

Deep Insights Advancing Impactful Medicines

Company Overview | November 2024



Forward-Looking Statements

Various statements in this presentation concerning the future expectations, plans and prospects of Scholar Rock Holding Corporation and Scholar Rock, Inc. (collectively, "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 our ability to continue as a going concern 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, 2023, and Quarterly Report on Form 10-Q for the quarter ended June 30, 2024, 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 and SRK-181 are investigational drug candidates under evaluation. Apitegromab, SRK-181, SRK-373, SRK-256, 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, SRK-373, SRK-256, and SRK-439 have not been established.





We are a global leader in harnessing the life-changing potential of TGFβ biology



OUR MISSION

To discover, develop, and deliver life-changing therapies by harnessing cutting-edge science to create new possibilities for people living with serious diseases



TGFβ=Transforming growth factor-beta.

Building a Fully Integrated Therapeutics Company



Revolutionary Scientific Platform

- Pioneers in unparalleled selective targeting of the latent forms of growth factors
- Robust pipeline of novel assets including two clinical programs and a growing portfolio of preclinical programs



Transformative Therapeutics in Development

Apitegromab in SMA

Potential therapy designed to **improve motor function to help address remaining unmet need** after receipt of existing SMA therapies

SRK- 439 in Obesity

Novel antimyostatin antibody with the potential to support healthier weight management by preserving lean muscle

SRK-181 in Immuno-Oncology

In Ph 1 development to **overcome resistance to checkpoint inhibitors** in multiple tumor types

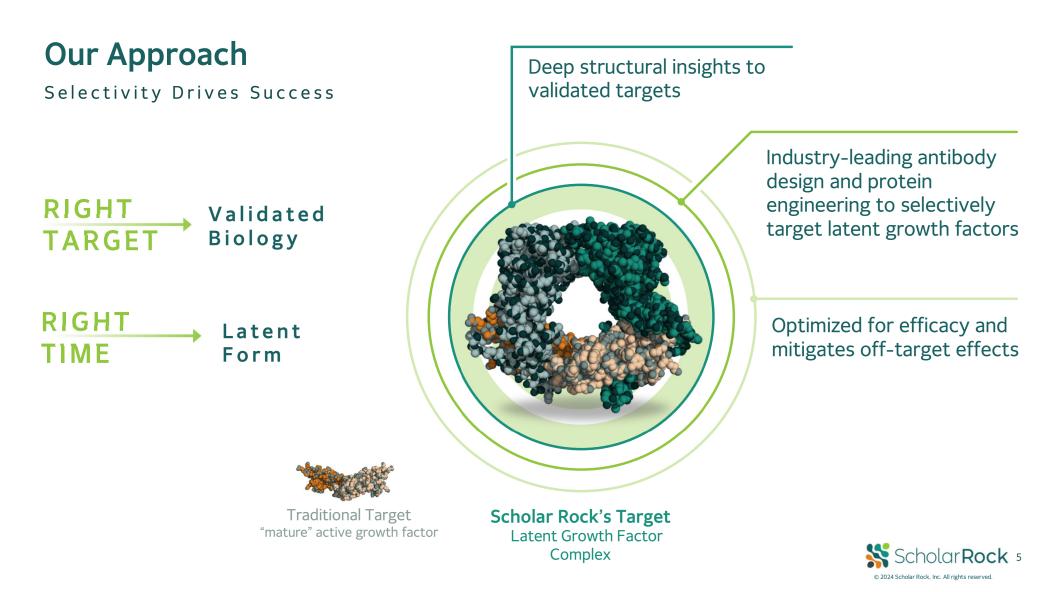


Experienced and Focused

- Seasoned team with track record of clinical and commercial success
- **Deep** rare disease, R&D, FDA/EMA approval & launch **experience**
- Focused, efficient approach to scaling the organization



SMA=Spinal muscular atrophy; EMA=European Medicines Agency; FDA=United States Food and Drug Administration; R&D=research and development.



Scientific Platform Yielding Growing Pipeline Across High Value Therapeutic Areas

TARGET	CANDIDATE	DISCOVERY/ PRECLINICAL	PHASE 1	PHASE 2	PHASE 3	COMMERCIAL
Latent Myostatin	SPINAL MUSCULAR ATROPHY Apitegromab			(Toost	SAPPHIRE	BLA/MAA submission in Q1 2025 [†]
	CARDIOMETABOLIC DISORDERS Apitegromab in Obesity*			EMBRAZE		
	SRK-439 (novel anti-myostatin antibody)					
Latent TGFβ-1	IMMUNO-ONCOLOGYSRK-181: Selective context- independent, anti-latent TGFβ-1)FIBROSISSRK-373: Selective context- dependent (LTBP1 & LTBP3) anti- latent TGFβ-1		DRACON			
RGMc	ANEMIA SRK-256: Selective anti-RGMc					
Undisclosed	NEUROMUSCULAR DISORDERS					

*Utilized data from previously completed Ph 1 study in healthy volunteers and initiate a Ph 2 POC trial in 2024. † Anticipated milestones.

LTBP1=Latent transforming growth factor beta binding protein 1; LTBP3=Latent transforming growth factor beta binding protein 3; POC=Proof of concept; RGMc=Repulsive guidance molecule C; TGFβ-1=Transforming growth factor beta-1.



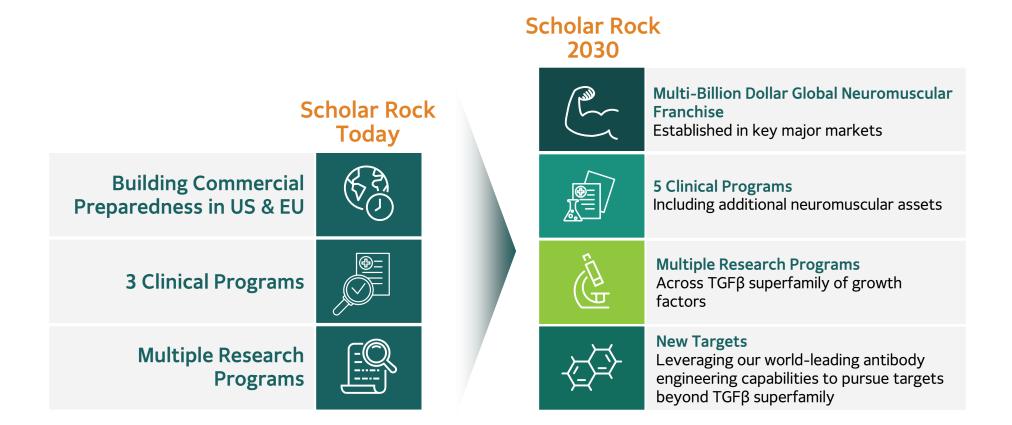
Leveraging Our Building Blocks, Transformative 18 Months Ahead

	Value I			
	Significant Inflection Points in Next Year	Preparing to Launch SMA in US and EU*		
	Apitegromab BLA/MAA Submission	Phased approach to building key capabilities		
	Proof of Concept in Obesity	Well established presence within SMA Community		
	Powerful Bu	ilding Blocks		
Novel Scientific Platform	Experienced Team	Established Markets with High Unmet Need	Global Rights Across the Portfolio	
Robust Pipeline across 5 therapeutic areas	Deep rare disease , R&D, FDA/EMA approval experience	Apitegromab in SMA SRK-439 in Obesity	29 patent families pending Exclusivity through 2036	
3 clinical programs Multiple preclinical program	<pre>~150+ Employees ~74% R&D</pre>			
* Subject to regulatory approval			🞇 Scholar Rock	

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Strategic Roadmap: Our Vision for 2030





Upcoming Planned Key Milestones



Apitegromab Submit FDA and EMA applications in Q1 2025 Regulatory Request priority review (FDA) and accelerated **Submissions** assessment (EMA)



Myostatin Clinical **Momentum**

- Obesity: EMBRAZE readout expected in Q2 2025
- SMA: Under 2 study initiation planned for mid-2025







Apitegromab Commercial

• US launch in Q4 2025 and EU launch to follow Launch in SMA*



* If approved by relevant health authorities



Antimyostatin Program: Apitegromab in Spinal Muscular Atrophy



Innovating a New Era in the Treatment of Spinal Muscular Atrophy

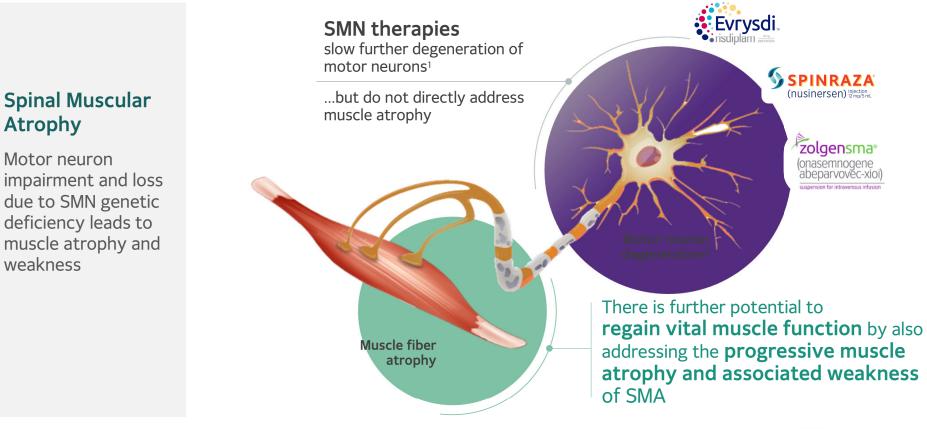
Scholar Rock has an industry-leading, highly selective antibody engineering platform that has succeeded where others have failed.

