UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM 8-K

CURRENT REPORT

Pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934

Date of Report (Date of earliest event Reported): May 17, 2024

Scholar Rock Holding Corporation
(Exact Name of Registrant as Specified in Charter)

Delaware	**001-38501**	**82-3750435**
(State or Other Jurisdiction of Incorporation)	(Commission File Number)	(I.R.S. Employer Identification Number)

301 Binney Street, 3rd Floor, Cambridge, MA 02142
(Address of Principal Executive Offices) (Zip Code)

(857) 259-3860
(Registrant's telephone number, including area code)

(Former name or former address, if changed since last report)

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions:

☐ Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)
☐ Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)
☐ Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))
☐ Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))

Securities registered pursuant to Section 12(b) of the Act:

Title of each class	Trading Symbol(s)	Name of each exchange on which registered
Common Stock, par value $0.001 per share	SRRK	Nasdaq Global Select Market

Indicate by check mark whether the registrant is an emerging growth company as defined in Rule 405 of the Securities Act of 1933 (17 CFR §230.405) or Rule 12b-2 of the Securities Exchange Act of 1934 (17 CFR §240.12b-2). Emerging growth company ☐

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. ☐

Item 1.01. Entry Into a Material Definitive Agreement.

Amendment No. 4 to Loan and Security Agreement

On May 17, 2024 (the "Effective Date"), Scholar Rock Holding Corporation (the "Company" or "we") and Scholar Rock, Inc., a wholly-owned subsidiary of the Company ("Scholar Rock" and collectively with the Company, the "Borrower"), entered into the Fourth Amendment ("Loan Amendment No. 4") to the Loan and Security Agreement, dated October 16, 2020, by and with Oxford Finance LLC and Silicon Valley Bank (each, a "Lender" and collectively, the "Lenders").

Pursuant to the Loan Agreement, we previously received $50 million in loan proceeds under the Loan Agreement. Pursuant to Loan Amendment No. 4, we and the Lenders agreed to amend the milestones required to access an additional tranche of $25.0 million that is available to us under the Loan Agreement. The fourth tranche is available at our discretion through December 2024, upon achievement of certain clinical and business milestones. Loan Amendment No. 4 also extended the interest-only payment period for an additional six months through May 2025, with principal payments to commence in June 2025, or for an additional six months through November 2025 upon achievement of certain business performance milestones, with principal payments to commence in December 2025.

The foregoing description of Loan Amendment No. 4 does not purport to be complete and is qualified in its entirety by reference to Loan Amendment No. 4, which we intend to file as an exhibit to our Form 10-Q for the fiscal quarter ending June 30, 2024.

Item 7.01. Regulation FD Disclosure.

On May 22, 2024, the Company will hold its previously announced "Investor Day" event beginning at 8:30 a.m. ET. During the event, representatives of the Company will, among other things, provide a business update, including the initiation of the Phase 2 EMBRAZE trial of apitegromab in obesity and provide new preclinical data for SRK-439 in obesity. A copy of the press release relating to the Investor Day event is attached hereto as Exhibit 99.1 and a copy of the presentation slides to be used by the Company during the Investor Day event and webcast is attached hereto as Exhibit 99.2. A live webcast of the Investor Day event may be accessed by visiting the Investors & Media section of the Company's website at http://investors.scholarrock.com. A recording of the webcast will also be available on the Company's website after the event.

The information in this report furnished pursuant to Item 7.01 and Exhibits 99.1 and 99.2 shall not be deemed "filed" for the purposes of Section 18 of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), or otherwise subject to the liabilities of that section nor shall such information be deemed incorporated by reference in any filing under the Securities Act of 1933, as amended, or the Exchange Act, regardless of the general incorporation language of such filing, except as shall be expressly set forth by specific reference in such filing. It may only be incorporated by reference in another filing under the Exchange Act or the Securities Act of 1933, as amended, if such subsequent filing specifically references the information furnished pursuant to Item 7.01 and Exhibits 99.1 and 99.2 of this report.

Item 8.01. Other Events.

Phase 2 EMBRAZE Proof-of-Concept Trial

On May 22, 2024, the Company announced the initiation of the Phase 2 EMBRAZE proof-of-concept trial, designed to assess the safety and efficacy of apitegromab, a highly selective myostatin inhibitor, to preserve lean muscle mass in individuals living with obesity and on background therapy of a GLP-1 receptor agonist (GLP-1 RA). The results from this trial will inform the development of SRK-439, a novel investigational selective myostatin inhibitor optimized for the treatment of cardiometabolic disorders, including obesity.

EMBRAZE is a randomized, double-blind, placebo-controlled, Phase 2 proof-of-concept trial evaluating the efficacy, safety and pharmacokinetics of apitegromab in adults with a body mass index (BMI) of >27 (overweight) or a BMI of >30 (obese) and taking a GLP-1 RA (tirzepatide or semaglutide). The target enrollment of EMBRAZE is 100 subjects aged 18-65 who are overweight or obese without diabetes. As part of the study design, the treatment period is 24 weeks, and all subjects will receive a GLP-1 RA. In addition, all subjects will be randomized 1:1 to receive either apitegromab or placebo by intravenous (IV) infusion every four weeks during the 24-week treatment period. The primary endpoint is change from baseline at Week 24 in lean mass assessed by dual-energy X-ray absorptiometry. Secondary endpoints

include additional weight loss measures, safety and tolerability, and pharmacokinetic outcomes. Exploratory endpoints at Weeks 24 and 32 include cardiometabolic parameters (e.g., HbA1c), body composition, and physical function. Primary data from EMBRAZE are expected in mid-2025 and will inform the Company's development of SRK-439 towards anticipated IND filing in 2025.

SRK-439

On May 22, 2024, the Company also announced new preclinical data from a head-to-head comparison of SRK-439 and an anti-activin receptor II (anti-ActRII) antibody which demonstrate SRK-439's potential as best in class in preserving lean mass in patients on GLP-1 RAs. For the head-to-head preclinical research study, the Company generated and tested an anti-ActRII antibody (a murine equivalent of bimagrumab) along with a murine equivalent of SRK-439 in a weight-stable diet-induced obesity (DIO) mouse model. Mice were given either semaglutide (0.04mg/kg, daily) with an IgG control antibody (weekly, 20mg/kg) or semaglutide (0.04mg/kg, daily) in combination with weekly injections of either SRK-439 (0.3-10mg/kg) or anti-ActRII (0.3-20mg/kg). Quantitative nuclear magnetic resonance (qNMR) was then used to analyze change in lean mass after four weeks of treatment.

Lean mass differences were significant in all doses of SRK-439 tested, supporting the hypothesis that SRK-439 could be an important therapy to aid in lean mass preservation and is suitable for subcutaneous dosing in a population of adults with obesity.

SRK-439 attenuated the GLP-1 RA-driven lean mass loss in combination with semaglutide at a dose as low as 0.3 mg/kg (8.3% lean mass loss from baseline) and with maximal effects observed at all doses over 1 mg/kg (4.2% lean mass loss from baseline at 10mg/kg), as compared to an IgG control + semaglutide (14.1% lean mass loss from baseline).

Superiority to anti-ActRII antibody was shown in all equivalent doses tested:

- 3 mg/kg: -4.7% SRK-439 vs. -12.0% for anti-ActRII
- 1 mg/kg: -5.0% SRK-439 vs. -12.6% for anti-ActRII
- 0.3 mg/kg: -8.3% SRK-439 vs. -15.4% for anti-ActRII.

Equivalent lean mass preservation was seen at the highest dose tested for both drugs; 10 mg/kg SRK-439 (-4.2%) and 20 mg/kg anti-ActRII (-4.3%).

Item 9.01. Financial Statements and Exhibits.

(d) Exhibits

Exhibit No.	Description
99.1	Press Release issued by the Company on May 22, 2024, furnished hereto.
99.2	Investor Day Presentation, furnished hereto.
104	Cover Page Interactive Data File (embedded within the Inline XBRL document).

SIGNATURE

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned hereunto duly authorized.

Scholar Rock Holding Corporation

Date: May 22, 2024

By: /s/ Junlin Ho
Junlin Ho
General Counsel and Corporate Secretary

Exhibit 99.1

Scholar Rock Announces Initiation of Phase 2 EMBRAZE Trial of Apitegromab in Obesity and New Preclinical Data Supporting SRK-439 in Obesity

- *Phase 2 EMBRAZE proof-of-concept trial designed to assess apitegromab's ability to safely preserve lean muscle mass in individuals on GLP-1 receptor agonist therapy for obesity*

- *New preclinical head-to-head comparison shows that SRK-439 is more potent than an anti-ActRII antibody in maintaining lean mass in diet-induced obesity (DIO) mice; lean mass loss with SRK-439, 1mg/kg dose was equivalent to anti-ActRII antibody, 20mg/kg dose*

- *Company hosting Investor Event today in New York City focusing on its selective latent myostatin inhibition programs in Spinal Muscular Atrophy and obesity with presentations from executive leadership and key experts*

CAMBRIDGE, Mass. — May 22, 2024 — Scholar Rock (NASDAQ: SRRK), a late-stage biopharmaceutical company focused on advancing innovative treatments for spinal muscular atrophy (SMA), cardiometabolic disorders, and other serious diseases where protein growth factors play a fundamental role, today announced the initiation of the Phase 2 EMBRAZE proof-of-concept trial, designed to assess the safety and efficacy of apitegromab, a highly selective myostatin inhibitor, to preserve lean muscle mass in individuals living with obesity and on background therapy of a GLP-1 receptor agonist (GLP-1 RA). The results from this trial will inform the development of SRK-439, a novel investigational selective myostatin inhibitor optimized for the treatment of cardiometabolic disorders, including obesity.

The Company also announced new preclinical data from a head-to-head comparison of SRK-439 and an anti-activin receptor II (anti-ActRII) antibody, which demonstrate SRK-439's potential as best in class in preserving lean mass in patients on GLP-1 RAs. This data will be presented by Mo Qatanani, Ph.D., Chief Scientific Officer, at Scholar Rock's Investor Event, which begins today at 8:30 a.m. ET and is being held in New York City.

"We are thrilled to have initiated the EMBRAZE clinical trial ahead of schedule and to share new data from our SRK-439 program, which we believe further support our hypothesis that selective latent myostatin inhibition has advantages over less selective approaches to safely and effectively maintain lean muscle mass," said Jay Backstrom, M.D., MPH, President and Chief Executive Officer at Scholar Rock. "Selectivity is key in mitigating potential safety concerns for this patient population and we look forward to sharing additional preclinical data at the American Diabetes Association 84th Scientific Sessions in June to support the best-in-class potential of SRK-439."

New SRK-439 Data

For the head-to-head preclinical research study, the Company generated and tested an anti-ActRII antibody (a murine equivalent of bimagrumab), along with a murine equivalent of SRK-439 in a weight-stable diet induced obesity (DIO) mouse model. Mice were given either semaglutide (0.04mg/kg, daily) with an IgG control antibody (weekly, 20mg/kg) or semaglutide (0.04mg/kg, daily) in combination with weekly injections of either SRK-439 (0.3-10mg/kg) or of the anti-ActRII antibody (0.3-20mg/kg). Quantitative nuclear magnetic resonance (qNMR) was used to analyze change in lean mass after four weeks of treatment.

Lean mass differences were significant in all doses of SRK-439 tested, supporting the hypothesis that SRK-439 could be an important therapy to aid in lean mass preservation and is suitable for subcutaneous dosing in a population of adults with obesity.

- SRK-439 attenuated the GLP-1 RA-driven lean mass loss in combination with semaglutide at a dose as low as 0.3 mg/kg (8.3% lean mass loss from baseline).
- Maximal effects observed at all doses over 1 mg/kg (4.2% lean mass loss from baseline at 10mg/kg), as compared to an IgG control + semaglutide (14.1% lean mass loss from baseline).
- Superiority to anti-ActRII antibody was shown in all equivalent doses tested:
    - 3 mg/kg: -4.7% SRK-439 vs. -12.0% for anti-ActRII
    - 1 mg/kg: -5.0% SRK-439 vs. -12.6% for anti-ActRII
    - 0.3 mg/kg: -8.3% SRK-439 vs. -15.4% for anti-ActRII
- Equivalent lean mass preservation was seen at the highest dose tested for both drugs; 10 mg/kg SRK-439 (-4.2%) and 20 mg/kg anti-ActRII (-4.3%).

“The data from this head-to-head comparison show that selectively inhibiting myostatin alone is sufficient to preserve lean mass on a background of GLP-1 RA, in preclinical models. Combined with the positive data observed at low doses of SRK-439, we believe that our selective myostatin approach is the right potential solution to preserve lean muscle mass while avoiding the potential off-target effects observed in less selective programs for this indication. We view this as strong evidence that SRK-439 could have a more favorable benefit/risk profile,” said Mo Qatanani, Ph.D., Chief Scientific Officer at Scholar Rock.

Phase 2 EMBRAZE Trial Design

Scholar Rock announced in January that the U.S. Food and Drug Administration cleared the Company’s Investigational New Drug (IND) application for EMBRAZE, a randomized, double-blind, placebo-controlled, Phase 2 proof-of-concept trial evaluating the efficacy, safety and pharmacokinetics of apitegromab in adults with a body mass index (BMI) of >27 (overweight) or a BMI of >30 (obese) and taking a GLP-1 RA (tirzepatide or semaglutide). The target enrollment of EMBRAZE is 100 subjects aged 18-65 who are overweight or obese without diabetes.

