)[1]

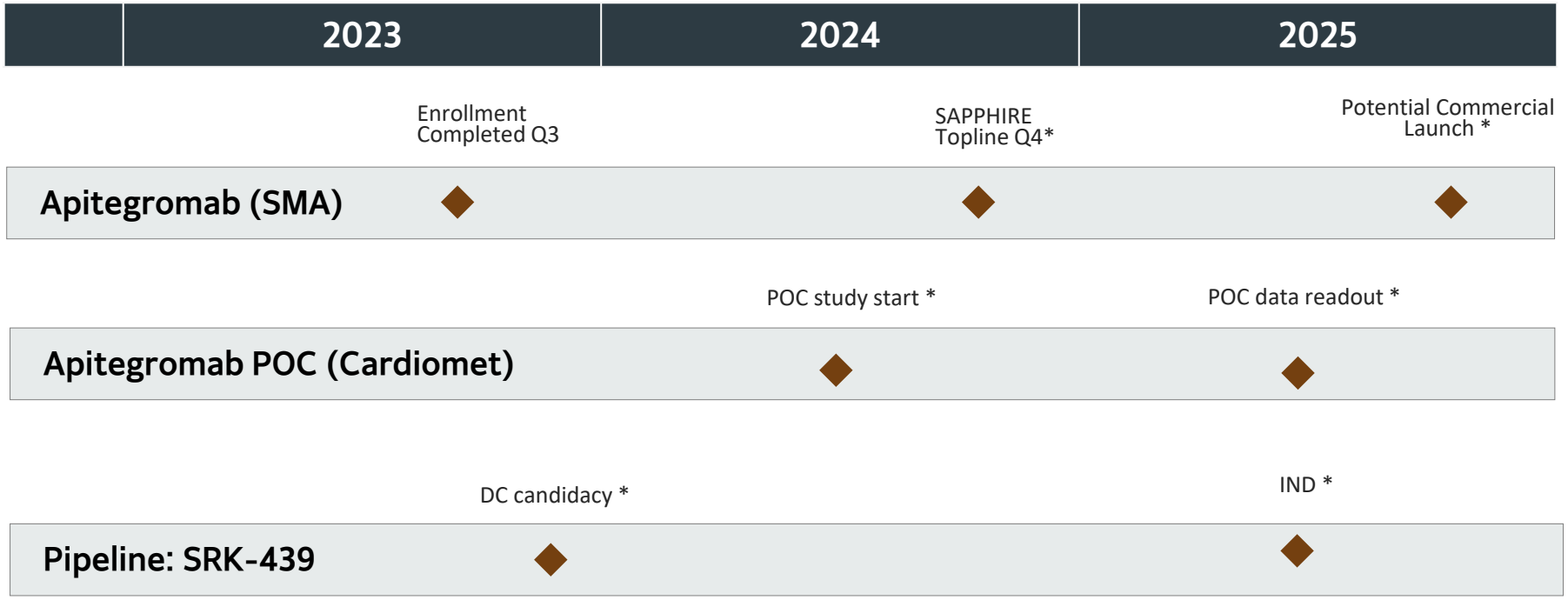
Lean Muscle Retention

Inhibition of myostatin in combination with GLP-1 RA-driven weight loss may lead to retention of lean muscle mass and combat the counter-regulatory metabolic effects of weight loss

1.Yang M et al. Myostatin: A potential therapeutic target for metabolic syndrome. Frontiers in Endocrinology 2023;14:1181913 2.Pirruccello-Straub M et al. Blocking extracellular activation of myostatin as a strategy for treating muscle wasting. Sci Reports 2017;8:2922 3. Welsh BT et al. Preclinical safety assessment and toxicokinetics of apitegromab, an antibody targeting proforms of myostatin for the treatment of muscle-atrophying disease. Int J Tox 2021;40(4):322-336 4. Barrett D et al. A randomized phase 1 safety, pharmacokinetic and pharmacodynamic study of a novel myostatin inhibitor apitegromab (SRK-015): A potential treatment for spinal muscular atrophy. Adv Ther 2021;38:3203-3222.

Expedite Cardiometabolic Program with Ph2 Proof of Concept Study of Apitegromab in Obesity

Creates additional anticipated milestones in next 18-24 months



* Anticipated milestones

APITEGROMAB + GLP-1 RA

Rapid Proof of Concept Phase 2 Study

SRK-439

Advancing SRK-439 for cardiometabolic indication

Summary

Ted Myles– COO & CFO

ScholarRock™

Key Investment Highlights

Revolutionary Platform

Discover and Develop
monoclonal antibodies with extraordinary selectivity

Overcome the Challenges
by targeting the latent forms of growth factors

Robust Clinical Pipeline

Apitegromab - SMA (Phase 3)
- Significant market opportunity
- Program on track
- Clear path to approval

Cardiometabolic
- Initiate POC trial with apitegromab in combo with GLP-1 RA in 2024
- Concurrently advance SRK-439 towards IND submission in 2025

SRK-181
- Completing enrollment in December 2023
- Conduct end of Phase 1 meeting

Positioned For Success

- Cash balance of $219M as of September 30, 2023, in addition to $92.5M of net proceeds from October 2023 public offering
- Anticipated cash runway into 2H 2025