POLARIS-101™

Next Gen Muscle Tropic AAV

Solid Bio, Shaping the Future of Gene Therapy

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Cautionary Note Regarding Forward Looking Statements and Disclaimer

This presentation contains “forward-looking statements” within the meaning of the Private Securities Litigation Reform Act of 1995, including statements regarding future expectations, plans and prospects for the company; the ability to successfully achieve and execute on the company’s goals, priorities and key clinical and preclinical milestones; strategies and expectations for the company’s SGT-003 programs; expectations for additional site activations, planned enrollment, planned data announcements, planned regulatory interactions and the potential approval pathways for SGT-003; and other statements containing the words “anticipate,” “believe,” “continue,” “could,” “estimate,” “expect,” “intend,” “may,” “plan,” “potential,” “predict,” “project,” “should,” “target,” “would,” “working” and similar expressions. Any 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, but are not limited to, risks associated with the company’s ability to advance SGT-003 and other preclinical programs, capsid libraries and other enabling technologies on the timelines expected or at all; obtain and maintain necessary approvals from the FDA and other regulatory authorities; replicate in clinical trials positive results found in preclinical studies and early-stage clinical trials of the company’s product candidates; manufacture sufficient quantities of our drug product in a timely manner and maintain adequate supply to support our clinical development and potential commercialization; obtain, maintain or protect intellectual property rights related to its product candidates; replicate preliminary or interim data from early-stage clinicals trials in the final data of such trials; compete successfully with other companies that are seeking to develop Duchenne and other neuromuscular and cardiac treatments and gene therapies; manage expenses; and raise the substantial additional capital needed, on the timeline necessary, to continue development of SGT-003 and other candidates, achieve its other business objectives and continue as a going concern. For a discussion of other risks and uncertainties, and other important factors, any of which could cause the company’s actual results to differ from those contained in the forward-looking statements, see the “Risk Factors” section, as well as discussions of potential risks, uncertainties and other important factors, in the company’s most recent filings with the Securities and Exchange Commission. In addition, the forward-looking statements included in this press release represent the company’s views as of the date hereof and should not be relied upon as representing the company’s views as of any date subsequent to the date hereof. The company anticipates that subsequent events and developments will cause the company's views to change. However, while the company may elect to update these forward-looking statements at some point in the future, the company specifically disclaims any obligation to do so.

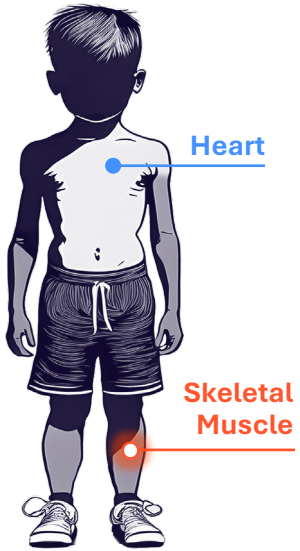
This presentation contains estimates and other statistical data made by independent parties and by us relating to market size and other data about our industry. This data involves a number of assumptions and limitations, and you are cautioned not to give undue weight to such data and estimates. In addition, projections, assumptions and estimates of our future performance and the future performance of the markets in which we operate are necessarily subject to a high degree of uncertainty and risk.

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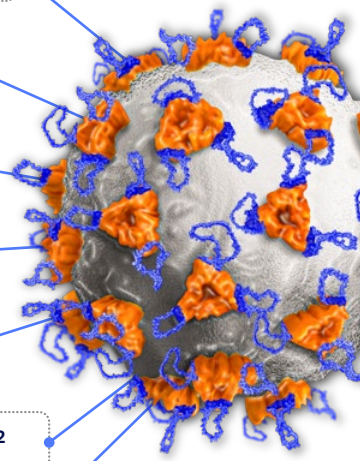
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POLARIS-101™ is a Next-Generation Capsid With Improved Muscle Tropism, Enabling Safe and Effective Systemic Administration

POLARIS-101™,[a] offers potential for transformative efficiency with effective skeletal muscle and cardiac tissue targeting and lower toxicity risks[1,2,3,4]



- High-efficiency transduction enables use of lower doses[1,b]
- Reduced liver biodistribution and off-target effects improve safety[1,c]
- Greater skeletal and cardiac muscle uptake improve biodistribution[1,c]
- Optimized transduction kinetics drive rapid and robust expression[2]
- Maximized yields and percentage of full capsids improve COGS[3,d]
- Optimal clearance timing supports shorter, safer systemic exposure[2]
- Minimal cross-reactivity offers potential for redosing after first-generation capsids (e.g., AAVrh74)[4]