As part of the study design, the treatment period is 24 weeks, and all subjects will receive a GLP-1 RA. In addition, all subjects will be randomized 1:1 to receive either apitegromab or placebo by intravenous (IV) infusion every four weeks during the 24-week treatment period. The primary endpoint is change from baseline at Week 24 in lean mass assessed by dual-energy X-ray absorptiometry. Secondary endpoints include additional weight loss measures, safety and tolerability, and pharmacokinetic outcomes. Exploratory endpoints at Weeks 24 and 32 include cardiometabolic parameters (e.g. HbA1c), body composition, and physical function.

Primary data from EMBRAZE are expected in mid-2025 and will inform Scholar Rock’s development of SRK-439 towards an anticipated IND filing in 2025.

The presentation from Scholar Rock’s Investor Day will be available in the Investors and Media section of Scholar Rock’s website. Live webcast of the event may be accessed by visiting the Investors & Media section of the Scholar Rock website at http://investors.scholarrock.com. An archived replay of the webcast will be available on the Company’s website for approximately 90 days following the presentations.

About SRK-439

SRK-439 is a novel, preclinical, investigational myostatin inhibitor that has high in vitro affinity for pro- and latent myostatin and maintains myostatin specificity (i.e., no GDF11 or Activin-A binding), and is initially being developed for the treatment of cardiometabolic disorders, including obesity. Based on preclinical data, SRK-439 has the potential to support healthier weight management by preserving lean mass during weight loss. The efficacy and safety of SRK-439 have not been established and SRK-439 has not been approved for any use by the FDA or any other regulatory agency.

About Apitegromab

Apitegromab is an investigational fully human monoclonal antibody inhibiting myostatin activation by selectively binding the pro- and latent forms of myostatin in the skeletal muscle. It is the first muscle-targeted treatment candidate to demonstrate clinical proof-of-concept in spinal muscular atrophy (SMA). Myostatin, a member of the TGFβ superfamily of growth factors, is expressed primarily by skeletal muscle cells, and the absence of its gene is associated with an increase in muscle mass and strength in multiple animal species, including humans. Scholar Rock believes that its highly selective targeting of pro- and latent forms of myostatin with apitegromab may lead to a clinically meaningful improvement in motor function in patients with SMA. The U.S. Food and Drug Administration (FDA) has granted Fast Track, Orphan Drug and Rare Pediatric Disease designations, and the European Medicines Agency (EMA) has granted Priority Medicines (PRIME) and Orphan Medicinal Product designations, to apitegromab for the treatment of SMA. The efficacy and safety of apitegromab have not been established and apitegromab has not been approved for any use by the FDA or any other regulatory agency.

About Scholar Rock

Scholar Rock is a biopharmaceutical company that discovers, develops, and delivers life-changing therapies for people with serious diseases that have high unmet need. As a global leader in the biology of the transforming growth factor beta (TGFβ) superfamily of cell proteins and named for the visual resemblance of a scholar rock to protein structures, the clinical-stage company is focused on advancing innovative treatments where protein growth factors are fundamental. Over the past decade, Scholar Rock has created a pipeline with the potential to advance the standard of care for neuromuscular disease, cardiometabolic disorders, cancer, and other conditions where growth factor-targeted drugs can play a transformational role.

Scholar Rock is the only company to show clinical proof-of-concept for a muscle-targeted treatment in spinal muscular atrophy (SMA). This commitment to unlocking fundamentally different therapeutic approaches is powered by broad application of a proprietary platform, which has developed novel monoclonal antibodies to modulate protein growth factors with extraordinary selectivity. By harnessing cutting-edge science in disease spaces that are historically under-addressed through traditional therapies, Scholar Rock works every day to create new possibilities for patients. Learn more about our approach at ScholarRock.com and follow @ScholarRock and on LinkedIn.

Availability of Other Information About Scholar Rock

Investors and others should note that we communicate with our investors and the public using our company website www.scholarrock.com, including, but not limited to, company disclosures, investor presentations and FAQs, Securities and Exchange Commission filings, press releases, public conference call transcripts and webcast transcripts, as well as on Twitter and LinkedIn. The information that we post on our website or on Twitter or LinkedIn could be deemed to be material information. As a result, we encourage investors, the media and others interested to review the information that we post there on a

regular basis. The contents of our website or social media shall not be deemed incorporated by reference in any filing under the Securities Act of 1933, as amended.

Scholar Rock® is a registered trademark of Scholar Rock, Inc.

Forward-Looking Statements

This press release contains "forward-looking statements" within the meaning of the Private Securities Litigation Reform Act of 1995, including, but not limited to, statements regarding Scholar Rock's future expectations, plans and prospects, including without limitation, Scholar Rock's expectations regarding its growth, strategy, progress and timing of its clinical trials for apitegromab and its preclinical programs, including SRK-439, and indication selection and development timing, including the therapeutic potential, clinical benefits and safety thereof, expectations regarding timing, success and data announcements of current ongoing preclinical and clinical trials, 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," "might," "could," "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. 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 2a clinical trial of apitegromab, or its preclinical data with respect to SRK-439, are not predictive of, may be inconsistent with, or more favorable than, data generated from future or ongoing clinical trials of the same product candidates, including, without limitation, the Phase 3 clinical trial of apitegromab in SMA or the Phase 2a EMBRAZE clinical trial; 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; Scholar Rock's dependence on third parties for development and manufacture of product candidates including, without limitation, to supply any clinical trials; and 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; as well as those risks more fully discussed in the section entitled "Risk Factors" in Scholar Rock's Quarterly Report on Form 10-Q for the quarter ended March 31, 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.

Scholar Rock:

Investors
Rushmie Nofsinger
Scholar Rock
rnofsinger@scholarrock.com
ir@scholarrock.com
857-259-5573

Media
Molly MacLeod
Scholar Rock
mmacleod@scholarrock.com
media@scholarrock.com
802-579-5995

Investor Day

May 22, 2024

ScholarRock

Welcome

Rushmie Nofsinger
Vice President
Investor Relations & Corporate Affairs

ScholarRock

Forward-Looking Statements

Various statements in this presentation concerning the future expectations, plans and prospects of Scholar Rock Holding Corporation and Scholar Rock, Inc. (collectiv "Scholar Rock"), including without limitation, Scholar Rock's expectations regarding its strategy, its product candidate selection and development timing, including timing for 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 a 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, a the potential of its product candidates and proprietary platform. The use of words such as "may," "could," "might," "will," "should," "expect," "plan," "anticipate," "believ "estimate," "project," "intend," "future," "potential," or "continue," and other similar expressions are intended to identify such forward-looking statements for the purposes of safe harbor provisions under The Private Securities Litigation Reform Act of 1995. All such forward-looking statements are based on management's current expectations 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 su forward-looking statements. These risks and uncertainties include, without limitation, that preclinical and clinical data, including the results from the Phase 2 trial of apitegrom 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 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 provide the financial support, resources and expertise necessary to identify and develop product candidates on the expected timeline, the data generated from Scholar Roc nonclinical and preclinical studies and clinical trials, information provided or decisions made by regulatory authorities, competition from third parties that are develop 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 collaboratio Scholar Rock's dependence on third parties for development and manufacture of product candidates including, without limitation, to supply any clinical trials, Scholar Roc ability to manage expenses and to obtain additional funding when needed to support its business activities and establish and maintain strategic business alliances and n business initiatives, 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, a Quarterly Report on Form 10-Q for the quarter ended March 31, 2024, as well as discussions of potential risks, uncertainties, and other important factors in Scholar Roc 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 up 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 t 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 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, assumptio 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, and SRK-439 have not been approved for any use by the FDA or a other regulatory agency and the safety and efficacy of apitegromab, SRK-181 and SRK-439 have not been established.

ScholarRoc

Company Speakers

Jay Backstrom, M.D., MPH
President & Chief Executive Officer

Jing Marantz, M.D., Ph.D.
Chief Medical Officer

Tracey Sacco
Chief Commercial Officer

Mo Qatanani, Ph.D.
Chief Scientific Officer

ScholarRock

Expert Speakers

Diana Castro, M.D.

Founder of Neurology & Neuromuscular Care Center and Neurology Rare Disease Center

Former Associate Professor of Pediatrics, Neurology and Neurotherapeutics, University of Texas Southwestern, Director of the Neuromuscular Program & Fellowship and Director of the Pediatric Muscular Dystrophy Association Clinic at Children's Health

Ania Jastreboff, M.D., Ph.D.

Associate Professor of Medicine (Endocrinology), Yale Scho of Medicine

Director, Yale Obesity Research Center (Y-Weight)

Co-Director, Yale Center for Weight Management

Member of Board of Directors for the American Board of Obesity Medicine

ScholarRoc

Today's Agenda

Topic	8:30 – 12:00	Speaker
▶ **Welcome**		**Rushmie Nofsinger**, VP of IR & Corporate Affairs
▶ **Vision & Strategic Overview**		**Jay Backstrom**, President & Chief Executive Officer
▶ **SMA: The Patient Journey**		**Diana Castro**, M.D., Neurology & Neuromuscular Care Center and Neurology Rare Disease Center
▶ **Apitegromab: Development Program**		**Jing Marantz**, Chief Medical Officer
▶ **Apitegromab: Commercial Readiness**		**Tracey Sacco**, Chief Commercial Officer
	Q&A	
	10-minute Break	
▶ **Obesity: Muscle Matters**		**Ania Jastreboff**, M.D., Ph.D., Yale School of Medicine
▶ **SRK-439: Differentiated Approach**		**Mo Qatanani**, Chief Scientific Officer
▶ **Cardiometabolic Development Program**		**Jing Marantz**, Chief Medical Officer
	Q&A	
▶ **Closing Remarks**		**Jay Backstrom**, President & Chief Executive Officer

ScholarRock

Building a Fully Integrated Biopharma Company

Jay Backstrom
President & Chief Executive Officer

ScholarRock

ScholarRock

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.

WHAT YOU WILL HEAR TODAY

Advancing Our Journey Towards Commercialization

1

Selectivity is the Key

The hallmark of our differentiated platform is unparalleled selectivity

2

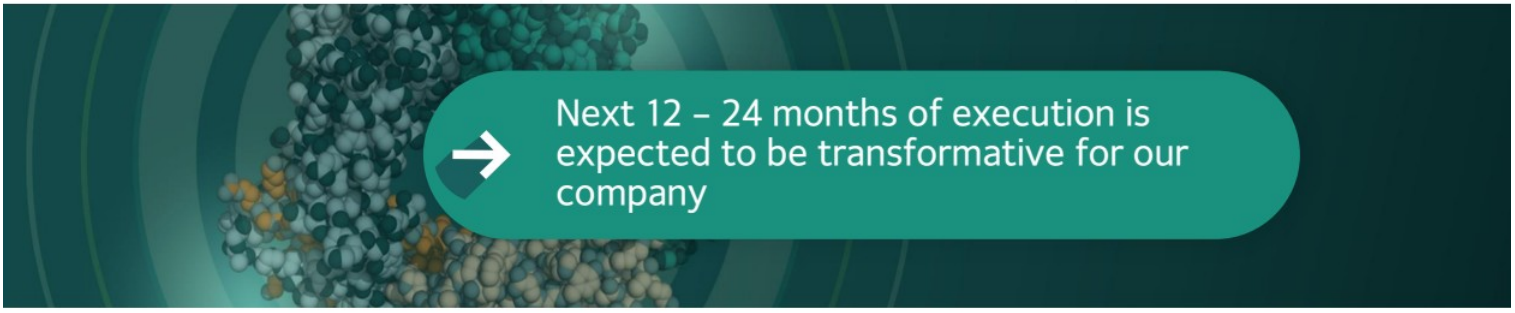
Large Unmet Needs

SMA and obesity represent high value markets offering significant potential revenue opportunities

3

Positioned for Success

Experienced team executing on strategy and goals



ScholarRock

AGENDA

Evolving into a Fully Integrated Biopharma Company

Leveraging our proprietary platform

Building a muscle-targeted franchise

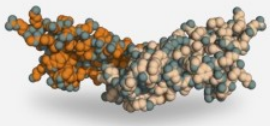
The road ahead – value drivers

ScholarRock

SELECTIVITY DRIVES SUCCESS

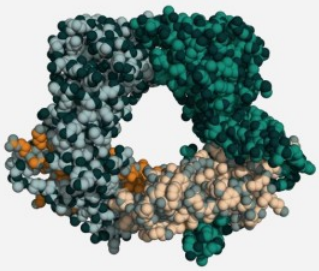
Scholar Rock Has Succeeded Where Others Have Failed