Apitegromab is the first and only muscle targeted therapy to show clinically meaningful and statistically significant functional improvement in SMA.

Apitegromab is also the first and only anti-myostatin therapy to demonstrate a functional improvement in a pivotal Phase 3 study.

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Hallmarks of SMA Motor Neuron Loss and Muscle Atrophy Leads to Progressive Muscle Weakness



SMA=Spinal muscular atrophy; SMN=Survival motor neuron.

1. Hua Y, et al. Nature. 2011;478(7367):123-6.

2. Figure adapted from: SMA Foundation Overview. http://www.smafoundation.org/wp-content/uploads/2012/03/SMA-Overview.pdf; Accessed April 18, 2021.



SMA Leads to Deterioration in Essential Muscle Function





What may seem like minimal gains in strength actually translate to **exponential gains in functional abilities.**

I often have to choose between taking a shower and doing homework because I don't have the energy to do both.

Small tasks are huge success in my life. If I could lift that 1L bottle of water at work instead of having to find a graduate student to move it for me...things don't take a ton more muscle, but they are all muscle I still don't have.

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Despite significant advancements, progressive muscle weakness remains an unmet need in SMA Muscle weakness can lead to deterioration in **mobility**, **swallowing**, **breathing** and cause **debilitating fatigue**

Quotes are from patient advocates who participated in 2022 Cure SMA FDA Patient-Led Listening Session and not from the pictured individuals. Summary of the listening session can be found on the FDA website at https://www.curesma.org/cure-sma-holds-patient-led-listening-session-with-fda/



SMA Today: More Patients Screened and Treated



Three treatments to address SMN loss



>13,000 patients treated WW

\$1.8 billion annual revenue (LTM)³



> 11,000 patients treated WW

~CHF1.4 billion annual revenue (LTM)⁴



> 3,500 patients treated WW

~\$1.2 billion in revenues (LTM)⁵

Established market dynamics support Scholar Rock's first potential commercial launch

CHF=Swiss franc; LTM=last twelve months; SMA=Spinal muscular atrophy; SMN=Survival motor neuron; WW=worldwide.

1. Cure SMA 2022 Report: 9042022 State-of-SMA_vweb.pdf (curesma.org)

- 2. Lally et al. Indirect estimation of the prevalence of spinal muscular atrophy Type I, II, and III in the United States. Orphanet J Rare Dis. 2017 Nov 28;12(1):175. doi: 10.1186/s13023-017-0724-z.
- 3. Revenue as of Biogen 3Q23 financial update; includes patients treated worldwide in post-marketing setting, expanded access program, and clinical trials as of May 2022.

4. Revenue as of Roche 3Q23 financial update; includes patients treated worldwide as of July 2023.

5. Revenue as of Novartis 3Q23 financial update; includes patients treated worldwide including clinical trials, commercially, and managed access programs as of August 2023.



Muscle-Targeted Therapy: A New Treatment Frontier



Mean improvement in HFMSE experienced by patients in nusinersen Phase 3 CHERISH trial¹

*Percentages represent percent of patients who named these unmet needs when asked, "What are your most significant current unmet needs that you hope new therapies would address?" HFMSE=Hammersmith Functional Motor Scale-Expanded.

1. Mercuri E et al.; N Engl J Med 2018; 378:625-635; DOI: 10.1056/NEJMoa1710504; cherish trial results; 2. 2022 Community Update Survey, Cure SMA.

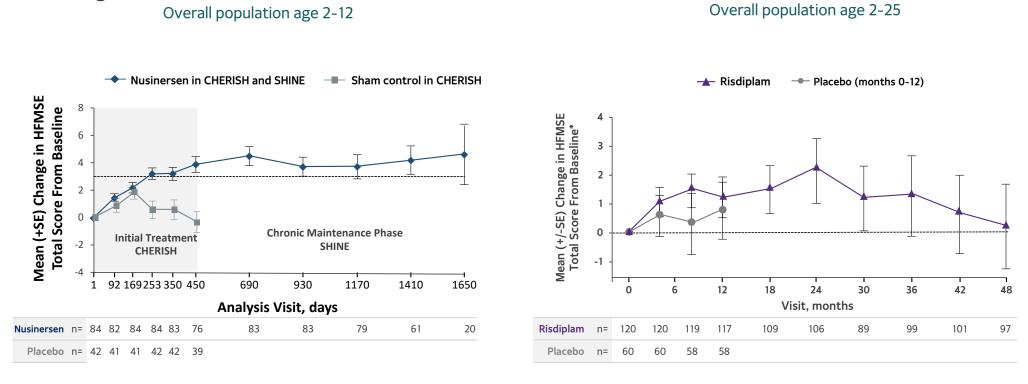
This third-party information is provided for background only and is not intended to convey or imply a comparison to the TOPAZ clinical trial results.



Change in HFMSE* Over Four Years with Risdiplam²

Motor Function With SMN Therapies as Assessed by HFMSE HFMSE appears to Plateau After Initial Gains

Change in HFMSE Over Four Years with Nusinersen¹



1. Mercuri E, et al. Presented at: World Muscle Society Congress 2020, P. 257

2. Oskoui M, et al. Presented at: 2021 Muscular Dystrophy Association Clinical & Scientific Conference; March 15-18, 2021. Poster 80.

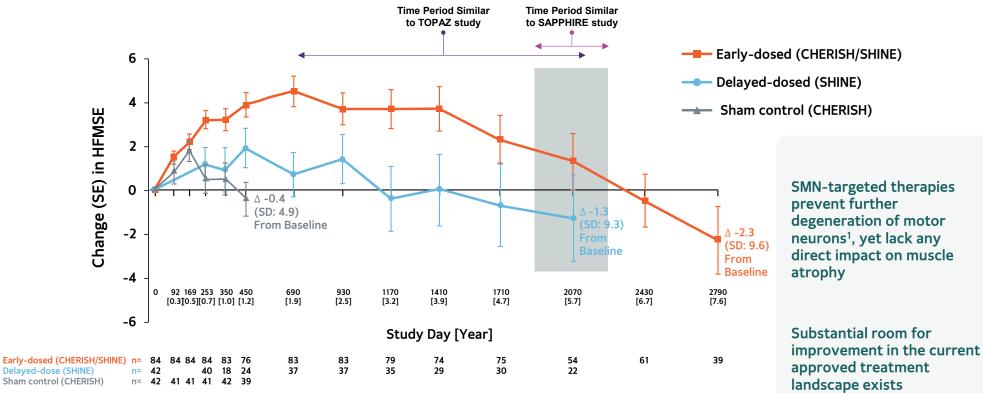
HFMSE, Hammersmith Functional Motor Scale-Expanded; SE, standard error.

*MFM was primary efficacy endpoint of SUNFISH. HFMSE was a secondary endpoint. This third-party information is provided for background only and is

not intended to convey or imply a comparison to the TOPAZ clinical trial results.



Despite Chronic SMN Therapy, SMA Patients Continue To Lose Function Over Time

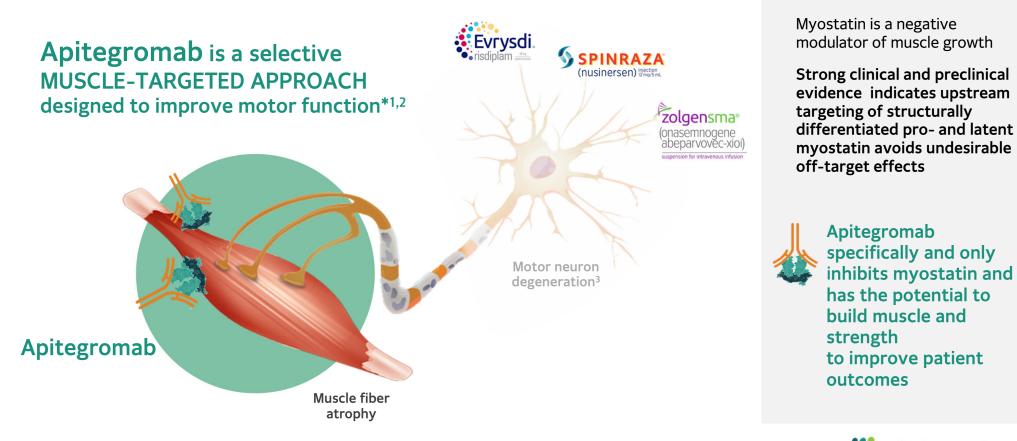


Finkel RS et al. "Final Safety and Efficacy Data From the SHINE Study in Participants With Infantile-Onset and Later-Onset SMA." Presented at Cure SMA Annual Conference, July 2024 *Patient age based on those received active treatment (mean or median)