[a]-Polaris-101™ formerly known as AAV-SLB101. [b]Data from human cell lines, mice, and non-human primates. [c]Compared with AAV9 in *mdx* Mouse Model of Duchenne. [d]Studies conducted in myoblast cell line derived from mouse skeletal muscle (C2C12). 1. Gonzalez P, et al. Presented at MDA, March 8–11, 2026, Orlando, FL. 2. Harmelink M, et al. Presented at MDA, March 8–11, 2026, Orlando, FL. 3. Wright B, et al. Presented at ASGCT, May 11-15, 2026, Boston, MA. 4. Patel K, et al. Presented at ASGCT, May 11-15, 2026, Boston, MA.

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Accelerating Innovation: Solid's AAV Gene Therapy Development Kit Available for Partnership

GROWING BODY OF CLINICAL DATA

Muscle biopsies at Day 90 and Day 360 in ambulatory boys with Duchenne[a]

- 53 participants dosed as of August 4, 2026[1]
- Transduction
- Expression
- Distribution
- Disease biomarkers
- Safety

ROBUST PRECLINICAL DATA

Mouse: Biodistribution and expression in multiple models[2,3]

NHP: GLP biodistribution and toxicology (Cambodian and Mauritian cynos)[2,3]

Pig: Ex vivo heart assessing cardiac transduction and expression

Human: Cardiomyocyte biodistribution and protein expression (multiple lines)[3]

LEADING-EDGE CMC TECHNOLOGY

POLARIS-101™ RepCap plasmid provided free of charge. Vector available for cost

Dual plasmid design to increase yield, improve full-empty capsid ratio

Manufacturing
Fee for service: research supply & platform access available for partnership

50+ agreements, including licenses, executed with corporations, institutions, and academic labs for use of POLARIS-101™

Pts=participants; Cap=capsid; CMC=clinical manufacturing capabilities; GLP=good laboratory practice; Rep=replication.

a*Phase 1/2 INSPIRE DUCHENNE clinical trial (NCT06138639) 1. Shieh P, et al. Presented at ICNMD, July 7-11, 2026, Florence Italy. 2. Harmelink M, et al. Presented at ASGCT, May 11-15, 2026, Boston, MA. 3. Boehler J, et al. Presented at ESGCT, October 7-10, 2025, Seville, Spain.

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SOLID INSIDE:

At Multiple Stages Along The Way Solid Can Save Partners Time, Money and Risk

Solid Inside Offers Partners Multiple Ways to Save Time, money and risk across gene therapy drug development

CAPITAL-EFFICIENT LICENSE
- Low upfront fee
- Milestones begin at IND

MUSCLE-DIRECTED CAPSID
- Lower dose
- Liver DE-targeting; safety upside[1]

IND RIGHT OF REFERENCE
- Leverage Solid's IND
- May avoid large-animal tox[2]

ORION™ Buffer System
- Reduces uncertainty around product shelf life



1. LICENSE	2. VECTOR	3. PRECLINICAL	4. PROCESS DEV.	5. GMP	6. IND	7. CLINIC
Program start	Capsid selection	Tox + biodistribution	AD / PD + scale-up	Clinical material	Regulatory Submission	Immune Regimen

DUAL-PLASMID PLATFORM[3]
- High full-to-empty ratios
- Lower manufacturing COGS

GMP CONNECT
- Use Solid Analytical / Process development
- Avoid rebuilding GMP workflow

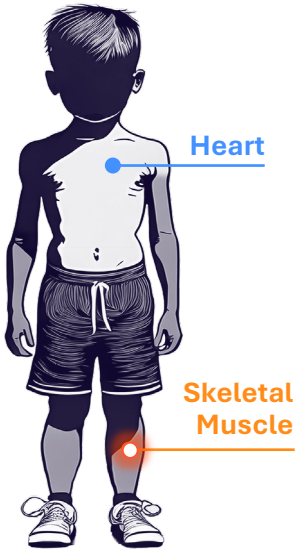
CLINICAL IMMUNE REGIMEN
- Solid has developed a clinically optimized immunomodulation regimen[1]

Potential benefit is program-specific and subject to partner process fit and regulatory alignment. 1. Shieh P, et al. Presented at ICNMD, July 7-11, Florence, IT. Data cutoff May 29, 2026. 2. SGT-003 toxicology data were leveraged by a POLARIS licensee to support an IND submission without additional large-animal GLP toxicology studies. 3. Christoforou, N et al. Presented at New Directions, June 7, Fort Lauderdale, FL.