Traditional Target
"Mature" Active Growth Factor



Has been challenging to target because of high homology across super-family

Scholar Rock's Target
Latent Growth Factor



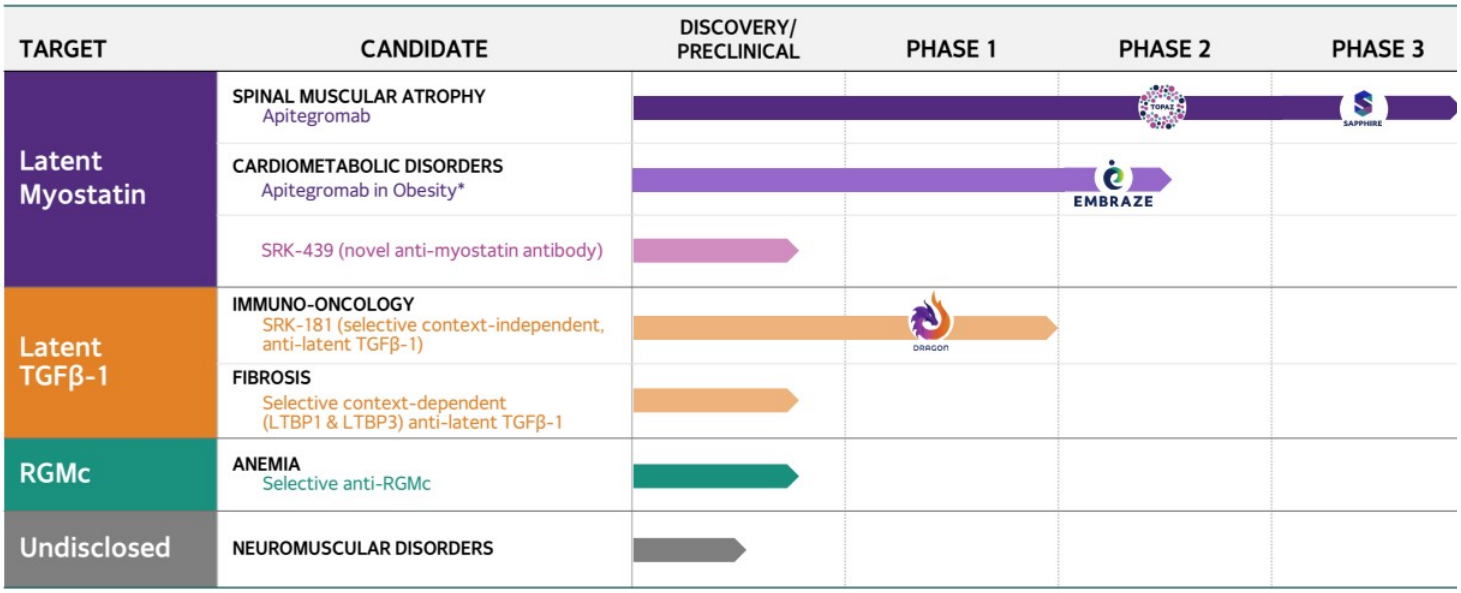
Targeting the 'cage' before growth factor is released allows for exquisite selectivity

RIGHT TARGET → Validated Biology

RIGHT TIME → Latent Form

ScholarRock

Growing Pipeline Across High Value Therapeutic Areas



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

ScholarRock

High Value Growth Opportunities

Neuromuscular Disorders

Ph 3 SAPPHIRE in SMA

Apitegromab additional neuromuscular populations

Cardiometabolic Disorders

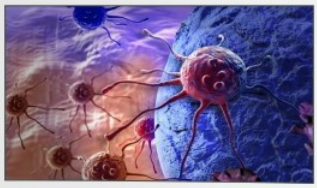
EMBRAZE PoC in obesity

Advance SRK-439 to IND

Immuno-Oncology

Established PoC in ccRCC

End of Ph 1 meeting



Fibrosis

Advance LTBP to IND

Nonclinical studies in renal and pulmonary fibrosis

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Strong Proprietary Platform

AGENDA

Evolving into a Fully Integrated Biopharma Company

Leveraging our proprietary platform

Building a muscle-targeted franchise

The road ahead – value drivers

ScholarRock

Distinct & High Value Opportunities for Myostatin Inhibition

Selective Myostatin Inhibition

	Therapeutic Area	Current Market Size
Apitegromab		**$4.5B**[1] Spinal Muscular Atrophy SRRK Commercialization
SRK-439		**~$20B**[2] Projected to reach $100B by 2030[2] Obesity Ideal for Partnership

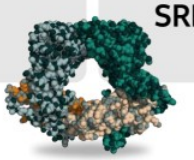
[1] Revenue as of Biogen 4Q23 financial update, Roche 4Q23 financial update, and Novartis 4Q23 financial update
[2] Morgan Stanley Research, "Obesity Medication, Ripple Effects." April 14, 2024

ScholarRock

Leveraging Our Building Blocks, Transformative 18 Months Ahead

Powerful Building Blocks

Novel Scientific Platform	Experienced Team	Established Markets with High Unmet Need	Global Rights Across the Portfolio
Robust Pipeline across 5 therapeutic areas **3** clinical programs **Multiple** preclinical programs	**Deep rare disease**, R&D, FDA/EMA approval experience **~150+** Employees **~74%** R&D	**Apitegromab** in SMA **SRK-439** in Obesity **SRK-181** in Immuno-oncology	**29** patent families pending **Exclusivity** through 2036 to 2043 for key assets



* Subject to regulatory approval

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Leveraging Our Building Blocks, Transformative 18 Months Ahead

Value Drivers

Significant Inflection Points in Next Year

Phase 3 SAPPHIRE Trial

Proof of Concept in Obesity

Preparing to Launch SMA in US and EU*

Phased approach to building key capabilities

Well established presence within SMA Community

Powerful Building Blocks

Novel Scientific Platform

Robust Pipeline across 5 therapeutic areas

3 clinical programs

Multiple preclinical programs

Experienced Team

Deep rare disease, R&D, FDA/EMA approval experience

~150+ Employees

~74% R&D

Established Markets with High Unmet Need

Apitegromab in SMA

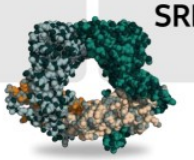
SRK-439 in Obesity

SRK-181 in Immuno-oncology

Global Rights Across the Portfolio

29 patent families pending

Exclusivity through 2036 to 2043 for key assets



* Subject to regulatory approval

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AGENDA

Evolving into a Fully Integrated Biopharma Company

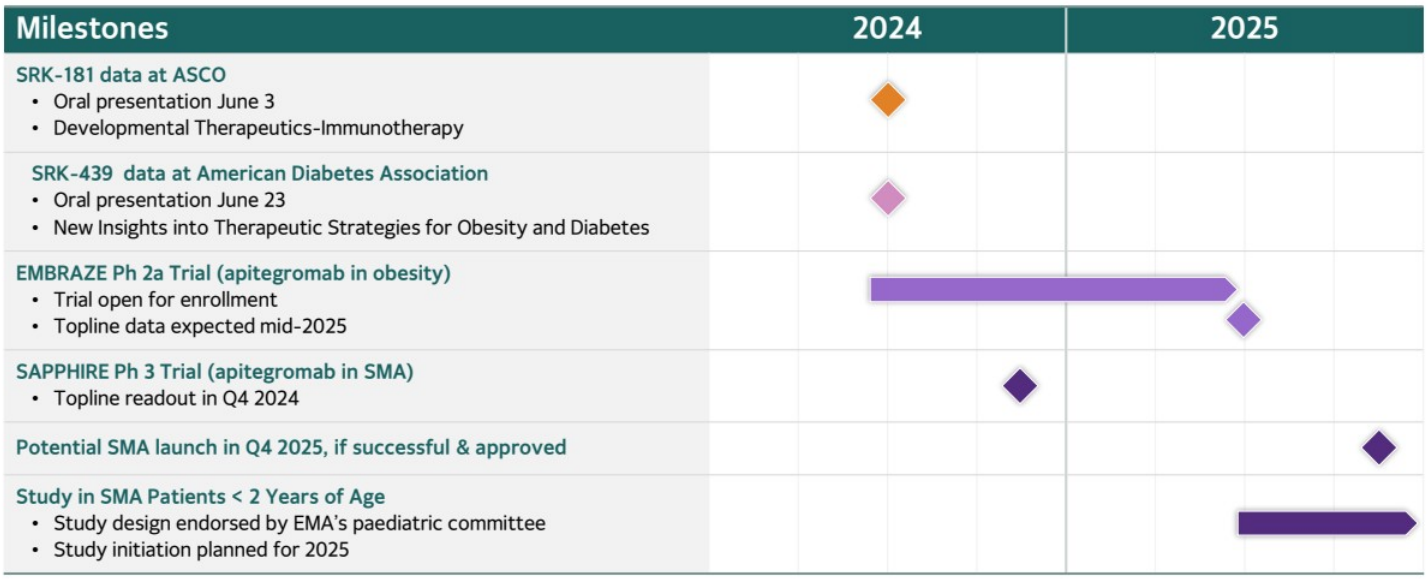
Leveraging our proprietary platform

Building a muscle-targeted franchise

The road ahead – value drivers

ScholarRock

Near-Term 2024 & 2025 Anticipated Milestones



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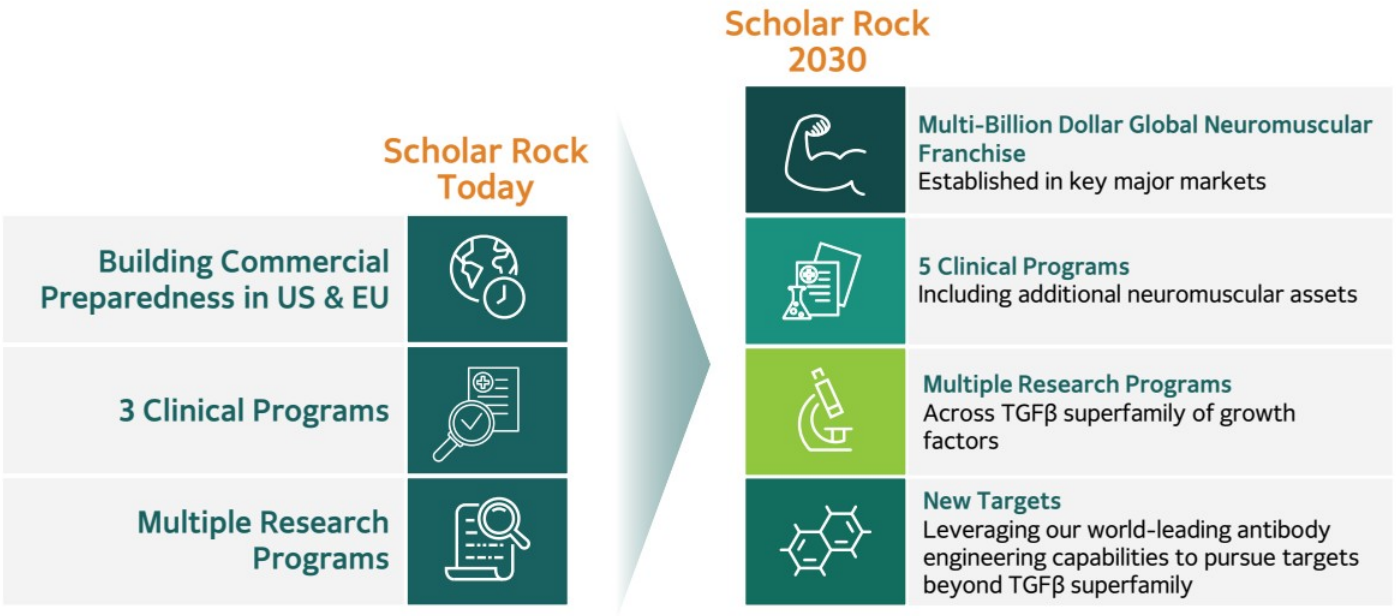
Strategic Roadmap: Our Vision for 2030



IN SUMMARY

From a World-Class Scientific Platform to a World-Class Biopharma Company

PLATFORM	Unparalleled selectivity to optimize efficacy and safety
PIPELINE	Broad opportunities to improve patient outcomes in areas of high unmet need
PEOPLE	Seasoned research, development and commercial teams

Industry-leading anti-myostatin portfolio

SMA & Obesity represent significant revenue opportunity

ScholarRock

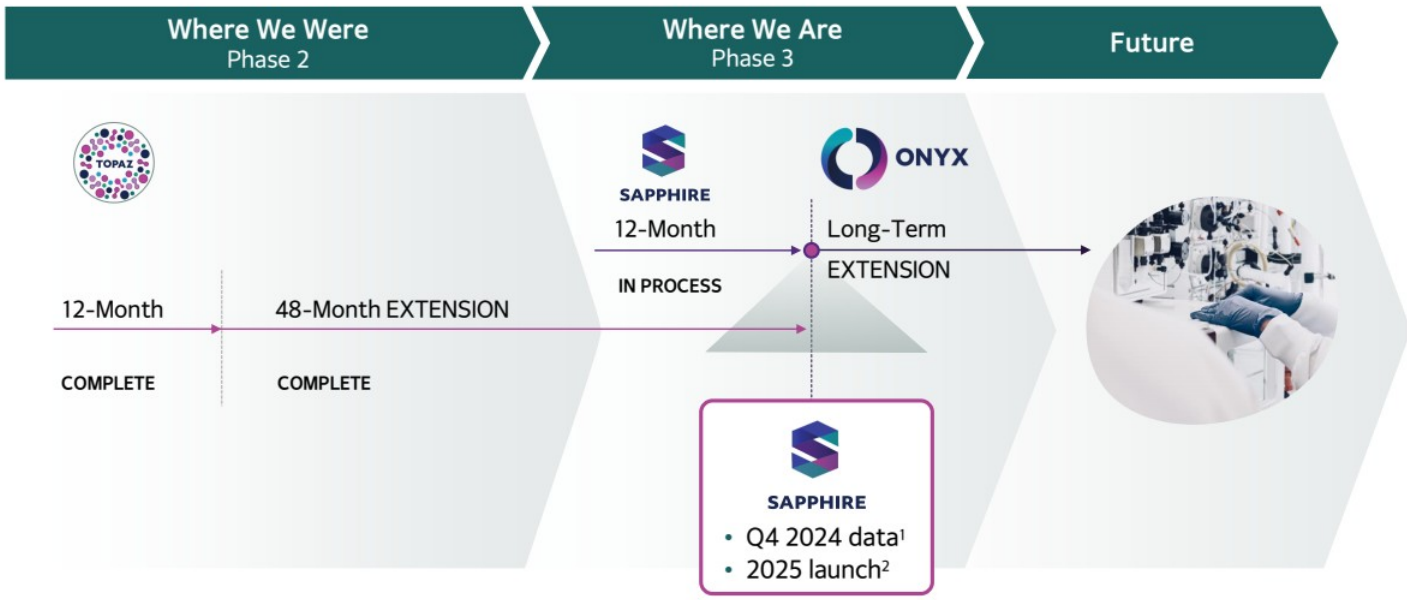
Apitegromab: Development Program

Jing Marantz
Chief Medical Officer

ScholarRoc

APITEGROMAB DEVELOPMENT PROGRAM

Upcoming Catalyst: Topline Data Expected in Q4 2024



[1] Anticipated
[2] Subject to regulatory approval

AGENDA

Apitegromab for SMA Development Program

Pivotal SAPPHIRE trial: Why we are confident

Evidence supporting apitegromab's potential

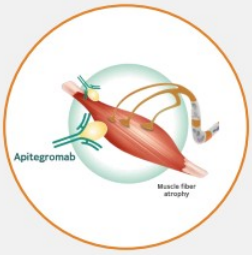
Where we plan to go

APITEGROMAB FOR SPINAL MUSCULAR ATROPHY

Why We Are Confident

1. Muscle Targeting

Selective muscle-targeting designed to improve motor function while minimizing off-target effects