1. This information from third-party studies is provided for background purposes only and is not intended to convey or imply a comparison to the SAPPHIRE clinical trial results SMN=survival motor neuron

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Apitegromab Offers Significant Potential to Address Unmet Needs



* 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.

myostatin avoids undesirable off-target effects Apitegromab specifically and only inhibits myostatin and

> has the potential to build muscle and

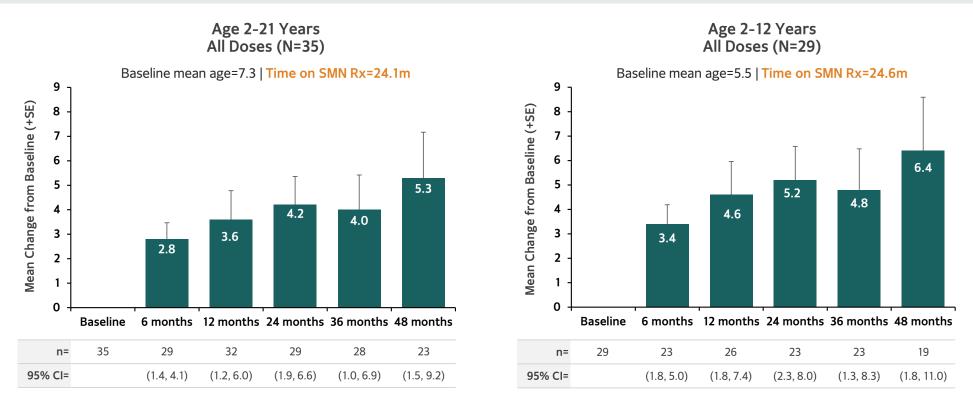
to improve patient

strength

outcomes

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Apitegromab TOPAZ Clinical Trial: Motor Function Outcomes by HFMSE Over 48 Months Improvements Were Substantial and Sustained

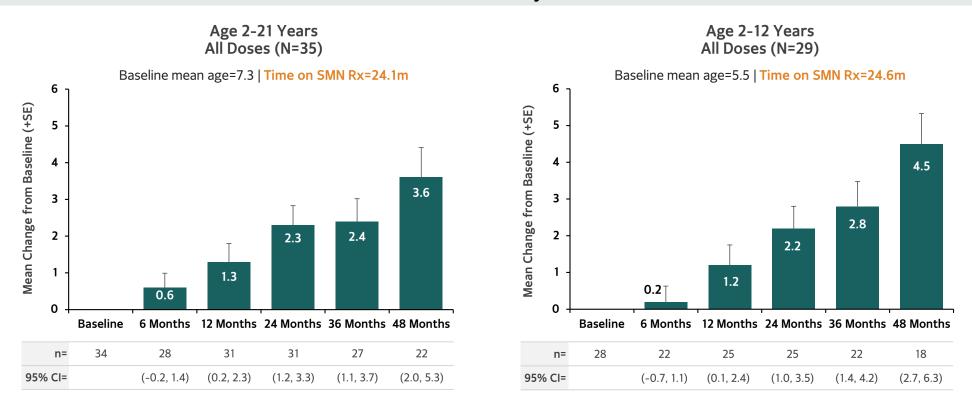


1. For the 48-month evaluation, an observed case analysis was conducted using available data by analysis timepoint, censoring any HFMSE assessments after the patient received scoliosis surgery. The analysis population pooled the nonambulatory patients (Cohorts 2 and 3) and included patients receiving either low dose (2 mg/kg) or high dose (20 mg/kg) apitegromab (inclusive of patients in Cohort 3 who switched from 2 mg/kg to 20 mg/kg in Year 2). A total of 11 patients in the population had scoliosis surgery during the study and their data was excluded from any HFMSE assessments at 48 months. Visit windows were applied to utilize data from unscheduled or early termination visits if the patient was missing the HFMSE total score at the scheduled visit. Error bars represent standard error (SE) and CI represents confidence interval. SMIN Rx=SMIN therapy. 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.



Pooled Nonambulatory Patients¹

Apitegromab TOPAZ Clinical Trial: Motor Function Outcomes by RULM Over 48 Months Improvements Were Substantial and Sustained



1. For the 48-month evaluation, an observed case analysis was conducted using available data by analysis timepoint, censoring any RULM assessments after the patient received scoliosis surgery. The analysis population pooled the nonambulatory patients (Cohorts 2 and 3) and included patients receiving either low dose (2 mg/kg) or high dose (20 mg/kg) apitegromab (inclusive of patients in Cohort 3 who switched from 2 mg/kg to 20 mg/kg in Year 2). A total of 11 patients in the population had scoliosis surgery during the study and their data was excluded from any RULM assessments at 48 months. Visit windows were applied to utilize data from unscheduled or early termination visits if the patient was missing the RULM total score at the scheduled visit. One patient did not have baseline RULM due to young age. Error bars represent standard error (SE) and CI represents confidence interval. SMN Rx=SMN therapy. 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.



Pooled Nonambulatory Patients¹

SAPPHIRE Phase 3 Design is Optimized by Insights from TOPAZ



TOPAZ Learnings

STUDY POPULATION

Substantial HFMSE gains observed in the nonambulatory Type 2/3 SMA cohorts

AGE

Exploratory age 2-12 analysis in nonambulatory Type 2/3 showed transformative potential

DURATION

HFMSE gains substantial by 12 months of treatment

DOSE

Dose response seen (greater effect observed with 20 mg/kg over 2 mg/kg)



Phase 3 SAPPHIRE Trial Registrational trial with topline 12-month data readout expected in Q4 2024

SAPPHIRE Design Elements

STUDY POPULATION

- Nonambulatory Type 2/3 SMA
- Primary efficacy endpoint: HFMSE

AGE

Age 2-12 main efficacy population Age 13-21 exploratory population

DURATION

12-month treatment duration

DOSE

• 20 mg/kg apitegromab dose

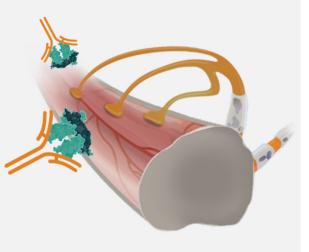
• 10 mg/kg apitegromab dose



HFMSE=Hammersmith Functional Motor Scale Expanded.

Summary of **TOPAZ** Data

Substantial and **Sustained** Improvement over 48 MONTHS¹

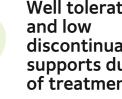




Data to date has shown substantial clinical benefit that is dose-dependent

Clinical benefit continued to improve or was sustained over 48 months

Consistency across functional scales and patient-reported outcomes



Well tolerated profile discontinuation rate supports durability of treatment

>90% of patients remained on therapy*

TOPAZ data suggest that apitegromab has the potential to transform care in SMA by directly addressing progressive muscle weakness

1- A total of 11 patients in the population had scoliosis surgery during the study and their data was excluded from any HFMSE and RULM assessments at 48 months. PRO=Patient Reported Outcome *Pooled non-ambulatory cohorts







Positive Topline Results from Pivotal Phase 3 SAPPHIRE Trial of Apitegromab SMA



Apitegromab Has the Potential to Transform Standard of Care in SMA



Scholar Rock is working with a sense of urgency to bring apitegromab to SMA patients

* Based on apitegromab combined dose (10 mg/kg and 20 mg/kg) + SOC versus placebo + SOC † 12.5% of patients on placebo + SOC achieved a \geq 3-point improvement in HFMSE SOC=Standard of care (i.e., nusinersen or risdiplam)



SAPPHIRE Trial Designed for Clinical Success

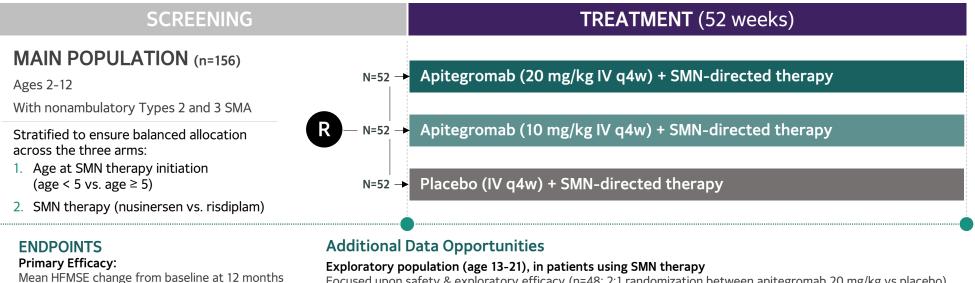


Additional Efficacy Measures:

Safety, PK/PD, ADA

RULM, WHO, other outcome measures

Randomized, double-blind, placebo-controlled, parallel arm design (n=204) Enrolling patients who are on SMN-directed therapy (nusinersen or risdiplam) Completed enrollment in Q3 2023



Focused upon safety & exploratory efficacy (n=48; 2:1 randomization between apitegromab 20 mg/kg vs placebo)

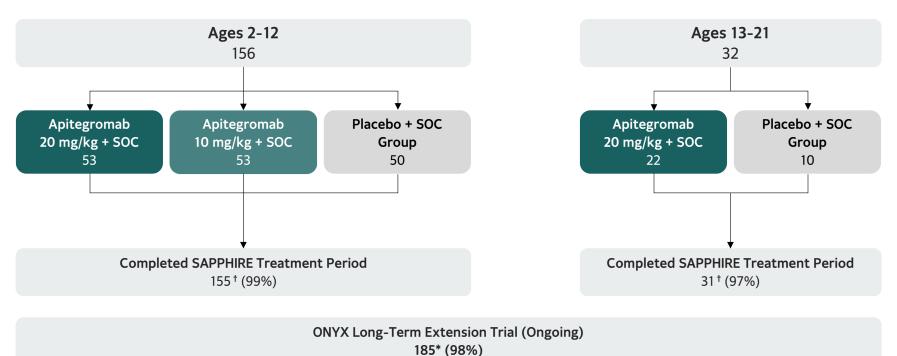
Separate open-label extension study (after patients complete 12-month treatment period) Focused upon safety & exploratory long-term efficacy

ClinicalTrials.gov Identifier: NCT05156320 HFMSE=Hammersmith Functional Motor Scale Expanded; RULM=Revised Upper Limb Module; R=randomization; SMA=spinal muscular atrophy; SMN=survival motor neuron



SAPPHIRE - APITEGROMAB IN SMA

98% of Patients Continue on Long-Term Extension



188 Patients Underwent Randomization

*1 patient from 2-12 age group opted not to enroll in the ONYX study.