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POLARIS-101™: A Novel Capsid Showing Promising Clinical Signals in Duchenne Muscular Dystrophy

SGT-003 Solid's next-gen, investigational microdystrophin gene transfer therapy that uses POLARIS-101™



INSPIRE DUCHENNE Phase 1/2 Clinical Study Overview

- Single 1.0×10^{14} vg/kg IV dose of SGT-003

Overall Enrollment Summary

- **53 participants (aged 6 months - 10 years; maximum weight of 39.7 kg) dosed as of August 4, 2026**
- **No evidence of drug-induced liver injury, myocarditis or TMA/aHUS**

POLARIS-101™ is the first systemically delivered, muscle- and cardiac-tropic next-generation capsid tested in the clinic

AAV=adeno-associated virus; aHUS=atypical hemolytic uremic syndrome; IV=intravenous; TMA=thrombotic microangiopathy.

Data on file. Solid Biosciences. 2025.

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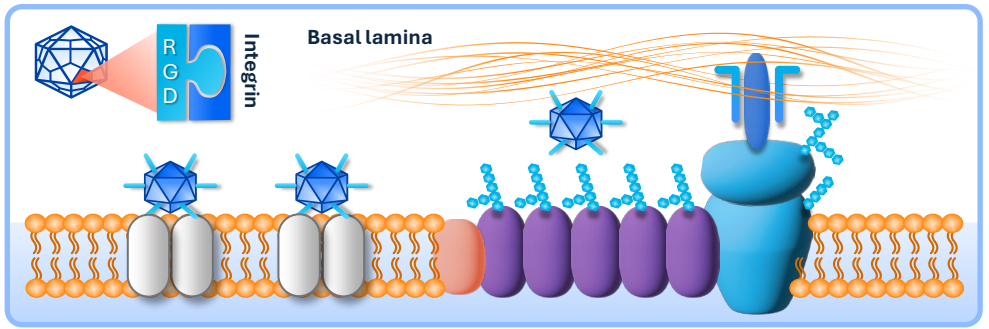
POLARIS-101™ Enhances Muscle Targeting Through Novel Integration of a Multivalent RGD Motif[1,2]

POLARIS-101™ was engineered to include an RGD motif inserted into the VR-VIII loop of AAV9, resulting in up to 60 copies of the peptide displayed across the capsid surface[3,4]

The RGD motif enables interaction with integrin receptors expressed in specific tissue microenvironments[5]

- These interactions bias capsid uptake toward skeletal and cardiac muscle

POLARIS-101™ Proposed Mechanism of Action



POLARIS-101™ acts via an entry pathway regulated by integrins, resulting in

- Increased binding and uptake in muscle
- Increased protein expression

RGD–integrin–mediated uptake preferentially targets skeletal and cardiac muscle due to integrin upregulation, especially in diseased tissue, limiting off-target uptake

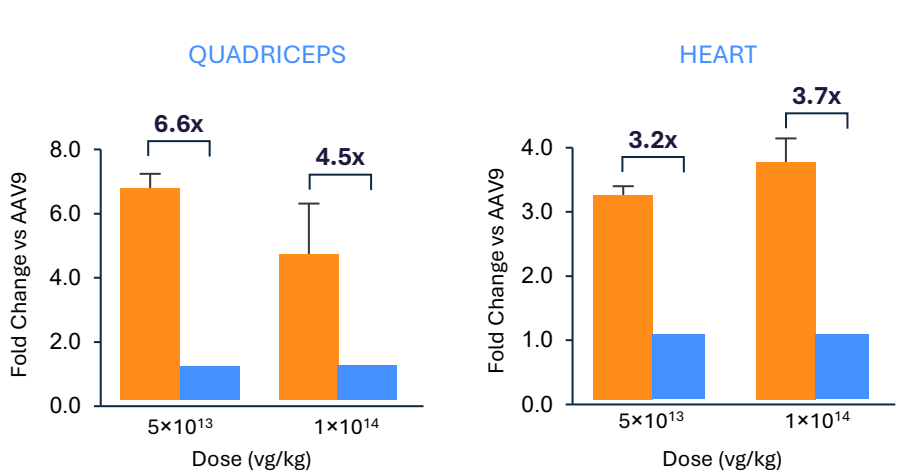
RGD=arginylglycylaspartic acid.