2. Clinical Proof-Of-Concept

TOPAZ clinical proof-of-concept with substantial and durable effect across broad SMA patients ages 2-21

TOPAZ

3. SAPPHIRE Optimized for Success

Trial design informed by insights from TOPAZ

SAPPHIRE

4. TOPAZ Safety Profile

>90% patient retention,[1] well tolerated profile supports durability of treatment

[1] Based on TOPAZ patients receiving combination therapy after 4 years of treatment. Data cutoff date: April 2024

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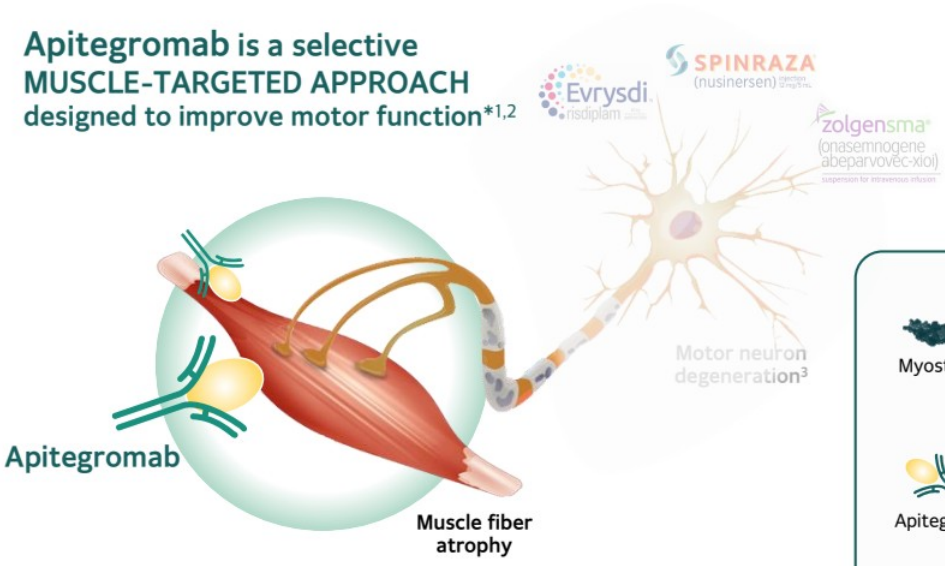
#1 SELECTIVE MUSCLE TARGETING

Selectively Targets Muscle to Address Unmet Needs

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



Myostatin

- Myostatin is a negative modulator of muscle growth

Apitegromab

- Evidence indicates upstream targeting of structurally differentiated pro- and latent myostatin minimizes undesirable off-target effects

* 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

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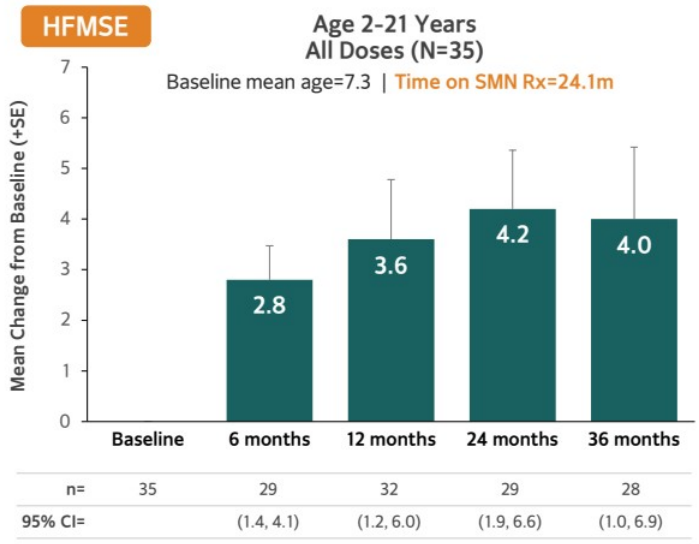
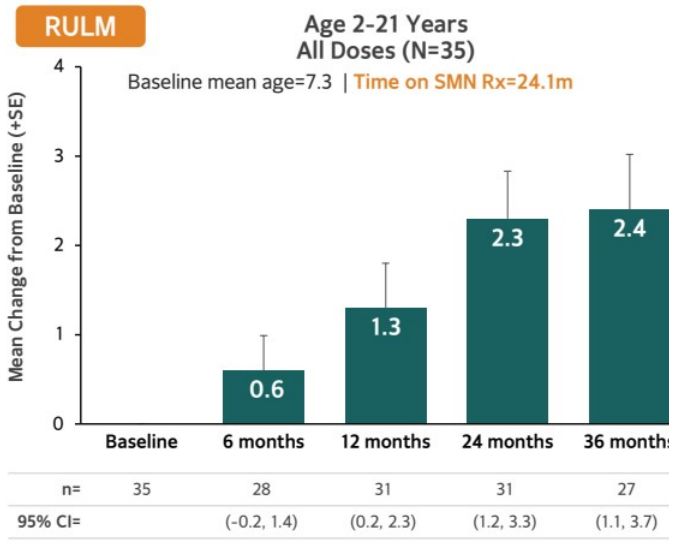
#2 PHASE 2 TOPAZ CLINICAL PROOF-OF-CONCEPT

Motor Function Improvements Were Substantial & Sustained Over 36 Month

Pooled Nonambulatory Patients



n=	35	29	32	29	28
95% CI=		(1.4, 4.1)	(1.2, 6.0)	(1.9, 6.6)	(1.0, 6.9)



n=	35	28	31	31	27
95% CI=		(-0.2, 1.4)	(0.2, 2.3)	(1.2, 3.3)	(1.1, 3.7)

For the 36-month evaluation, an observed case analysis was conducted, which pooled all the nonambulatory patients (Cohorts 2 and 3) and was based upon the available data for given timepoints. This analysis population 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). This analysis excludes data post scoliosis surgery from seven patients. One patient did not conduct HFMSE at time of database lock for 24 months, however, this patient had an unscheduled HFMSE score one month prior to their scheduled visit. In the most recent analysis, this result was included in the 24-month analysis. Error bars represent SE. CI represents confidence interval. SMN Rx=SMN therapy. In the age 2-21 group, 18/28 patients achieved ≥ 1-pt gains, and 11/28 patients ≥ 3-pt gains at 36 months. Data cutoff date as of March 13, 2023. 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.**

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#3 PHASE 3 SAPPHIRE TRIAL OPTIMIZED FOR SUCCESS

SAPPHIRE Phase 3 Design is Optimized by Insights from TOPAZ

	TOPAZ Learnings	SAPPHIRE Trial Design
Study Population	• Substantial HFMSE gains in nonambulatory* patients • Type 2/3 SMA cohorts	• Nonambulatory* Type 2/3 SMA patients • Primary efficacy endpoint: HFMSE
Age	• Exploratory age 2-12 analysis in nonambulatory Type 2/3 showed transformative potential	• Age 2-12 main efficacy population • Age 13-21 exploratory population
Duration	• HFMSE gains substantial by 12 months of treatment	• 12-month treatment duration
Dose	• Clear dose response with greater effect observed with 20 mg/kg over 2 mg/kg	• 20 mg/kg apitegromab dose • 10 mg/kg apitegromab dose

HFMSE=Hammersmith Functional Motor Scale Expanded.
*Nonambulatory is defined as unable to independently ambulate without aids or orthotics over 10 steps at time of walk test during screening.

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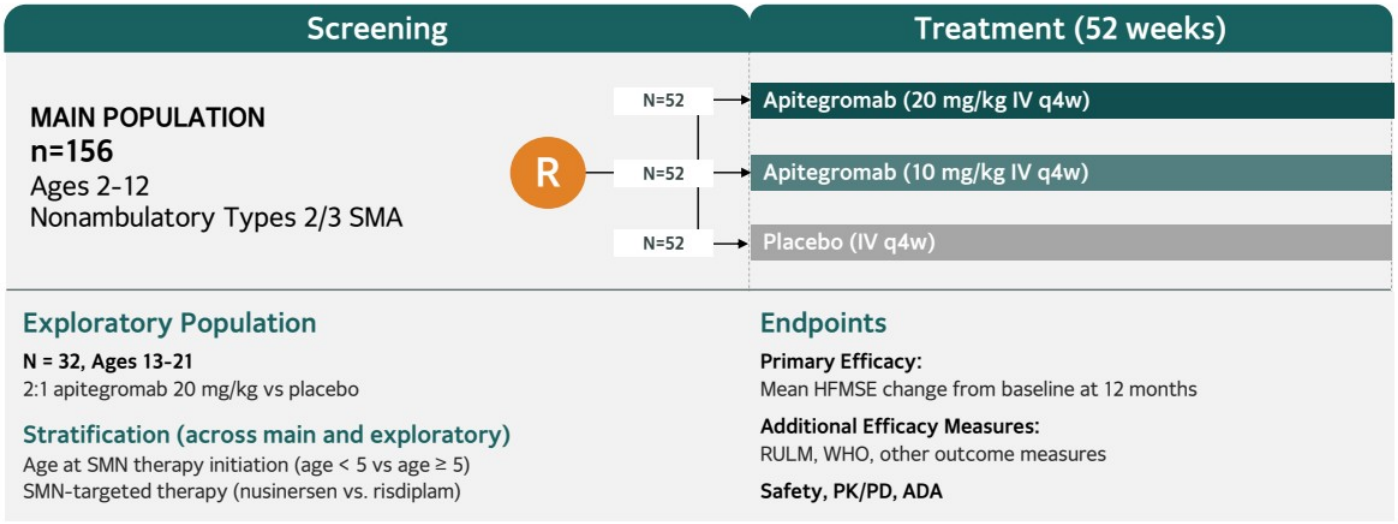
#3 PHASE 3 SAPPHIRE TRIAL OPTIMIZED FOR SUCCESS

SAPPHIRE Trial Design - Calibrated and Targeted

SAPPHIRE

Randomized, double-blind, placebo-controlled (enrolled n=188)
Enrolled patients receiving SMN-targeted therapy (nusinersen or risdiplam)
Completed enrollment in 3Q 2023



Exploratory Population

N = 32, Ages 13-21
2:1 apitegromab 20 mg/kg vs placebo

Stratification (across main and exploratory)

Age at SMN therapy initiation (age < 5 vs age ≥ 5)
SMN-targeted therapy (nusinersen vs. risdiplam)

Endpoints

Primary Efficacy:
Mean HFMSE change from baseline at 12 months

Additional Efficacy Measures:
RULM, WHO, other outcome measures

Safety, PK/PD, ADA

Nonambulatory is defined as unable to independently ambulate without aids or orthotics over 10 steps at time of walk test during screening

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SAPPHIRE – Clear Goals

SAPPHIRE

Study Aims to Demonstrate

- **Improved motor function** (HFMSE[1] and RULM) across broad SMA patients ages 2-21 and regardless of type of SMN-targeted therapy
- **Improved caregiver-reported outcomes** (PROMIS-Fatigue and PEDI-CAT) consistent with motor function improvement
- **Safety and tolerability profile** that supports long-term use

[1] Primary efficacy endpoint of the SAPPHIRE trial

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#4 TOPAZ SAFETY PROFILE

Well Tolerated Safety Profile & Low Discontinuation Rate

RIGHT TARGET → Myostatin

RIGHT TIME → Latent Form

- **>90%** of patients on combination therapy remain on study after 4 years of treatment[1]
- **Consistent** treatment-emergent adverse events (TEAEs) with previous reports with no new findings after >200 patient years of exposure in SMA[2]
  - Most frequently reported TEAEs included headache, pyrexia, COVID-19, nasopharyngitis, & upper respiratory tract infection
  - TEAEs were mostly mild to moderate and generally consistent with the underlying patient population and nusinersen therapy
- **No** treatment-related serious AEs or hypersensitivity reactions
- **No** report of positive anti-apitegromab antibodies (ADA)

[1] Excludes patients on monotherapy
[2] Data cutoff date: April 2024

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AGENDA

Apitegromab for SMA Development Program

Pivotal SAPPHIRE trial: Why we are confident

Evidence supporting apitegromab's potential

Where we plan to go

Evidence from TOPAZ to Support Apitegromab's Potential in SMA

1. SMN therapies generally plateau after initial gains
2. Substantial HFMSE gains on top of SMN therapy
3. Motor function improvement showed dose response and no clear correlation with nusinersen exposure
4. Caregiver-reported outcomes demonstrated improved fatigue and daily activities
5. High patient retention on study

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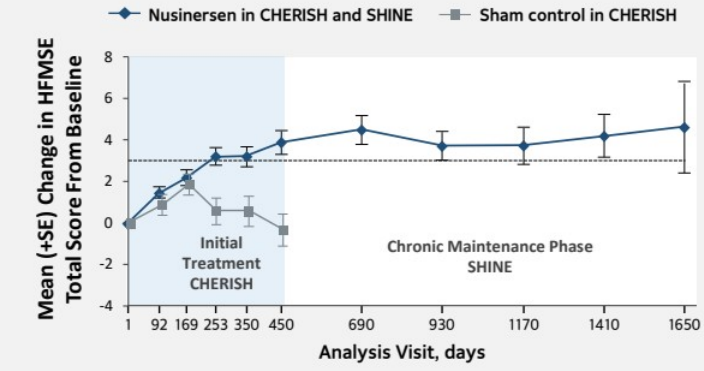
#1 SMN THERAPIES: HFMSE SCORES GENERALLY PLATEAU AFTER INITIAL GAINS

Unmet Need to Address Muscle Atrophy

Change in HFMSE Over Four Years with Nusinersen[1]

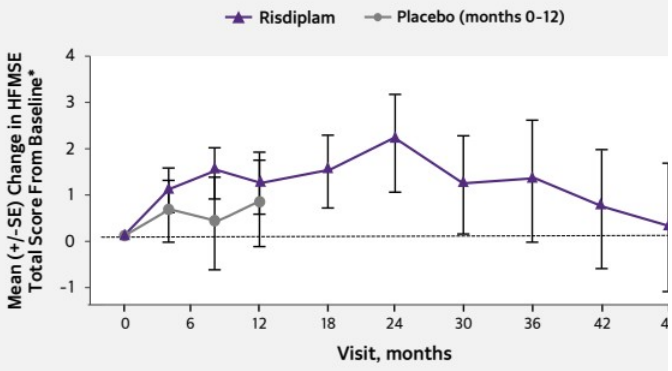
Overall population age 2-12



Nusinersen n=	84	82	84	84	83	76	83	83	79	61	20
Placebo n=	42	41	41	42	42	39					

Change in HFMSE* Over Four Years with Risdiplam[2]

Overall population age 2-25



Risdiplam n=	120	120	119	117	109	106	89	99	101	9
Placebo n=	60	60	58	58						

[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.