† 1 subject (1%) in the 20 mg/kg apitegromab arm in the 2-12 age group withdrew consent. 1 subject (3%) in the 20 mg/kg apitegromab arm in the 13-21 age group withdrew consent. Neither withdrew consent due to an adverse event.

SOC=standard of care.

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Baseline Demographics and Disease Characteristics Well Balanced

		Ages	Ages 13-21			
	Placebo + SOC (N = 50)	Apitegromab 10 mg/kg + SOC (N = 53)	Apitegromab 20 mg/kg + SOC (N = 53)	Apitegromab + SOC (N = 106)	Placebo + SOC (N = 10)	Apitegromab 20 mg/kg + SOC (N = 22)
Female Sex, n (%)	25 (50.0)	23 (43.4)	26 (49.1)	49 (46.2)	5 (50.0)	15 (68.2)
Age at Screening – years, mean (range)	8.1 (3, 12)	7.4 (2, 12)	7.9 (2, 12)	7.6 (2, 12)	15.2 (13, 18)	16.1 (13, 21)
SMN Therapy at Randomization						
Nusinersen / Risdiplam (%)	80 / 20	75.5 / 24.5	77.4 / 22.6	76.4 / 23.6	60 / 40	54.5 / 45.5
Duration of Nusinersen / Risdiplam – years, mean	5.5 / 2.7	4.4 / 3.0	5.3 / 3.5	4.8 / 3.2	6.7 / 3.3	5.9 / 3.8
SMN Therapy Initiation Age, $<5 / \ge 5$ years (%)	88 /12	86.8 / 13.2	84.9 / 15.1	85.8 / 14.2	N/A	N/A
Number of SMN Therapies, 1 / 2 (%)	86 / 14	86.8 / 13.2	84.9 / 15.1	85.8 / 14.2	80 / 20	90.9 / 9.1
SMA Type, Type 2 /3 (%)	94 / 6	83 / 17	90.6 / 9.4	86.8 / 13.2	60 / 40	40.9 / 59.1
SMN2 Copy Number, 2 / 3 / 4 (%)	4 / 90 / 2	11.3 / 77.4 / 7.5	7.5 / 86.8 / 5.7	9.4 / 82.1 / 6.6	0 / 80 / 10	4.5 / 59.1 / 13.6
Baseline HFMSE Score, mean (range)	27.8 (9, 46)	25.5 (9, 48)	25.5 (10, 43)	25.5 (9, 48)	22.8 (10, 45)	20.6 (8, 43)
History of Scoliosis (%)	70	71.7	71.7	71.7	90	86.4

KEY

- Study population was broadly representative of SMA population
- **TAKEAWAYS** Patients on the advanced phase of their SMN therapy journey

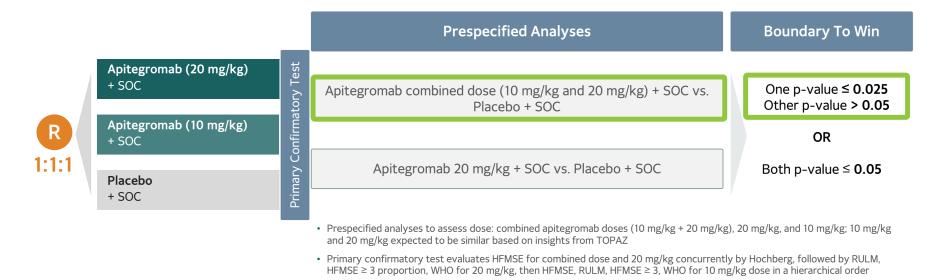
Max=Maximum; Min=Minimum; SD=standard deviation; SMN=Survival Motor Neuron; SMA=Spinal Muscular Atrophy, SOC=standard of care.



Prespecified Statistical Analysis Plan

Primary Objective

To assess the efficacy of apitegromab compared with placebo using HFMSE in patients 2 through 12 years old



The Hochberg procedure (Hochberg 1988) was used to test: 1) apitegromab combined dose (10 mg/kg and 20 mg/kg) vs placebo and 2) apitegromab 20 mg/kg dose vs placebo concurrently for the primary endpoint as the primary confirmatory test. The hierarchical testing procedure was applied to account for multiple confirmatory tests for the primary endpoint and key secondary endpoints. The testing procedure first evaluated the primary confirmatory test, followed by analyses of key secondary endpoints for apitegromab 20 mg/kg, and then the analyses of primary endpoint and key secondary endpoints for apitegromab 10 mg/kg. SOC=standard of care



SAPPHIRE - APITEGROMAB IN SMA

Primary Endpoint Met Clinically Meaningful and Statistically Significant Improvement in HFMSE

Change from Baseline in HFMSE Total Score

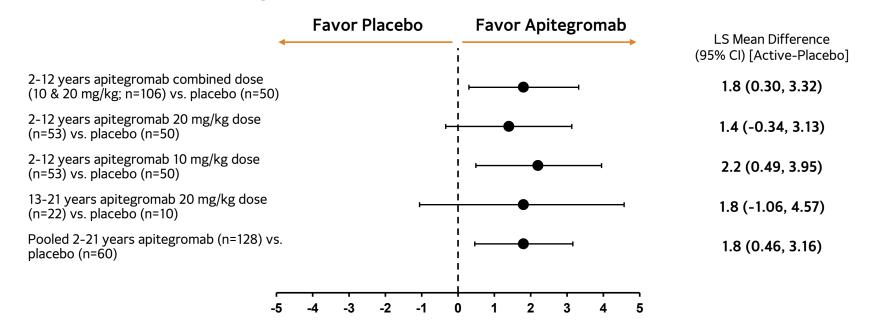
	Analysis	n	Results (vs Placebo, n=50)	Unadjusted <i>P</i> -value	
Primary	Apitegromab 10+20 mg/kg combined	106	1.8	0.0192*	Achieved Statistical Significance
Analysis	Apitegromab 20 mg/kg	53	1.4 0.1149*	0.1149*	
	Apitegromab 10 mg/kg	53	2.2	0.0121**	

*Hochberg method prespecified for multiplicity adjustment; **nominal p value HFMSE=Hammersmith Functional Motor Scale Expanded.



Improvement in HFMSE Consistent Across Doses and Age Groups

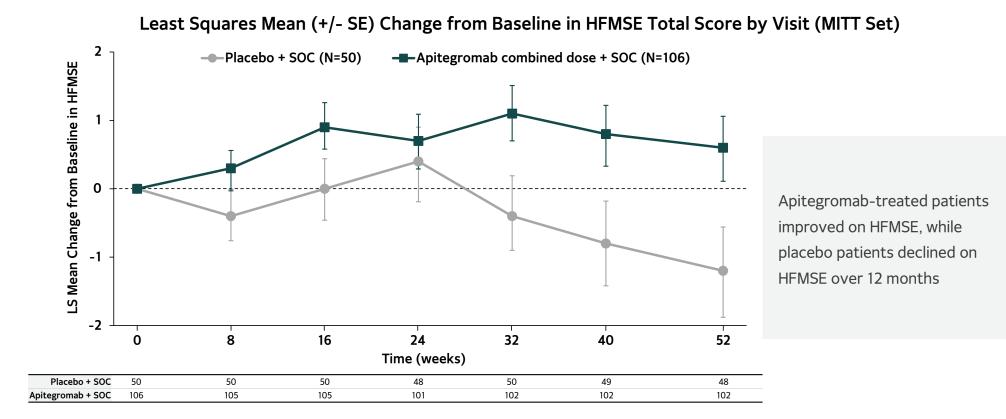
Change from Baseline in HFMSE Total Score at 12 Months*



CI=Confidence Interval; EXP=Exploration Subpopulation; HFMSE=Hammersmith Functional Motor Scale Expanded; SOC=standard of care. *n values at 12-month endpoint



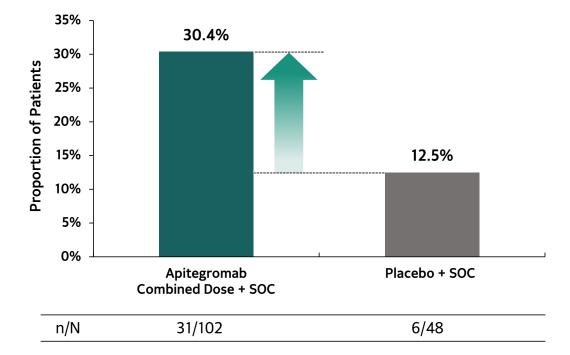
Early and Increasing HFMSE Improvement vs. Placebo



CI=Confidence Interval; EXP=Exploration Subpopulation; HFMSE=Hammersmith Functional Motor Scale Expanded; LS=Least Squares; MEP=Main Efficacy Population; SOC=standard of care.