1. Tabebordbar M, et al. *Cell*. 2021;184(19):4919-4938.e22. 2. Weinmann J, et al. *Nat Commun*. 2020;11(1):5432. 3. DiMattia MA, et al. *J Virol*. 2012;86(12):6947-6958. 4. Drouin LM, Agbandje-McKenna M. *Future Virol*. 2013;8(12):1183-1199. 5. Hong AV, et al. Nature Commun. 2024;15:7965.

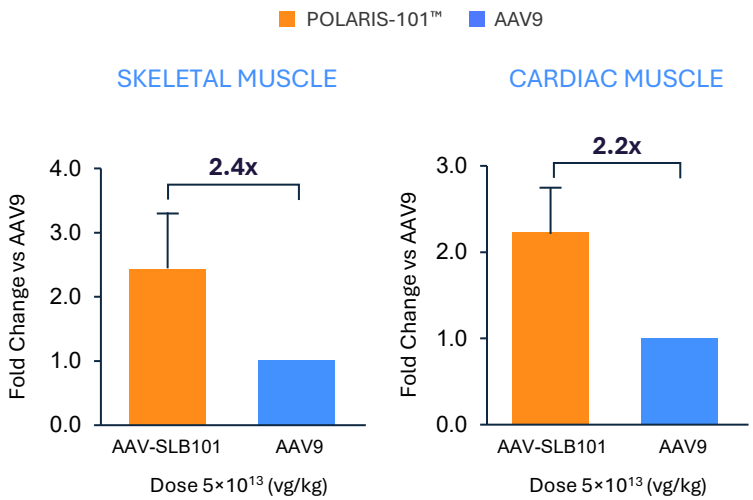
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POLARIS-101™ Shows Higher Skeletal and Cardiac Muscle Biodistribution vs AAV9 in Mouse and NHPs

Biodistribution in Isolated Tissues (Day 28 Post-dose)[a,b]



Biodistribution in Isolated Tissues (Day 28 Post-dose)[a,c]



Efficient vector delivery to muscle at lower doses supports dose optimization while limiting total systemic viral load, consistent across multiple species.

[a]Average fold differences calculated from the 5 skeletal muscle tissues and 3 regions of cardiac tissue sampled. [b]*mdx* Mouse Model of Duchenne. [c]Non-human primates.
Boehler J, et al. Presented at ESGCT, October 7-10, 2025, Seville, Spain.

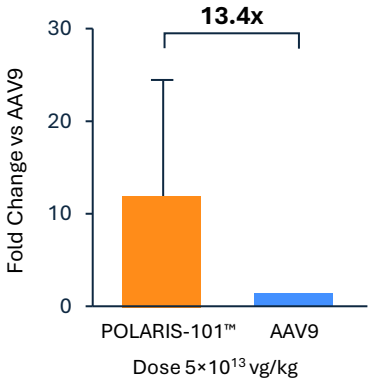
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POLARIS-101™ Demonstrates High-Efficiency Expression vs AAV9 in NHPs and Human Cardiomyocytes

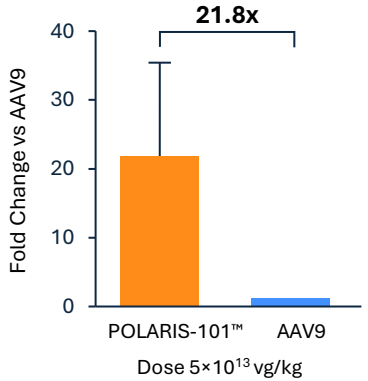
Expression Efficiency (Luciferase Activity in NHPs)[a,b]