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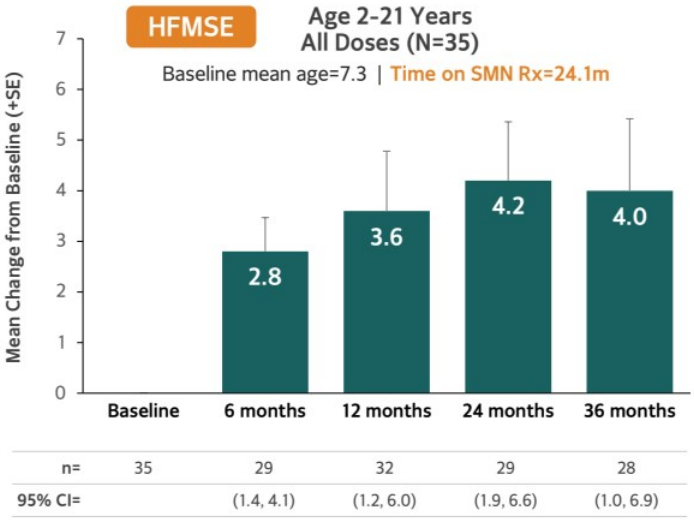
#2 SUBSTANTIAL HFMSE GAINS WITH APITEGROMAB ON TOP OF SMN THERAPY

Motor Function Gains Were Substantial & Sustained Over 36 Months



n=	35	29	32	29	28
95% CI=		(1.4, 4.1)	(1.2, 6.0)	(1.9, 6.6)	(1.0, 6.9)

TOPAZ

- Patients enrolled in the TOPAZ study had received nusinersen for a mean of ~2 years, well into the steady maintenance phase
- HFMSE gain stands above outcomes observed well into the plateau phase of nusinersen treatment

For the 36-month evaluation, an observed case analysis was conducted, which pooled all the nonambulatory patients (Cohorts 2 and 3) and was based upon the available data for given timepoints. This analysis population 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). This analysis excludes data post scoliosis surgery from seven patients. One patient did not conduct HFMSE at time of database lock for 24 months, however, this patient had an unscheduled HFMSE score one month prior to their scheduled visit. In the most recent analysis, this result was included in the 24-month analysis. Error bars represent SE. CI represents confidence interval. SMN Rx=SMN therapy. In the age 2-21 group, 18/28 patients achieved ≥ 1-pt gains, and 11/28 patients ≥ 3-pt gains at 36 months. Data cutoff date as of March 13, 2023. 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.**

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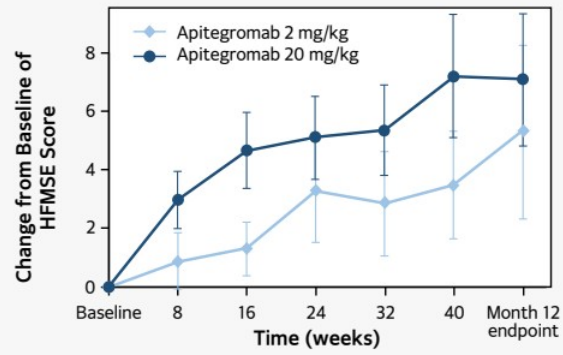
#3 HFMSE SHOWED DOSE RESPONSE AND NO CLEAR CORRELATION WITH DURATION OF PRIOR NUSINERSEN

Motor Function Improvement Mainly Attributable to Apitegromab

Clear Benefit Attributable to Apitegromab

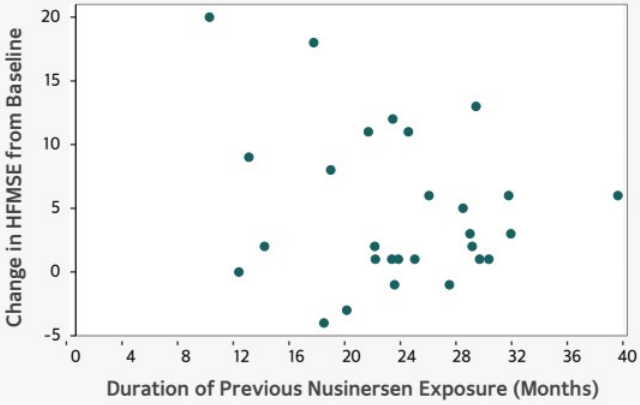


Apitegromab sample size at each visit

2 mg/kg	10	10	10	7	8	8	9
20 mg/kg	10	10	10	8	8	8	8

- Dose response observed in HFMSE in nonambulatory ≥Age 2 group randomized to 2 mg/kg and 20 mg/kg in a double-blind fashion
- Both arms showed early benefit with a greater latency of the low dose arm, supporting that the effect is mainly attributable to apitegromab

Lack of Correlation Suggests Improvement Attributable to Apitegromab



- Patients enrolled were already in the chronic maintenance phase of nusinersen (mean prior exposure ~2 years) where motor function generally plateaus
- Lack of clear correlation between 12-month HFMSE & duration of prior nusinersen exposure in patients aged 2 – 21 suggests motor function improvement mainly attributable to apitegromab

HFMSE, Hammersmith Functional Motor Scale Expanded.
Dose response graph: Crawford TO, et al. Neurology. 2024; 102 (5). Scatter plot of prior nusinersen treatment duration vs change in HFMSE from baseline, a post-hoc analysis in nonambulatory. Types 2 and 3 participants in TOPAZ. Patients skipped 3 or more doses due to COVID-site restrictions excluded;.
Apitegromab is an investigational product candidate under development.

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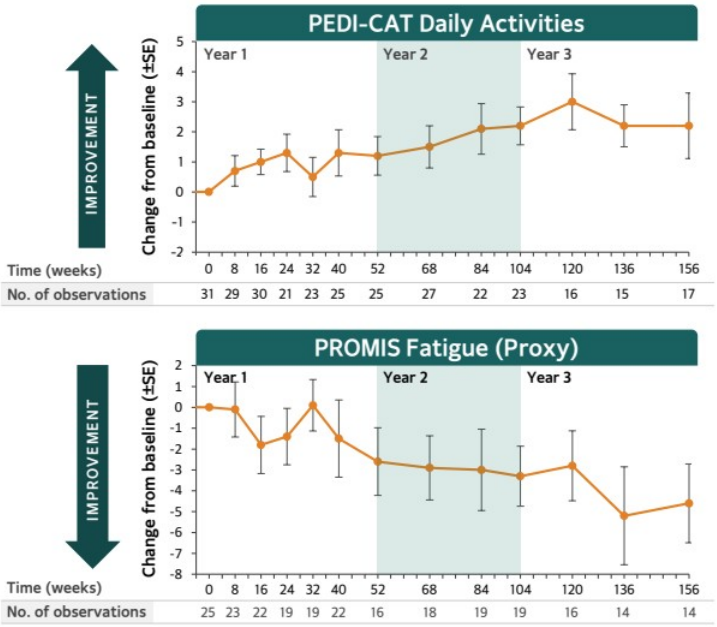
#4 CAREGIVER-REPORTED OUTCOMES DEMONSTRATED IMPROVED FATIGUE AND DAILY ACTIVITIES

Caregivers Report Improved Self-Sufficiency and Fatigue



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

Motor improvements:
"...since the trial she's been able to go from lying down to sitting on her own, to getting into the sitting position."

Independence:
"She has more recently gained the ability to crawl. She can get into the crawling position on her own and move across the room, and stand on her own..."

Fine Motor Skills:
"She can take lids off markers on her own. She is able to use crayons...She can brush her own teeth and dress Barbie."

Autonomy:
"She is able to access a lot of her world way more than she was able to [before the trial]."

[1] Pokrzywinski R et al. Presented at AAN, 2024.
[2] Data on file, Scholar Rock, Inc.

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.**

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#5 HIGH PATIENT RETENTION ON STUDY

>90 Percent of Patients on Combination Therapy Remain on Study

TOPAZ Safety Profile

Primary Treatment (12 Months)

- **58** enrolled
- **57** completed primary treatment period and enrolled in the extension study
- **1** withdrew consent

Extension Phase

- **57** enrolled
- **8** discontinued: **2** due to COVID-19 concerns; **1** due to work schedule, **5** on monotherapy due to perceived lack of benefit
- **>90%** of patients on combination therapy remain on study with 4 years of treatment[1]

~94% (33/35) of nonambulatory* patients remain on study with 4 years of treatment

[1]Excludes patients on monotherapy. Data cutoff date: April 2024
*Nonambulatory is defined as unable to independently ambulate without aids or orthotics over 10 steps at time of walk test during screening.

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AGENDA

Apitegromab for SMA Development Program

Pivotal SAPPHIRE trial: Why we are confident

Evidence supporting apitegromab's potential

Where we plan to go

APITEGROMAB DEVELOPMENT PROGRAM

Where We Plan to Go: Expanding to Benefit More People Living with SAPHIRE

2024

SAPPHIRE

Q4 Data Readout

2025

- **BLA /MAA Filing**
- **Regulatory Approval***
- **Study in SMA Patients < 2 Years of Age**
  - Study design endorsed by EMA's paediatric committee
  - Study initiation planned for 2025

*Pending approval

IN SUMMARY

Advancing a Novel Muscle-Targeted Therapy for SMA

- High confidence based on proof-of-concept data in SMA
- Q4 pivotal readout with potential 2025 regulatory approval & commercialization
- Studies planned to support additional indications for apitegromab

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Apitegromab: Commercial Readiness

Tracey Sacco
Chief Commercial Officer

ScholarRock

AGENDA

Apitegromab: Commercial Readiness

SMA market insights

Commercialization planning

Our Purpose: Create Possibilities for Those Living with SMA

> Muscle is everything. I want to live knowing that I have the strength **to take care of myself** if left alone.
>
> - Lyza

ScholarRock

Listening to the Customer Voice to Stay Focused on Our Purpose

Building Deep Insights

- **>15** market research and insights projects with US, EU, and UK participants
  - → **250+** caregivers of or people living with SMA
  - → **340+** HCPs, including both neurologists and physical therapists
  - → **60+** payer insights
- Ongoing discussions with SMA patient advocacy organizations and SMA treaters

Source: Scholar Rock Internal Research 2022-2024
HCP=Healthcare Professional

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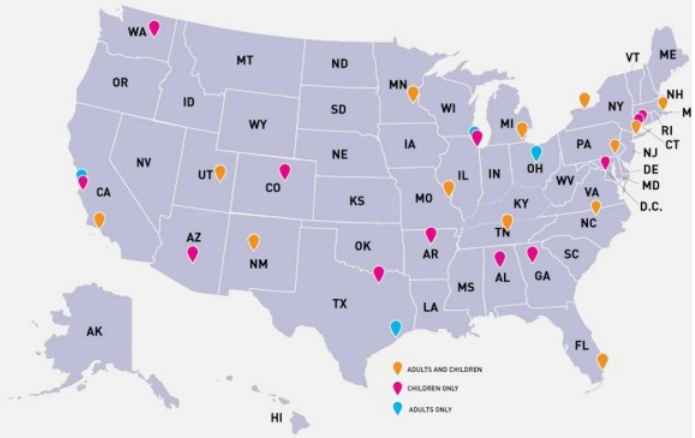
SMA Has Evolved – Today Patients are Diagnosed, Treated, and Surviving Longer

SMA Has Evolved

- Newborn screening leading to earlier treatment
- Broad and expanding global access to treatment
- Concentrated care in US and EU
- Engaged and organized global patient advocacy

Cure SMA Care Center Network



Sources: https://www.curesma.org/sma-care-center-network accessed April 22, 2024; https://odysma.sma-europe.eu accessed April 22, 2024; Internal Scholar Rock market research

Patient Demand, HCP Feedback, and Payer Proactivity Suggest: More is Still Needed

Patient Demand

% of patients who identified *improvement in muscle strength* as what they seek most from a new treatment in SMA

97%

Physician Feedback

% of SMA patients for whom HCPs *would prescribe a muscle targeted therapy*

Payer Proactivity

% of US commercial lives whose plan already covers *combination SMA therapy**

1/3

Sources: Cure SMA. Education on adult patient expectations according to copy number and disease status at time of report. September 2022. Internal Scholar Rock market research; Managed Markets Insight & Technology, LLC
*As measured by covered lives; coverage for SMA approved therapy following demonstrated decline post-treatment with SMA approved gene therapy

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Progressive Muscle Weakness Remains a Core Unmet Need

> Personal hygiene, using the toilet and the shower on my own would be huge. My four-year-old can do it on her own. It's degrading.
>
> – **US Patient**

> Muscle atrophy and loss of strength is a key issue in these patients. Increasing a patients' HFMSE score is really important. Its measurable and meaningful.
>
> – **Pediatric Neurologist (UK)**

> Patients treated with [nusinersen and risdiplam] are receiving only modest benefit. We need to restore motor function that enables practical improvement in daily activities / independence.
>
> – **National MCO**

Source: Internal Scholar Rock market research
HFMSE = Hammersmith Functional Motor Scale Extended; MCO = Managed Care Organization

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SMA is the Right Opportunity for Scholar Rock's First Launch

1.