30% of Apitegromab Patients Achieved ≥3 Points on HFMSE



≥3 Point Improvement in HFMSE

Proportion of patients achieving \geq 3 Point Improvement in HFMSE was higher for apitegromab vs. placebo in combined dose (odds ratio 3.0, p=0.0256)



HFMSE=Hammersmith Functional Motor Scale Expanded; SOC=standard of care.

SAPPHIRE - APITEGROMAB IN SMA

Well-Tolerated Safety Consistent With Established Profile

		Main Efficad (ages	Exploratory Subpopulation (ages 13-21)			
Summary of Adverse Events	Placebo + SOC (N = 50) n (%)	10 mg/kg + SOC (N = 53) n (%)	20 mg/kg + SOC (N = 53) n (%)	SRK-015 + SOC (N = 106) n (%)	Placebo + SOC (N = 10) n (%)	20 mg/kg + SOC (N = 22) n (%)
AE	43 (86.0)	51 (96.2)	46 (86.8)	97 (91.5)	9 (90.0)	19 (86.4)
SAE	5 (10.0)	9 (17.0)	12 (22.6)	21 (19.8)	1 (10.0)	0
AE Grade ≥ 3	5 (10.0)	9 (17.0)	11 (20.8)	20 (18.9)	1 (10.0)	1 (4.5)
AE Leading to treatment discontinuation	0	0	0	0	0	0
AE Leading to study withdrawal	0	0	0	0	0	0
AE with highest incidence						
Pyrexia	16 (32.0)	18 (34.0)	13 (24.5)	31 (29.2)	1 (10.0)	2 (9.1)
Nasopharyngitis	10 (20.0)	15 (28.3)	11 (20.8)	26 (24.5)	4 (40.0)	6 (27.3)
Cough	11 (22.0)	15 (28.3)	11 (20.8)	26 (24.5)	1 (10.0)	4 (18.2)
SAE with highest incidence						
Pneumonia	0	3 (5.7)	4 (7.5)	7 (6.6)	0	0
Dehydration	0	2 (3.8)	1 (1.9)	3 (2.8)	0	0

• Treatment with apitegromab was well-tolerated across all age groups, with a safety profile consistent with established safety profile

• There were no clinically relevant differences in the adverse event profile by dose, 10 mg/kg vs 20 mg/kg

KEY TAKEAWAYS

• Serious adverse events (SAEs) were consistent with underlying disease and SMN treatment; no SAEs were assessed as related to apitegromab

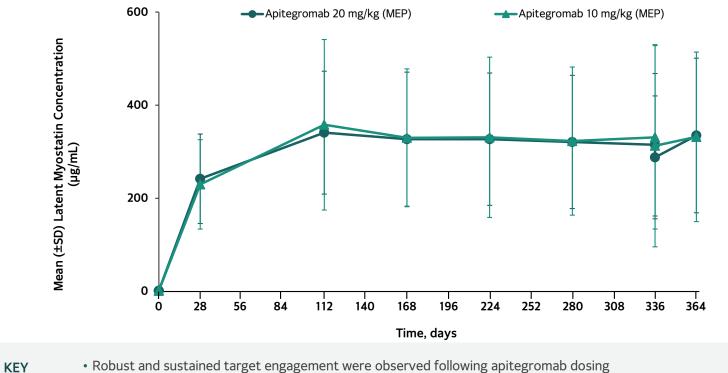
 $\ensuremath{\,\cdot\,}$ There were no deaths or study drug discontinuations due to adverse events

• 1 patient tested positive for ADA; the samples were further assessed and determined to be below the sensitivity cutoff point

AE=Adverse Event; SAE= serious adverse event; SOC=standard of care; SMN=survival motor neuron; ADA=anti-drug antibodies; all AEs are coded using the MedDRA version 26.1.



SAPPHIRE - APITEGROMAB IN SMA **Total Latent Myostatin Levels Over Time**



Latent Myostatin Level Over Time

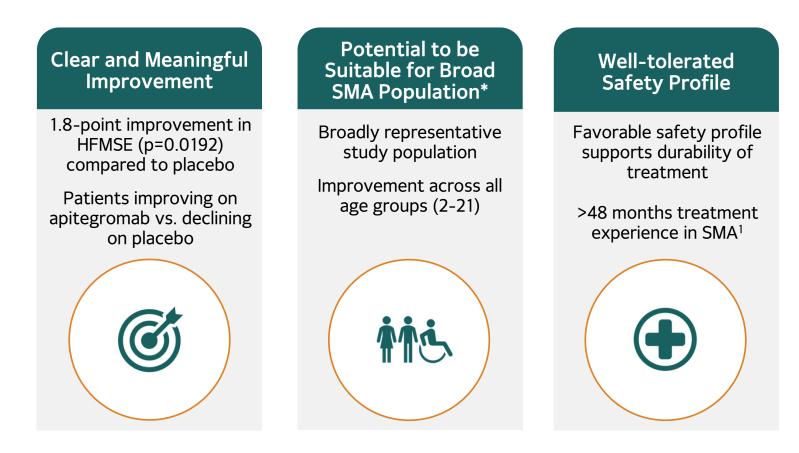
Robust and sustained target engagement were observed following apitegromab dosing

• Similar levels of target engagement were observed for 10 mg/kg and 20 mg/kg **TAKEAWAYS**



MEP=main efficacy population; SD=standard deviation.

SAPPHIRE - APITEGROMAB IN SMA Potential to Transform Standard of Care in SMA



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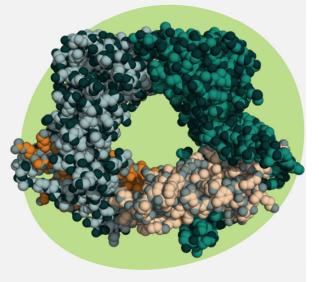
¹ Based on TOPAZ patients receiving combination therapy after 4 years of treatment. Data cutoff date: April 2024 * If approved by regulatory authorities



Next Horizon in Antimyostatin Therapies: Cardiometabolic Disorders



Differentiated Expertise Developing Muscle-Targeted Therapies



 $\begin{array}{l} Myostatin is a member of the TGF\beta \\ superfamily known to be a negative \\ regulator of muscle mass and promotes \\ muscle catabolism \end{array}$

Next Frontier in Antimyostatin Leveraging Our R&D Platform to Expand into Cardiometabolic Disorders



Pioneered unique approach to develop antibodies that bind to proand latent forms of myostatin with exquisite selectivity and inhibit its activation



Apitegromab is being developed as a highly selective inhibitor of latent myostatin activation, to enhance muscle growth and function in neuromuscular disorders

 To date apitegromab has been evaluated in approximately 250 patients ages 2 to 21 living with spinal muscular atrophy (SMA), showing sustained benefit over 36 months, a well tolerated profile and low discontinuation rate



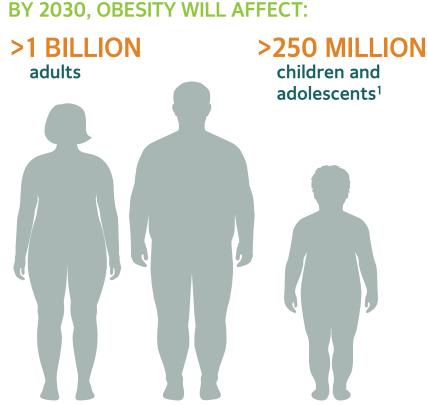
Discovered multiple additional anti-pro/latent myostatin inhibitory antibodies including:

 SRK-439: Being developed as a novel, highly potent and selective antibody tailored for cardiometabolic disorders



Obesity is Recognized as a Top Global Public Health Issue

<text>



Adult obesity associated with more than **\$170 billion in excess costs** annually in the U.S.²

In the US, 1 in 5 children and more than 1 in 3 adults are obese

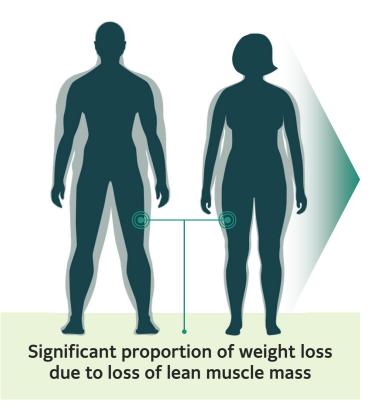
Obesity can increase the risk of comorbidities, such as some cancers, heart disease, and type 2 diabetes

1. The World Obesity Foundation, World Obesity Atlas 2022; 2. Ward ZJ, Bleich SN, Long MW, Gortmaker SL (2021) Association of body mass index with health care expenditures in the United States by age and sex. PLoS ONE 16(3): e0247307.