POLARIS-101™ AAV9

SKELETAL MUSCLE



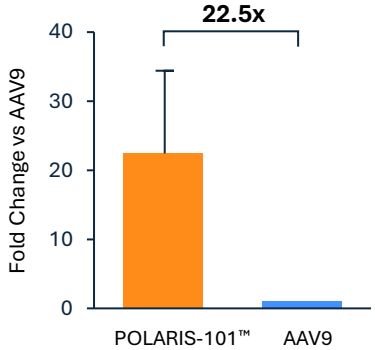
CARDIAC MUSCLE



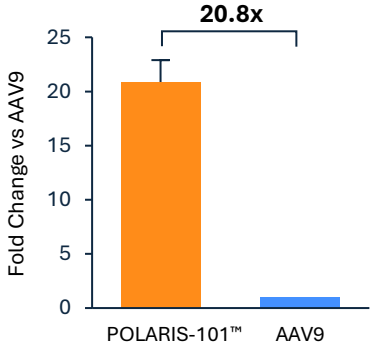
Expression Efficiency (Luciferase Activity In Vitro)

POLARIS-101™ AAV9

HUMAN DUCHENNE MYOTUBES[c]



HEALTHY iPSC-DERIVED CARDIOMYOCYTES



These results reflect strong preclinical-to-clinical translation, supporting higher expression at lower doses and limited off-target exposure

iPSC=induced pluripotent stem cell; NHP=nonhuman primate. CMV-Luciferase

[a]n=2 per group. [b]Average fold differences calculated from the 5 skeletal muscle tissues sampled and 3 regions of cardiac tissue sampled.[c]n=3 cell lines per treatment, Dose 3×10^6. [d]Dose 3×10^5.

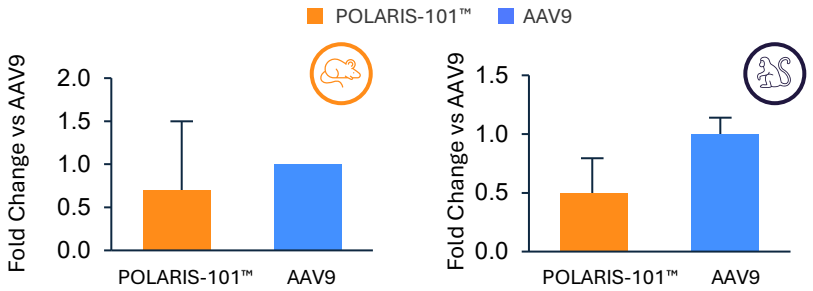
Boehler J, et al. Presented at ESGCT, October 7-10, 2025, Seville, Spain.

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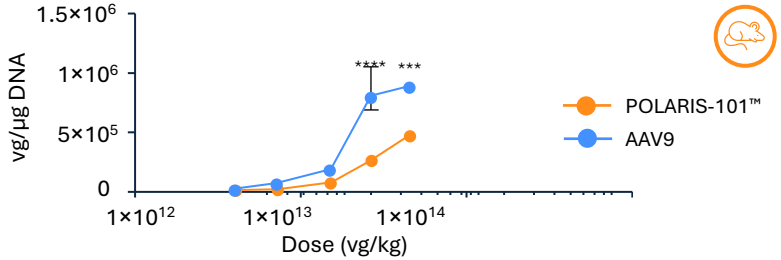
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Human Phase 1/2 INSPIRE DUCHENNE Trial Supports Preclinical Data Showing Reduced Liver Biodistribution of POLARIS-101™

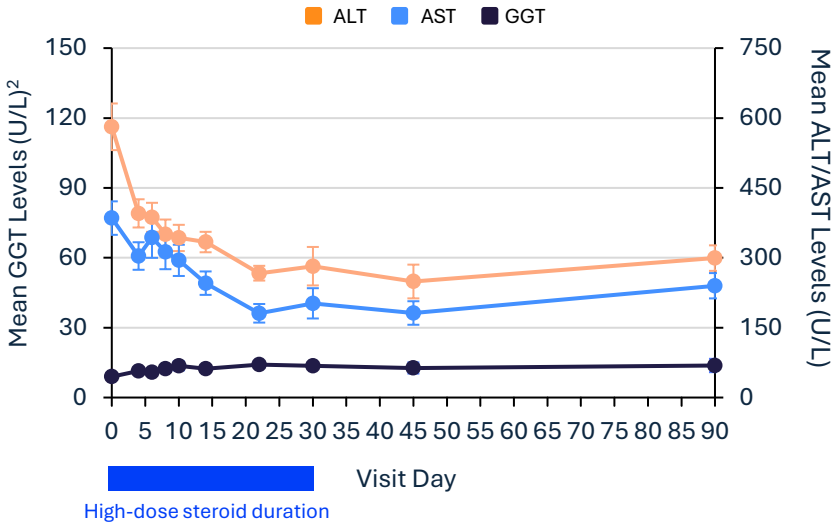
AAV Biodistribution to Liver[1]