Clear Unmet Need

- Patient, HCP, and payer communities recognize remaining needs in SMA

2.

Concentrated and Proactive Care

- Patients already diagnosed and treated proactively
- High concentration of care

3.

Engaged Patient Community

- Proactive advocacy, patient, and caregiver community
- Aligned on need for muscle targeted therapy

4.

Payer Receptivity

- Established value of improving motor function

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AGENDA

Apitegromab: Commercial Readiness

SMA market insights

Commercialization planning

Why We Are Confident About Potential Commercial Success of Apitegromab

Gold standard efficacy measure in SMA
- HFMSE is a SMA-specific, validated functional scale
- Commonly used in practice by both HCPs and payers

Long-term treatment experience in SMA patients
- SMA patients treated >4 years on apitegromab[1]
- High retention rate in TOPAZ

Fits into current SMA practice
- Used with nusinersen or risdiplam
- Monthly dosing

[1] Ph 2 TOPAZ trial (apitegromab in SMA), data as of April 2024
HFMSE = Hammersmith Functional Motor Scale Extended

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SMA Represents a Significant Opportunity for Apitegromab

~$4.5B[1]

global revenue for three SMN targeted therapies

SPINRAZA (nusinersen) injection 12 mg/5 mL

Evrysdi risdiplam 60 mg powder for oral solution

zolgensma (onasemnogene abeparvovec-xioi) suspension for intravenous infusion

Apitegromab global revenue potential

>$1.0B[2]

[1] Revenue as of Biogen 4Q23 financial update, Roche 4Q23 financial update, and Novartis 4Q23 financial update
[2] Scholar Rock internal estimates as of May 2024
SMA=Spinal muscular atrophy; SMN=Survival motor neuron.

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Commercialization Approach: Three Key Elements

1. ENGAGEMENT

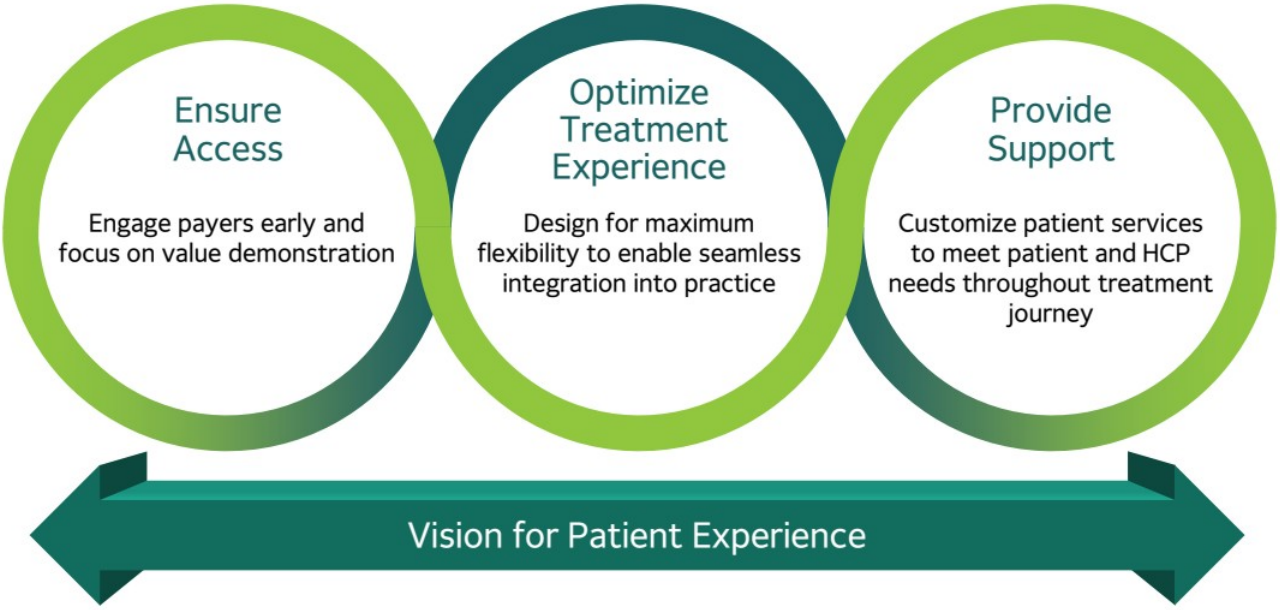
Partnering With the SMA Community

- MSL team on the ground
- Continued engagement with US and EU patient advocacy
- Amplify patient voice with muscle-focused education

MSL= Medical Science Liaison

2. PATIENT EXPERIENCE

Secure Access and Customize Treatment to Meet Patient Needs



3. EXECUTION

Building to Achieve Commercial Success

Building the Foundation

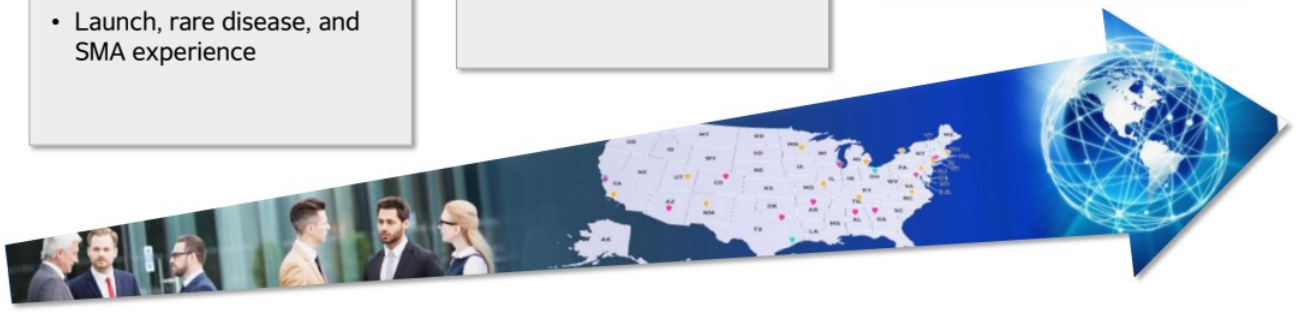
- Focused and experienced team
- Launch, rare disease, and SMA experience

U.S. Launch*

- Expand commercial capabilities
- Efficient US customer facing footprint (30-50 FTEs)

Geographic Expansion

- Commercialize in selected European countries*
- Remaining EU and ROW expansion through distributorships & partnerships



2024 2025 2026+

* Subject to regulatory approval
ROW= Rest of world

IN SUMMARY

Path to Achieving Commercial Success in SMA

The right market

→ Clear unmet need and favorable market dynamics

The right medicine

→ Competitive and attractive potential profile

The right plan

→ Engagement, patient-focus & execution

[1] Scholar Rock internal estimates as of May 2024

SRK-439: Selective Anti-Myostatin Designed for Optimal Profile in Obesity

Mo Qatanani
Chief Scientific Officer

ScholarRoc

AGENDA

A Differentiated Approach

Best-in-class platform for selectivity

Different approaches to muscle preservation

SRK-439: novel asset, differentiated profile

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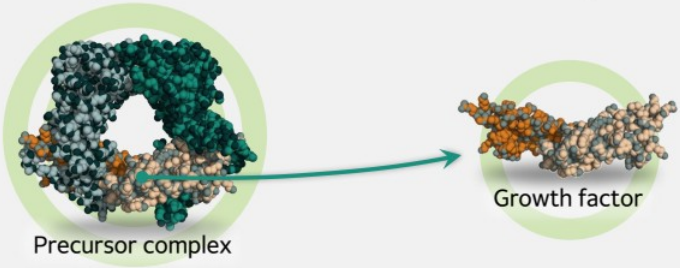
SELECTIVITY DRIVES SUCCESS

Differentiated Approach to Targeting Growth Factors

Advantages of Scholar Rock's Approach

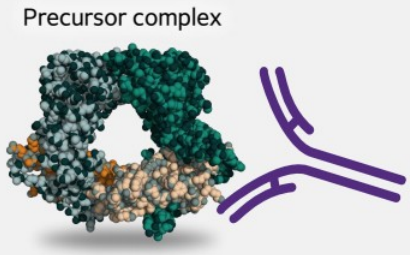
Scholar Rock's Target
Latent growth factor

Traditional Target
"Mature" active growth factor



- Deep structural insights to validated targets
- Industry-leading antibody design and protein engineering to selectively target latent growth factors
- Optimized for efficacy and avoids off-target effects

Transformational Medicines



Highly selective monoclonal antibodies

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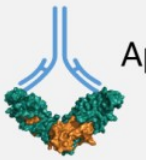
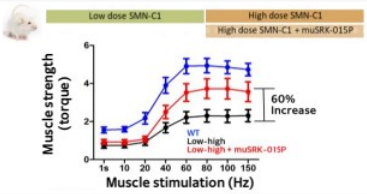
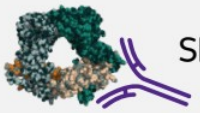
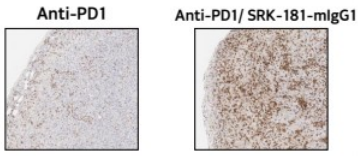
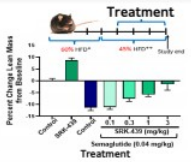
TRANSLATIONAL SUCCESS TO THE CLINIC

Platform and Expertise Drive Success in Clinic

Superb Engineering	Translational Models	Clinic
 Apitegromab		TOPAZ SAPPHIRE ONY
 SRK-181		DRAGON
 SRK-439		FDA IND in 2025

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AGENDA

A Differentiated Approach

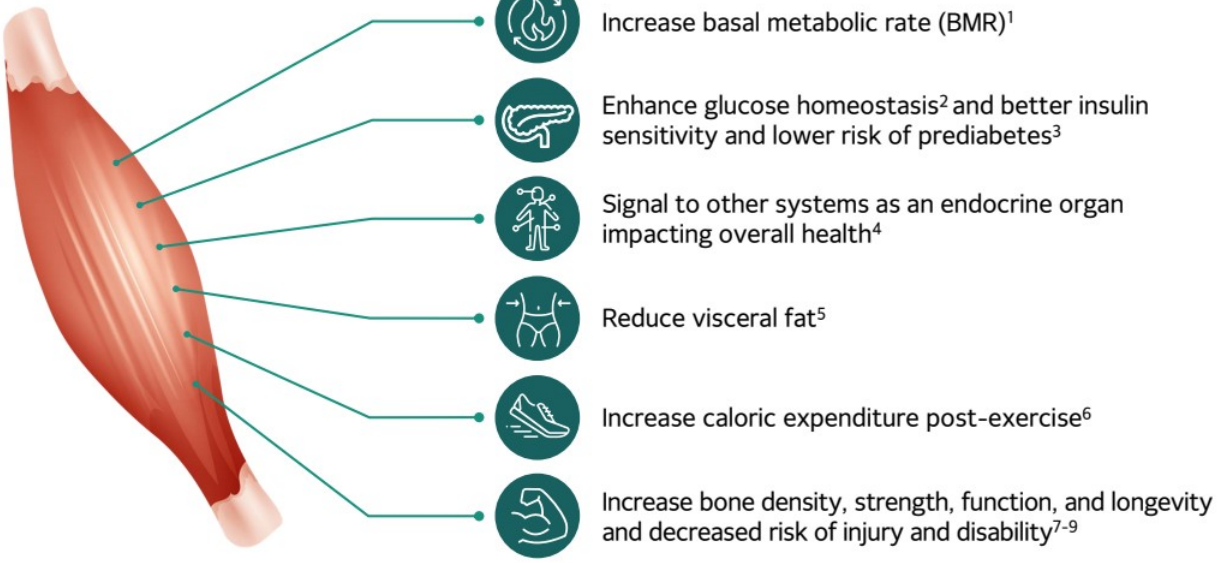
Best-in-class platform for selectivity

Different approaches to muscle preservation

SRK-439: novel asset, differentiated profile

KEY METABOLIC ORGAN

Muscle is Critical for Overall Health



1. Aristizabal JC et al. Eur J Clin Nutr 2015; 2. Lindegaard B et al. J Clin Endocrinol Metab 2008; 3. Srikanthan P, Karlamangla AS J Clin Endocrinol Metab 2011; 4. Severinsen et al. Endocr Rev. 2020; 5. Wewege MA, et al. Sport Med 2022; 6. Zurlo F. et al. J Clin Invest 1990; 7. Fukushima Y et al. Diabetes Metab J. 2016; 8. Roh E, Choi KM. Front. Endocrinol. 2020; 9. Volpi E, et al Curr Opin Clin Nutr Metab Care. 2004