Loss of Lean Muscle Significant with GLP-1 RA Therapy

Lean muscle is essential to healthy metabolic function



Current Weight Loss Strategies *Challenged by:*

Tolerability

Lack of durability

Significant muscle loss¹⁻³ Recently approved **GLP-1 RAs are highly effective** in weight loss & experiencing rapid uptake

But 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 outcomes⁴⁻⁷

GLP-1 RA=Glucagon-like peptide-1 receptor agonists.

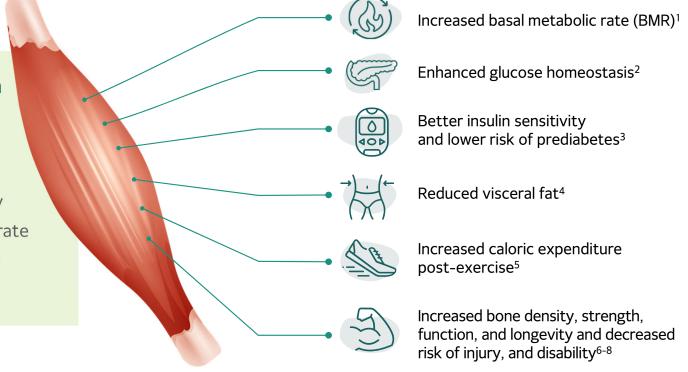
1. Muller TD, et al Anti-obesity drug discovery: advances and challenges. Nature Reviews Drug Discovery 2022; 21, 201–223; 2. Wilding JPH, Batterham RL, Calanna S, et al. Once-Weekly Semaglutide in Adults with Overweight or Obesity. N Engl J Med. 2021;384(11):989-1002; 3. Jastreboff AM, et al Tirzepatide 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):379-80.



Maintaining Muscle is Important for Healthy Weight Loss

The preservation of lean mass has many benefits for overall health:

- Improved strength
- Improved insulin sensitivity
- Increased basal metabolic rate
- Improved metabolic profile
- Reduced total body fat



GLP-1 RA=Glucagon-like peptide-1 receptor agonist.

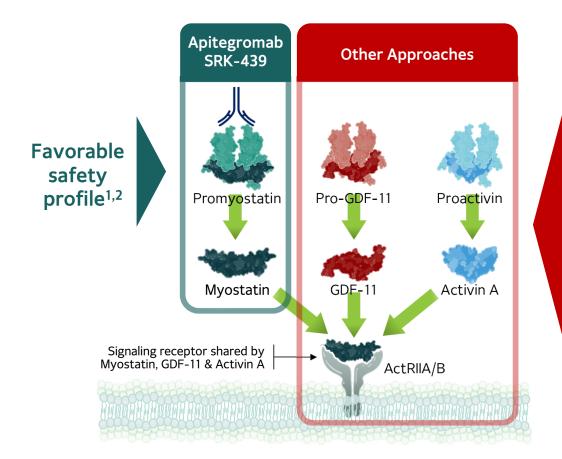
1. Aristizabal JC, Freidenreich DJ, Volk BM, et al. Effect of resistance training on resting metabolic rate and its estimation by a dual-energy X-ray absorptiometry metabolic map. Eur J Clin Nutr.2015; 69, 831–836. https://doi.org/10.1038/ejcn.2014.216; 2. Lindegaard B, Hansen T, Hvid T, et al. The effect of strength and endurance training on insulin sensitivity and fat distribution in human immunodeficiency virus-infected patients with lipodystrophy. J Clin Endocrinol Metab. 2008; 93:3860–9; 3. Srikanthan P, Karlamangla AS. Relative muscle mass is unversely associated with insulin resistance and prediabetes. Findings from the third National Health and Nutrition Examination Survey. J Clin Endocrinol Metab. 2011; 96:2898–903. doi: 10.1210/jc.2011-0435; 4. Wewege MA, Desai I, Honey C, et al. The effect of resistance training in healthy adults on Body fat percentage, fat mass and visceral fat: A systematic review and meta-analysis. Sports Med. 2022(Feb);52(2):287-300. doi: 10.1007/s40279-021-01562-2; 5. Zurlo, F., Larson, K., Bogardus, C., et al. Skeletal muscle metabolism is a major determinant of resting energy expenditure. J Clin Invest. 1990;86(5), 1423-1427; 6. Hvukshima Y, Kurose S, Shinno H, et al. Importance of lean muscle matcheance to improve insulin resistance by body weight reduction in female patients with obesity. Diabetes Metab J. 2016;40: 147-153; 7. Roh E, Choi KM. Health consequences of sarcopenic obesity: a narrative review. Front. Endocrinol. 2002;11: 332; 8. Volpi E, Nazemi R, Fujita S. Muscle tissue changes with aging. Curr Opin Clin Nutr Metab Care. 2004;7(4): 405-410.



SELECTIVITY TO MYOSTATIN IS CRITICAL

OBESITY

Multiple Risks Associated with Non-Selective Targeting



Health Risks Observed with Non-Selective Inhibition of ActRII Pathway:

- GI problems, e.g., diarrhea, pancreatitis ³⁻⁶
- Nose bleeds (epistaxis), low platelet count, telangiectasias⁷⁻¹⁰
- Reduction in reproductive hormones in males and females^{3, 7, 11, 12}
- Acne, rash, skin abscesses^{5, 13, 14}
- Madarosis (loss of eyebrows or eyelashes)¹⁴

1. Barrett et al., Adv Therapy 2021; 2. Crawford et al., Neurology 2024; 3. Garito T et al Clin Endocrinol 2018; 4. Amato AA et al Neurology 2021; 5. Heymsfield SB et al. JAMA 2021; 6. Vanhoutte F et al. J Clin Pharmacol 2020; 7. Attie KM et al Muscle Nerve 2013; 8. Attie KM et al Am J Hematol 2014; 9. Campbell C et al. Muscle Nerve 2017; 10. Hoeper MM et al NEJM 2023; 11. Ruckle J et al, JBMR 2009; 12. Sherman ML et al J Clin Pharm 2013; 13. Muntoni F et al. Neurol Ther. 2024. 14. Rocco MD et al Nat Med 2023;



Why We Are Confident in SRK-439

Scholar Rock's Unique Approach

 A new anti-myostatin specifically suited for obesity

Exquisite Selectivity

 Targets pro and latent forms of myostatin designed to minimize undesirable off-target effects



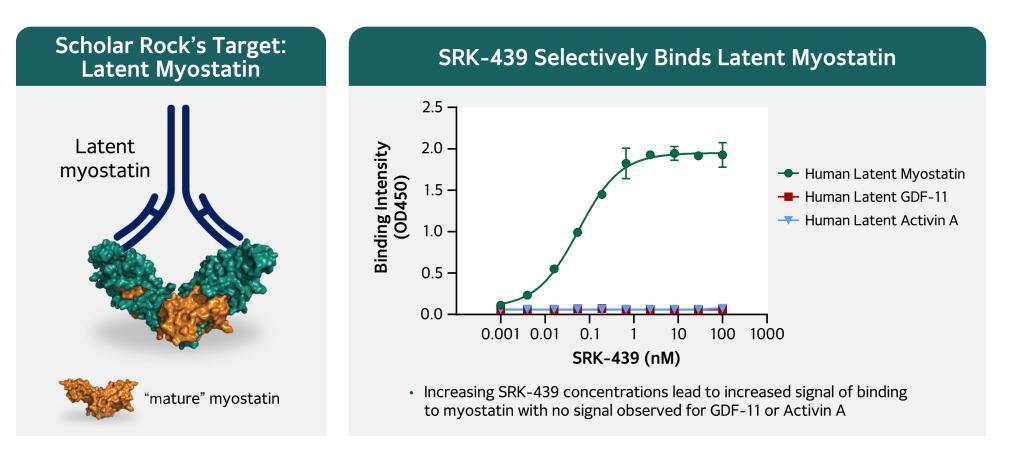
Strong Scientific Validation

 Preclinical data demonstrated favorable muscle mass preservation and metabolic effects





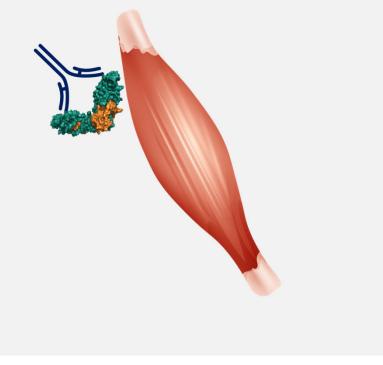
SRK-439: Exquisite Selectivity for Myostatin