Dose-Dependent Reduction in Liver Transduction[1,a]



Liver Biomarkers in Participants Dosed Using POLARIS-101™[2,b,c,d]



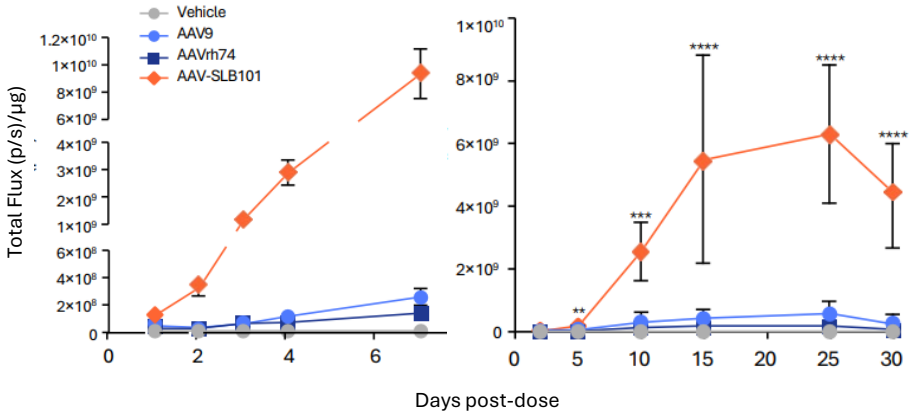
POLARIS-101™ has been generally well tolerated in the INSPIRE DUCHENNE trial with no drug-induced liver injury observed as of the safety cutoff date[c]

ALT=alanine aminotransferase; AST=aspartate aminotransferase; GGT=gamma-glutamyl transferase.
[a]Asterisks indicate statistical significance between groups (***P<0.001, ****P<0.0001). [b]n=24 [includes only participants with data to Day 90]. [c]Data cutoff of February 23, 2026. [d]Error bars for GGT data are present but obscured by their associated data points due to the small range for standard error. [d]Values are means ± standard error of the mean.
1. Boehler J, et al. Presented at ESGCT, October 7-10, 2025, Seville, Spain. 2. . Flanigan K, et al. Presented at ASGCT, May 5-11, 2026, Boston, MA.

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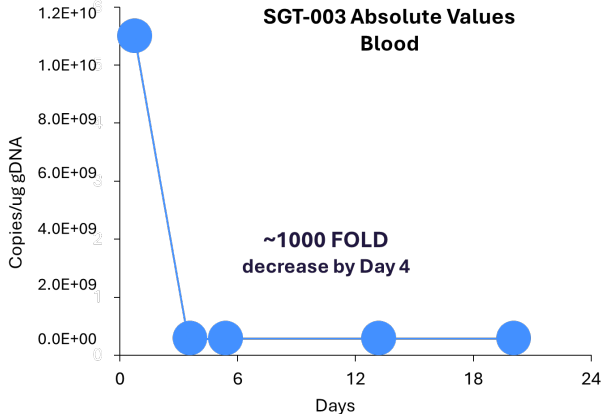
POLARIS-101™ Exhibits Enhanced Kinetics Enabling Rapid Expression vs AAV9 and AAVrh74 and Optimal Clearance Timing

Luciferase Activity (Whole Body IVIS)[1]



POLARIS-101™ expression detected 2 days post-dose, remaining significantly higher than AAV9 or AAVrh74

Mean Clearance of POLARIS-101™[2]



Rapid clearance of POLARIS-101™ seen despite higher viral load in whole blood[3]

POLARIS-101™ clearance is optimized to maximize transduction, but clear before adaptive immunity is mounted

IVIS=in vivo imaging system.

[a]Asterisks indicate statistical significance between groups (***P*<0.01, ****P*<0.001,*****P*<0.0001).