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Myostatin is the Right Target for Muscle Growth

Advantages

- Myostatin is specific to muscle[1]
- Validated genetically with no evident safety liabilities [1-4]
- Inhibition leads to muscle growth in adults[5]
- Selective targeting leads to improved motor function as seen in TOPAZ with favorable tolerability profile observed in >200 patient years of exposure in SMA [6]

Pictures depict increase in muscle mass in myostatin null animals and humans

1. McPherron, A.C., et al. Nature 1997; 2. Schuelke, M., et al. NEJM 2004; 3. Kambadur, R., et al Genome Res. 1997; 4. Mosher, D.S., et al. PLoS 2007; 5. Abati E, et al. Cell Mol Life Sci. 2022; 6. Ph 2 TOPAZ trial (apitegromab in SMA), data as of April 2024

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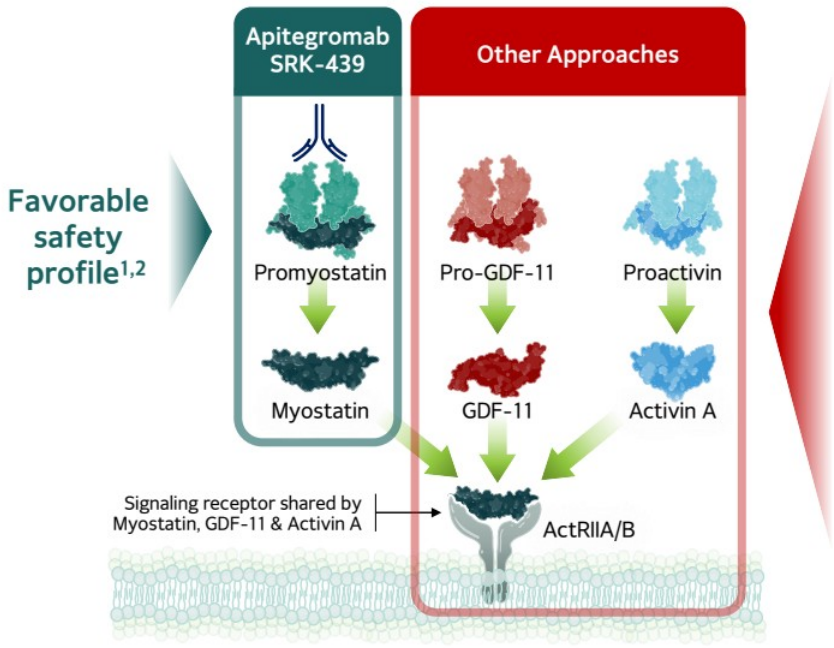
SELECTIVITY TO MYOSTATIN IS CRITICAL

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, telangiectasias[7-10]
- 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;

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AGENDA

A Differentiated Approach

Best-in-class platform for selectivity

Different approaches to muscle preservation

SRK-439: novel asset, differentiated profile

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

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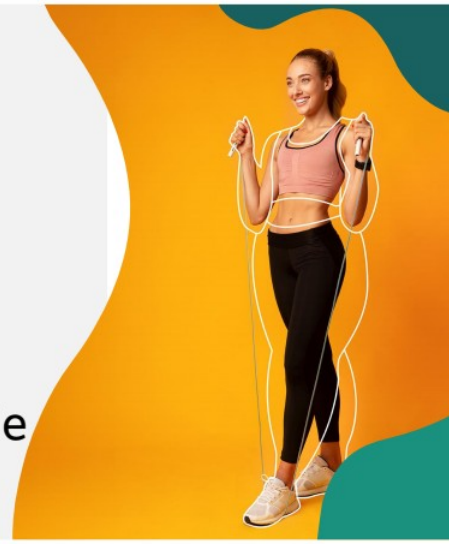
SRK-439: Differentiated Profile

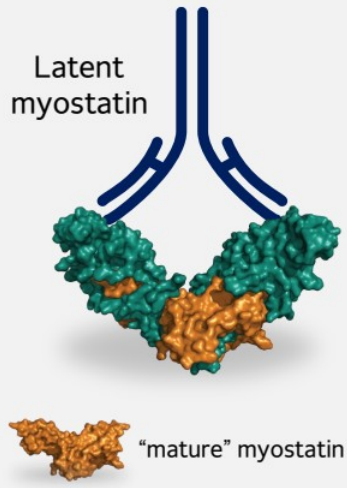
1. Exquisite selectivity for myostatin
2. Potential for healthier weight loss in combination with GLP-1 RA
3. Low efficacious dose and competitive profile



#1 SELECTIVE FOR MYOSTATIN

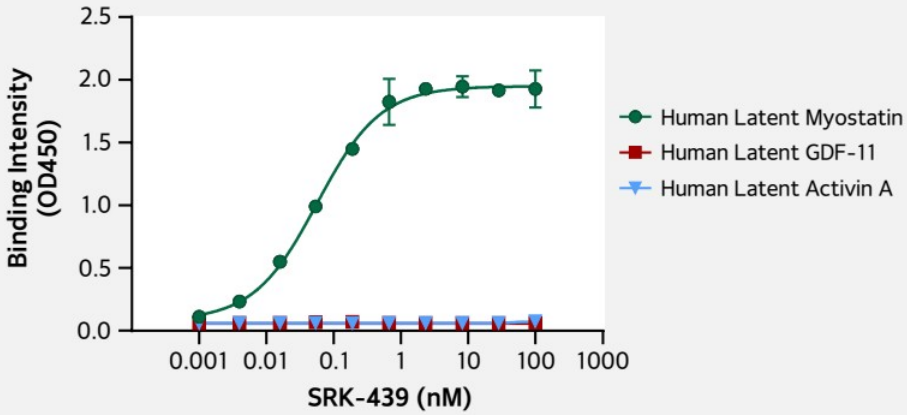
SRK-439: Exquisite Selectivity for Myostatin

Scholar Rock's Target: Latent Myostatin



"mature" myostatin

SRK-439 Selectively Binds Latent Myostatin



- Increasing SRK-439 concentrations lead to increased signal of binding to myostatin with no signal observed for GDF-11 or Activin A

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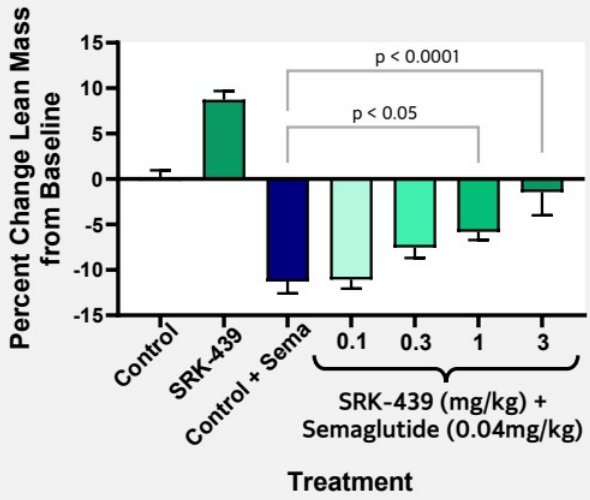
#2 COMBINATION GLP-1 RA DATA IN OBESITY MODELS

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

SRK-439 Maintained Lean Mass in Semaglutide Treated Animals



Key Observations

- Considerable lean mass loss with semaglutide treatment
- Combination with SRK-439 led to dose-dependent 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

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

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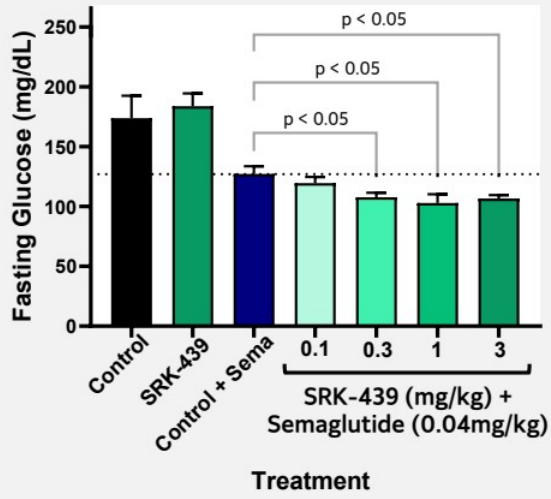
SRK-439: Further Improvement of Metabolic Health

SRK-439 Further Improved Fasting Glucose in Semaglutide Treated Animals



Key Observations

- Semaglutide reduced fasting glucose levels as expected
- 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

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

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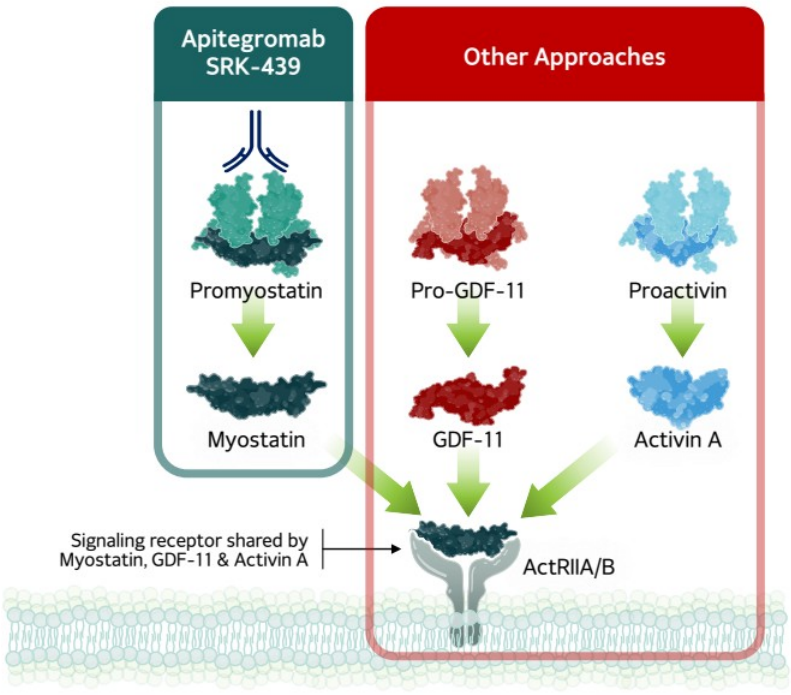
SELECTIVITY TO MYOSTATIN IS CRITICAL

Are We Limiting Efficacy with Selective Targeting of Myostatin?



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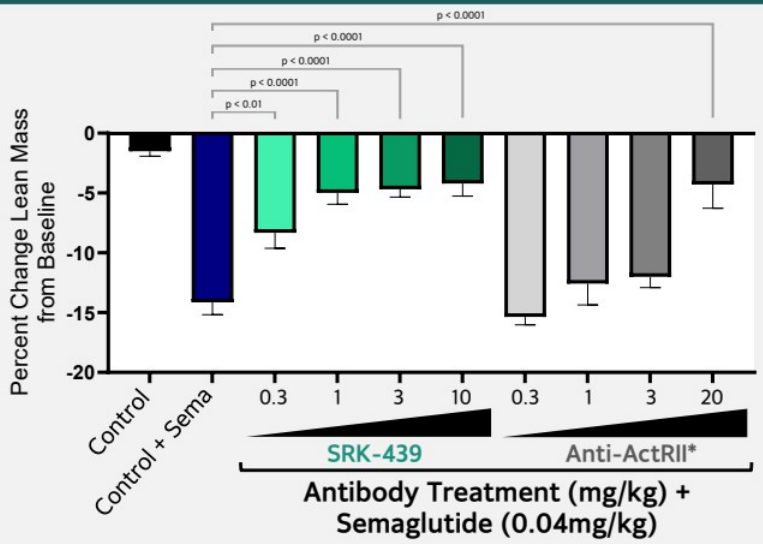
#3 LOW EFFICACIOUS DOSE AND COMPETITIVE PROFILE

SRK-439: More Potent than Anti-ActRII Antibody at Maintaining Lean Mass

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 GLP-1 driven lean mass loss dose-dependently and at lowe doses than anti-ActRII
- Highlights efficacy of SRK-439 and avoi potential liabilities of non-selective approach
- Low target dose of SRK-439 supports subcutaneous profile

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SRK-439: Best in Class Potential

	SRK-439	ActRII Ab	Ligand Trap	Adnectin
Selectivity for myostatin	✓	✗	✗	✗
Action limited to muscle	✓	✗	✗	✗
Combination GLP-1 RA data in obesity preclinical models[1-3]	✓	✓	✓	✓
Low efficacious dose in preclinical obesity models[1-3]	✓	✗	✗	✗
Lower risk of potential undesirable effects in clinic[4]	✓	✗	✗	✗

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.