Strong Scientific Validation and Promising Preclinical Evidence

Give Us Confidence in SRK-439



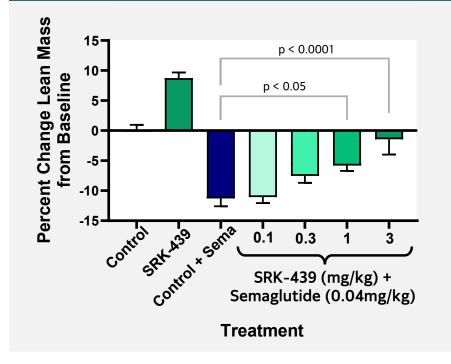
Preclinical data to date show strong potential to support healthier weight loss in combination with GLP-1 RA:

- Preservation of lean mass during GLP-1 RAinduced weight loss and improvement in metabolic parameters
- Increase in lean mass and attenuation of fat mass regain following GLP-1 RA withdrawal
- **Greater potency** compared to an anti-ACTRII antibody



SRK-439: Potential for Healthier Weight Loss Management in Combination with GLP-1 RA

SRK-439 Maintained Lean Mass in Semaglutide Treated Animals



Study conducted in Diet Induced Obesity (DIO) mouse model utilizing a murine chimera of SRK-439 GLP-1 RA: GLP1 receptor agonist

Considerable lean mass loss with semaglutide treatment

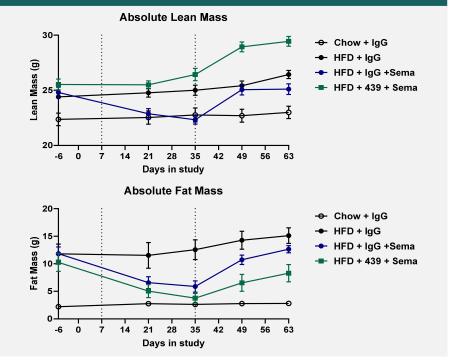
Key Observations

- Combination with SRK-439 led to dosedependent lean mass preservation
 - Effects seen with doses as low as 0.3 mg/kg
- Dose dependent enhancement of fat mass loss also observed, improving overall body composition



SRK-439 Increased Lean Mass and Attenuated Regain of Fat Mass After GLP-1 RA Withdrawal in Obesity Mouse Model

SRK-439 Increased Absolute Lean Mass and Attenuated Regain of Absolute Fat Mass



Key Observations

- Considerable lean mass loss seen with semaglutide treatment as expected
- Treatment with SRK-439 led to:
 - Preservation of lean mass during semaglutide treatment
 - Significant increase in lean mass upon semaglutide discontinuation
 - Attenuation of fat mass regain upon semaglutide discontinuation

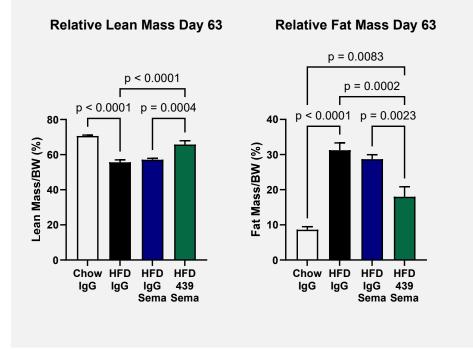


Study conducted in Diet Induced Obesity (DIO) mouse model utilizing a murine chimera of SRK-439 GLP-1 RA: GLP1 receptor agonist. Day 7 is start of semaglutide and SRK-439 treatment. Day 35 is discontinuation of semaglutide treatment.



SRK-439 Improved Body Composition After GLP 1-RA Withdrawal

SRK-439 Improved Proportion of Lean and Fat Mass to Total Body Weight



Study conducted in Diet Induced Obesity (DIO) mouse model utilizing a murine chimera of SRK-439 GLP-1 RA: GLP1 receptor agonist. HFD: High Fat Diet

Key Observations

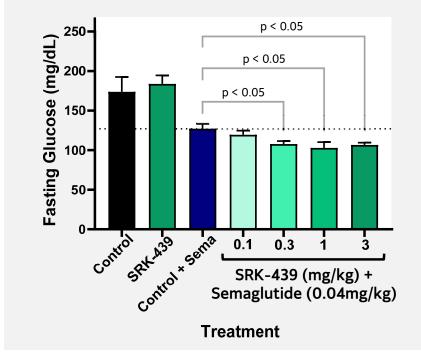
- SRK-439 attenuates regain of fat mass after withdrawal of semaglutide compared to IgG control
- SRK-439 leads to higher lean mass proportion after withdrawal of semaglutide compared to IgG control



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SRK-439: Further Improvement of Metabolic Health

SRK-439 Further Improved Fasting Glucose in Semaglutide Treated Animals



Study conducted in Diet Induced Obesity (DIO) mouse model utilizing a murine chimera of SRK-439

Semaglutide reduced fasting glucose levels as expected

Key Observations

- Combination with SRK-439 led to further improvement in fasting glucose levels by ~20% in a dose-dependent manner
- Highlights the role of muscle preservation in improving long term metabolic profile

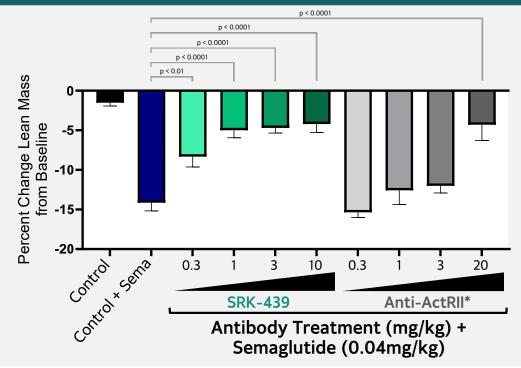


LOW EFFICACIOUS DOSE AND COMPETITIVE PROFILE

OBESITY

SRK-439 Is More Potent than Anti-ActRII Antibody at Maintaining Lean Mass During GLP-1 RA-Induced Weight Loss

Head-to-Head Comparison to Non-Selective Myostatin Inhibitor in DIO Mouse Model



*Murine chimera of Bimagrumab

Study conducted in Diet Induced Obesity (DIO) mouse model utilizing a murine chimera of SRK-439

Key Observations

- SRK-439 preserved semaglutide-driven lean mass loss dose-dependently and at lower doses than anti-ActRII
- Highlights efficacy of SRK-439 and avoids potential liabilities of non-selective approach of anti-ActRII antibodies
- Low target dose of SRK-439 supports subcutaneous and potentially best-in-class profile



LOW EFFICACIOUS DOSE AND COMPETITIVE PROFILE

SRK-439: Selective Inhibition of Myostatin in Combination with Metformin Increased Lean Mass

Percent Change Lean Mass 40 150 p < 0.0001 p < 0.0001 p<0.05 Percent Change Fat Mass from Baseline 30 from Baseline 100 20 50 10 0 0 lgG SRKlgG SRKlgG SRKlgG SRK-439 439 439 439 vehicle metformin vehicle metformin

Lean and Fat Mass Change in DIO Mice

Treated with SRK-439 and Metformin

Key Observations

OBESITY

- Young animals (7 weeks at start of study) treated with SRK-439 and metformin demonstrated a 2-fold increase in lean mass over the duration of the study
- The combination of SRK-439 and metformin also resulted in lower fat mass gain than was seen with metformin alone
- SRK-439 has the potential to improve body composition and contribute to healthier weight management in the context of both obesity and type 2 diabetes



Study conducted in Diet Induced Obesity (DIO) mouse model utilizing a murine chimera of SRK-439

SRK-439: Best in Class Potential

	SRK-439	ActRll Ab	Ligand Trap	Adnectin
Selectivity for myostatin	\bigcirc	X	X	×
Action limited to muscle		X	X	X
Combination GLP-1 RA data in obesity preclinical models ¹⁻³				\bigcirc
Low efficacious dose in preclinical obesity models ¹⁻³		X	X	×
Lower risk of potential undesirable effects in clinic ⁴		X	X	X

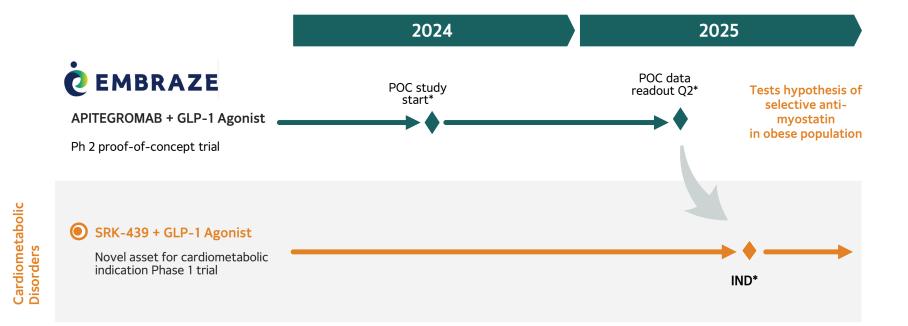
GLP-1 RA: GLP1 receptor agonist 1. Nunn E, et al., Mol Metab 2024; 2. Schang G., et al, J. Endoc Soc 2023; 3. Ackerman, P, et al. Obesity Week 2023 Poster 211; 4. See also references on slide titled, "Multiple Risks Associated with Non-Selective Targeting" in this presentation.



PIPELINE OVERVIEW

OBESITY

Leveraging Apitegromab to Inform Obesity Program



*Expected timelines POC = Proof of Concept



CARDIOMETABOLIC DEVELOPMENT PROGRAM

Goals of the EMBRAZE Proof-of-Concept Study



- Effect of apitegromab to preserve lean mass in obese or overweight patients receiving a GLP-1 agonist
- Safety and tolerability data to provide initial support for long-term chronic use
- Explore the potential effect of apitegromab to improve metabolic profile and physical function

INSIGHTS GAINED FROM EMBRAZE STUDY to inform SRK-439 development

Initiated trial in May 2024, ahead of target timeline Strong enrollment momentum

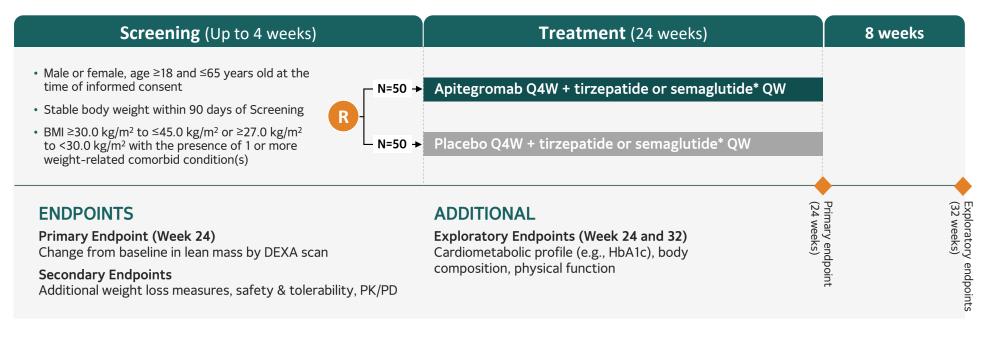
Updating guidance for topline data to Q2 2025



Enrolling Phase 2 Proof-of-Concept Study of Apitegromab in Obesity



Randomized, double-blind, placebo-controlled (n=100) Enrolling patients who are overweight or obese Enrollment ahead of schedule; topline data expected in Q2 2025



*Participating patient will be assigned to either tirzepatide or semaglutide depending on availability.

Apitegromab dose regimen will be 10 mg/kg Q4W, based on projected exposure in the obese population comparable to that of 20 mg/kg Q4W in SMA Tirzepatide and semaglutide dose regimen will follow the United States Prescribing Information.



CARDIOMETABOLIC DEVELOPMENT PROGRAM Regulatory Pathway

FDA Guidelines



A clinical outcome assessment is a measure that describes or reflects how a patient feels, functions, or survives.*

- FDA guidance supports combination strategy
- Need to demonstrate the added clinical benefit of the combination

Added Clinical Benefit

Incremental Weight Loss

- Current weight management drugs approved based on total body weight loss
- Incremental weight loss as primary endpoint preservation of lean mass may lead to additional weight loss incremental to that mediated by GLP-1 agonist

Incremental Clinical Benefit

- Increased muscle mass has the potential to improve metabolic profile (e.g., HbA1c)
- Preserving lean body mass is expected to improve physical function

*Clinical Outcome Assessment: Frequently Asked Questions: https://www.fda.gov/about-fda/clinical-outcome-assessment-coa-frequently-asked-questions#Consideration1



IN SUMMARY

SRK-439: The Right Molecule for Healthy Weight Loss

The right target

 \rightarrow Highly selective approach

The right tissue

→ Targets muscle

The right safety profile

→ Efficacy without potential liabilities of non-selective approaches

The right product profile

→ Designed for subcutaneous low frequency dosing with robust subcutaneous exposure and long half life









Fibrosis



TGFβ is Established as Key Driver of Fibrosis Across Multiple Diseases

<i>Nature Reviews</i> , April 25, 2016	NATURE REVIEWS NEPHROLOGY
--	-----------------------------

TGF- β : the master regulator of fibrosis

Xiao-ming Meng¹, David J. Nikolic-Paterson² and Hui Yao Lan³

Int. J. Mol. Sci. August 27, 2018

Targeting TGF-β Signaling in Kidney Fibrosis

Yoshitaka Isaka

Nature Reviews. August 19, 2014

NATURE REVIEWS | RHEUMATOLOGY

Transforming growth factor β —at the centre of systemic sclerosis

Robert Lafyatis

J. Am. Soc. Nephrol. December 3, 2017

Targeting Anti-TGF- β Therapy to Fibrotic Kidneys with a Dual Specificity Antibody Approach

Steve McGaraughty,* Rachel A. Davis-Taber,[†] Chang Z. Zhu,* Todd B. Cole,* Arthur L. Nikkel,* Meha Chhaya,[†] Kelly J. Doyle,* Lauren M. Olson,* Gregory M. Preston,[†] Chrisine M. Grinnell,[†] Katherine M. Salte,* Anthony M. Giamis,* Yanping Luo,* Victor Sun,[†] Andrew D. Goodearl,[†] Murali Gopalakrishnan,* and Susan E. Lacy[†] J Pathol, July 25, 2021

 $\mathsf{TGF}\text{-}\beta$ as a driver of fibrosis: physiological roles and the rapeutic opportunities

Erine H Budi¹, Johanna R Schaub¹, Martin Decaris¹, Scott Turner¹, Rik Derynck²

J Receptors Sign Trans, Feb 13, 2020

Inevitable role of TGF- β in progression of nonalcoholic fatty liver disease

Bhagyalakshmi Nair and Lekshmi R. Nath

Proc Am Thorac Soc, July 3, 2006

 $\begin{array}{l} \mbox{Transforming Growth Factor } \beta \\ \mbox{A Central Modulator of Pulmonary and Airway Inflammation and Fibrosis} \end{array}$

Dean Sheppard

PNAS, February 24, 1986

PNAS

Transforming growth factor type β : Rapid induction of fibrosis and angiogenesis in vivo and stimulation of collagen formation in vitro

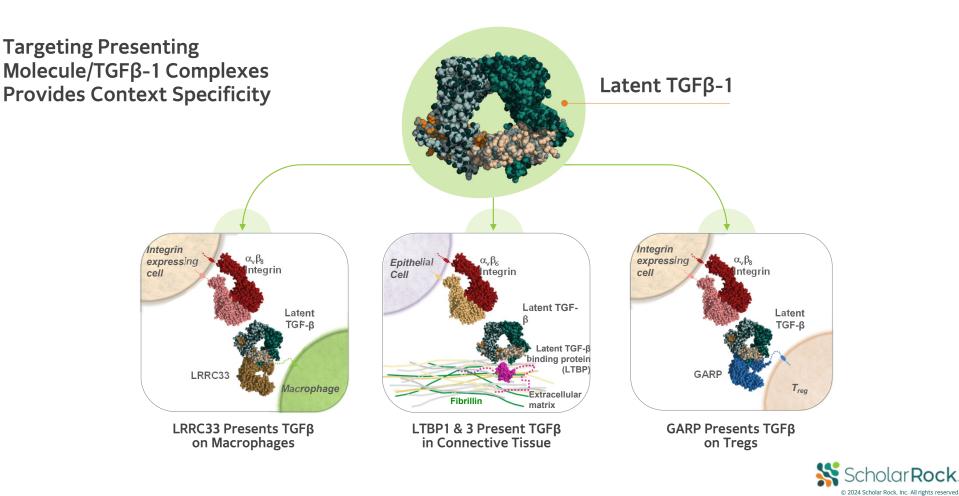
ANITA B. ROBERTS* MICHAEL B. SPORN*, RICHARD K. ASSOLAN*, JOSEPH M. SMITH*, NANETTE S. ROCHE*, LALAGE M. WAKEFIELD*, URSULA I. HEINE*, LANCE A. LIOTTA*, VINCENT FALANGA†, JOHN H. KEHRL‡, AND ANTHONY S. FAUCI‡



FIBROSIS

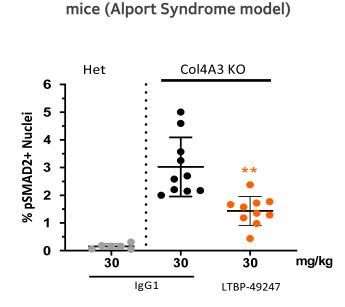
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Targeting Latent TGF β -1 Complexes Creates Multiple "Handles" For Selectivity



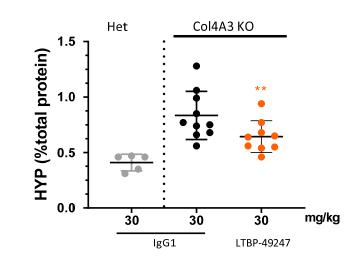
FIBROSIS

LTBP-49247 Reduced TGFβ Signaling and Fibrosis in Preclinical Models of Kidney Fibrosis



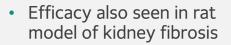
LTBP-49247 reduced a TGF_B PD

biomarker in kidneys of Col4a3KO



LTBP-49247 reduced fibrosis

in kidneys of Alport model



- No observed toxicity in mouse 13-week non-GLP repeat dose study
- Favorable PK in cynomolgus monkeys (t1/2 ~28 days) suggests LTBP-49247 is amenable to clinical subcutaneous dosing with promising developability profile

** p < 0.01 One way ANOVA vs. lgG HYP=hydroxyproline