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IN SUMMARY

SRK-439: The Right Molecule for Healthy Weight Loss

The right target

→ 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

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Cardiometabolic Development Program

Aiming for Healthier Weight Loss

Jing Marantz
Chief Medical Officer

ScholarRoc

AGENDA

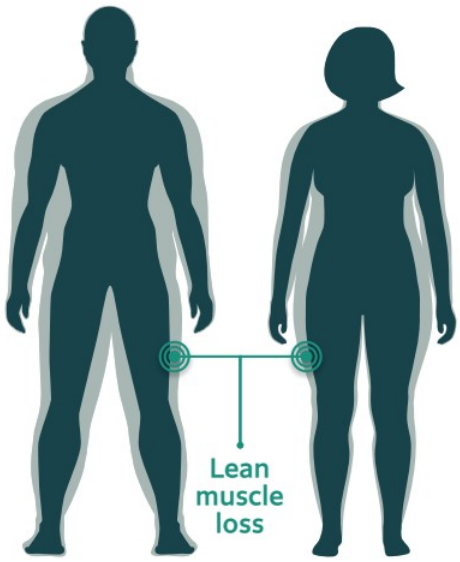
Cardiometabolic Development Program

Overview of muscle-targeted opportunity

SRK-439 Development Pathway

LOSS OF LEAN MUSCLE SIGNIFICANT WITH GLP-1 AGONIST THERAPY

Significant Proportion of Weight Loss Due to Loss of Lean Muscle Mass



Current weight loss strategies challenged by:

- Tolerability
- Lack of durability
- **Significant muscle loss**[1-3]

GLP-1 Agonist=Glucagon-like peptide-1 receptor agonist

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;

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LOSS OF LEAN MUSCLE SIGNIFICANT WITH GLP-1 AGONIST THERAPY

Lean Muscle Is Essential to Healthy Metabolic Function

- **Increased** basal metabolic rate[1]
- **Enhanced** glucose homeostasis[2]
- **Better** insulin sensitivity and lower risk of prediabetes[3]
- **Reduced** visceral fat[4]
- **Increased** caloric expenditure post-exercise[5]
- **Increased** bone density, strength, function, longevity, and decreased risk of injury and disability[6-8]

GLP-1 Agonist=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 inversely 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. Fukushima Y, Kurose S, Shinno H, et al. Importance of lean muscle maintenance 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. 2020;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.

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THERAPEUTIC POTENTIAL OF OUR MUSCLE-TARGETED APPROACH IN OBESITY

Our Solution Delivers Attractive Clinical Risk/Benefit Profile

Key Points

- **Inhibition of myostatin**, a negative regulator of muscle, is known to promote muscle growth and function
- Apitegromab, a selective myostatin inhibitor, has been shown in a Phase 2 Proof-of-Concept study to **improve motor function**
- Preserving muscle, an endocrine organ with important role in energy metabolism, has the potential to **improve durability of weight loss**
- Selective targeting **minimizes off-target effects**, potentially supporting long-term use for healthy weight management

Potential Benefits

- ✓ **Preserving muscle**
- ✓ **Improving function**
- ✓ **Improving durability**
- ✓ **Long-term safety**

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Cardiometabolic Development Program

Overview of muscle-targeted opportunity

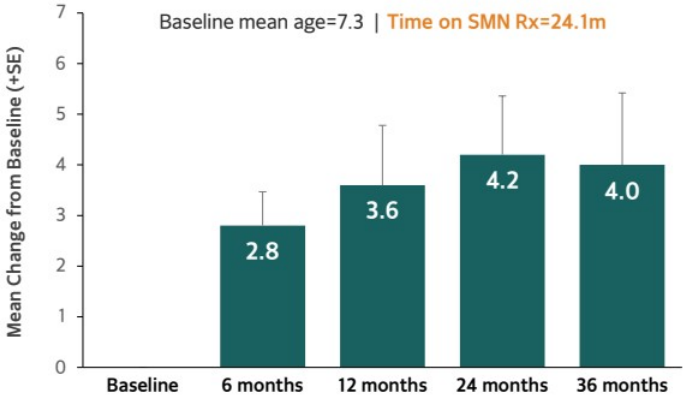
SRK-439 Development Pathway

Apitegromab in SMA Improved Motor Function from Baseline

HFMSE Gain

Age 2-21 Years
Pooled Nonambulatory Patients (N=35)

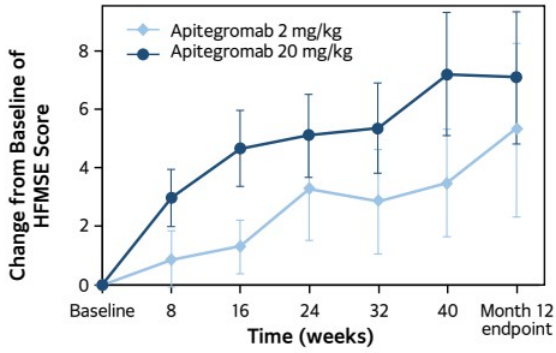
Baseline mean age=7.3 | Time on SMN Rx=24.1m



n=	35	29	32	29	28
95% CI=		(1.4, 4.1)	(1.2, 6.0)	(1.9, 6.6)	(1.0, 6.9)

Dose Response in HFMSE

TOPAZ nonambulatory Cohort 3 patients randomized to 2 mg/kg and 20 mg/kg in a double-blind fashion



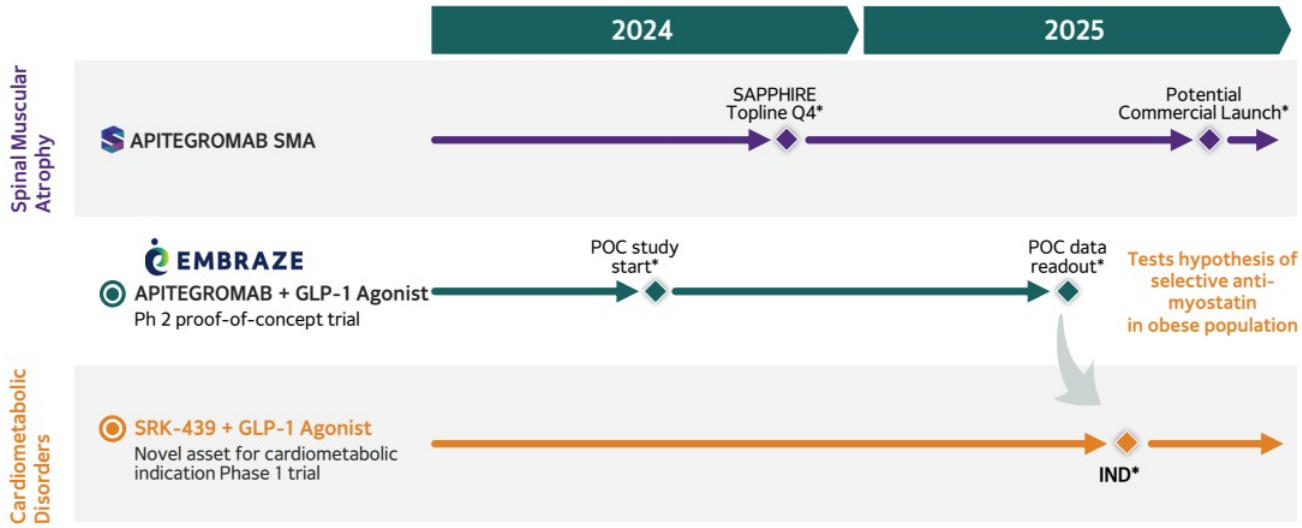
Apitegromab sample size at each visit

2 mg/kg	10	10	10	7	8	8	9
20 mg/kg	10	10	10	8	8	8	8

HFMSE, Hammersmith Functional Motor Scale Expanded.
Dose response graph: Crawford TO, et al. Neurology. 2024; 102:e209151
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.

CARDIOMETABOLIC DEVELOPMENT PROGRAM

Leveraging Apitegromab POC Study to Inform SRK-439 Development



Expected timelines
POC = Proof of Concept

CARDIOMETABOLIC DEVELOPMENT PROGRAM

EMBRAZE Proof-of-Concept Study

EMBRAZE Study Aims to Demonstrate

- 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

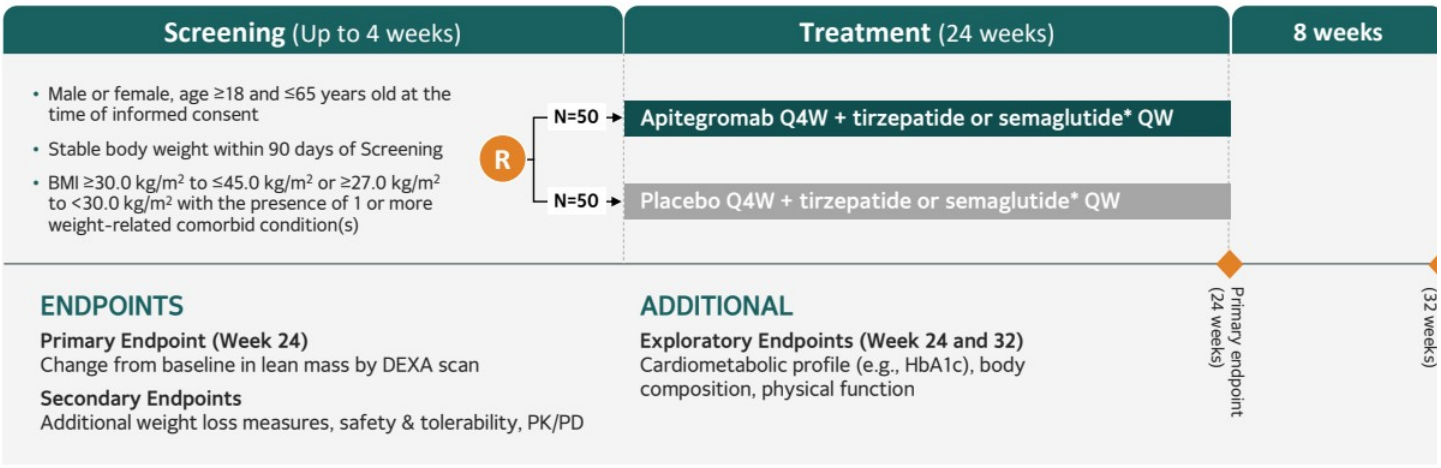
Insights gained from EMBRAZE study to inform SRK-439 development

EMBRAZE TRIAL DESIGN

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

EMBRAZE

Randomized, double-blind, placebo-controlled (n=100)
Enrolling patients who are overweight or obese
Enrollment expected to start in 2Q 2024



ENDPOINTS

Primary Endpoint (Week 24)
Change from baseline in lean mass by DEXA scan

Secondary Endpoints
Additional weight loss measures, safety & tolerability, PK/PD

ADDITIONAL

Exploratory Endpoints (Week 24 and 32)
Cardiometabolic profile (e.g., HbA1c), body composition, physical function

*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.

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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 o 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 metaboli 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

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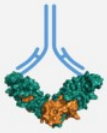
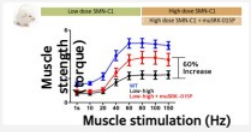
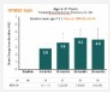
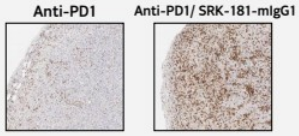
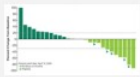
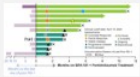
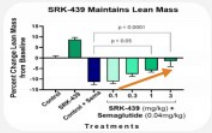
TRANSLATIONAL SUCCESS TO THE CLINIC

Platform and Expertise Drive Success in Clinic

Differentiated Engineering	Translational Models	Clinic
 Apitegromab		  SAPPHIRE ONYX
 SRK-181		 DRAGON  
 SRK-439		FDA IND in 2025

IN SUMMARY: A DIFFERENTIATED APPROACH

Cardiometabolic Program Has Key Ingredients For Success

Leverages Apitegromab Study

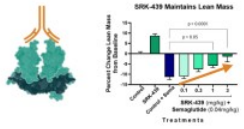
First and only anti-myostatin to show clinical proof of concept, apitegromab's study in obesity informs SRK-439 development

EMBRAZE

SRK-439 Designed for Obesity

Specificity minimizes off-target effects; effect in translational models on preservation of lean mass, enhanced fat loss, & improved metabolic profile

SRK-439



Regulatory Path Forward

FDA guidance supports combination strategy; SRK-439 development has the potential to improve function & incremental weight loss

FDA

IND in 2025

Closing Remarks

Jay Backstrom
President & Chief Executive Officer

ScholarRoc

IN SUMMARY

Advancing Our Journey Towards Commercialization

1

Selectivity is the Key

The hallmark of our differentiated platform is unparalleled selectivity

2

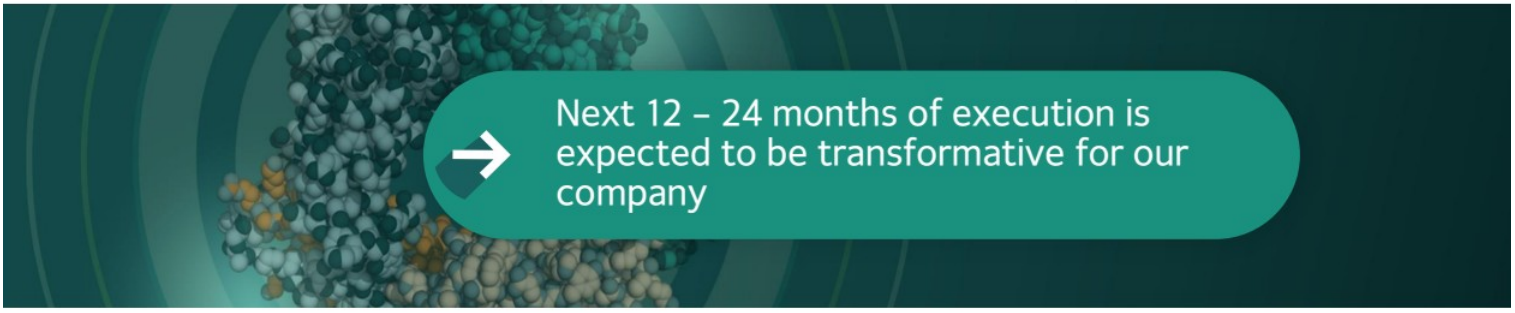
Large Unmet Needs

SMA and obesity represent high value markets offering significant potential revenue opportunities

3

Positioned for Success

Experienced team executing on strategy and goals



ScholarRock