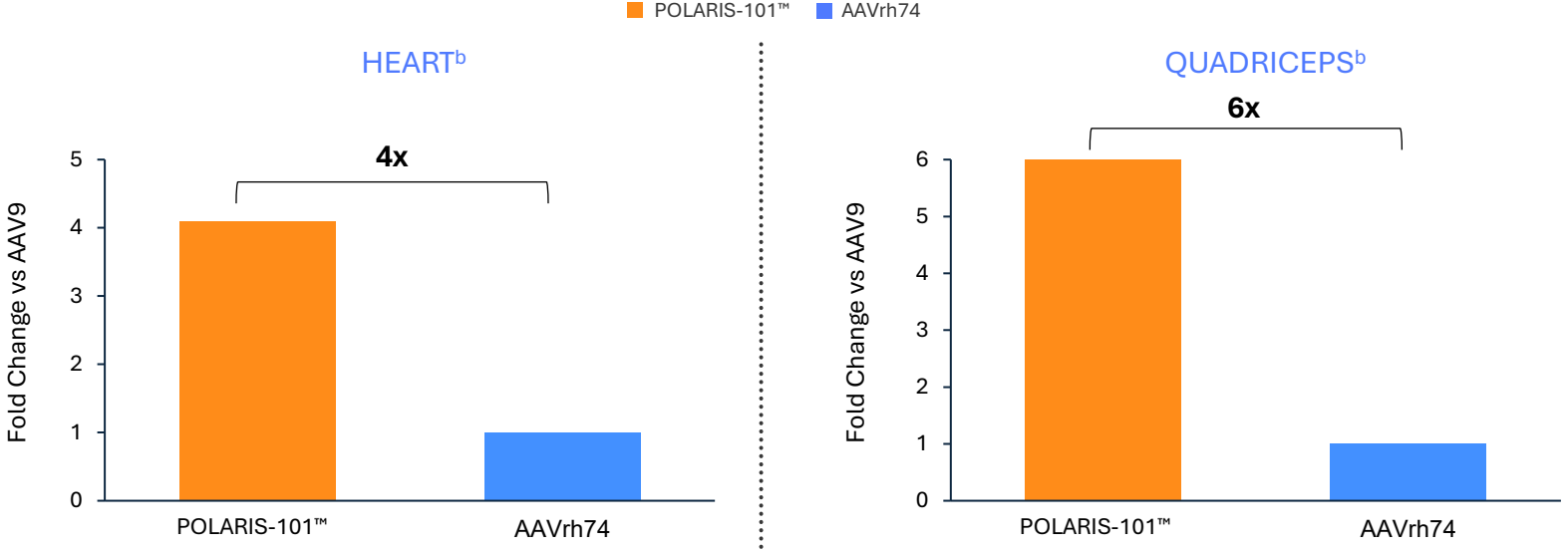
1. Boehler J, et al. Presented at ESGCT, October 7-10, 2025, Seville, Spain. 2. Harmelink M, et al. Presented at ASGCT, May 11-15, 2026, Boston, MA.
3. Agarwal S, et al. *Blood Adv*. 2024;8(17):4606-4615.

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POLARIS-101™ Leads to Greater Protein Expression vs AAVrh74 in NHPs

Expression Efficiency (LCMS - CK8-Microdystrophin in NHPs)

Dose 1.0×10^{14} vg/kg[1,a]



POLARIS-101™ leads to greater protein expression vs AAVrh74 in skeletal and cardiac muscle[2]

LCMS=liquid chromatography mass spectrometry.

[a]N=5 for each tissue/capsid. [b]N=3 for POLARIS-101™. N=2 for AAVrh74.

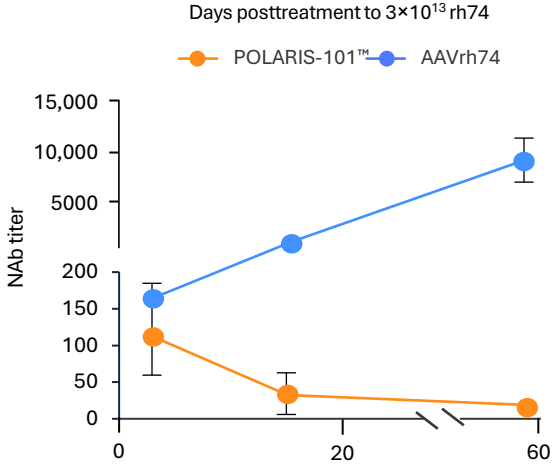
1. Boheler J, et al. Presented at ASGCT, May 13–17, 2025, New Orleans, LA. 2. Chan C, et al. *Viruses*. 2023;15(11):2168.

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Redosing Potential: POLARIS-101™ Demonstrates Low NAb Titers After AAVrh74 Dosing in Multiple Species

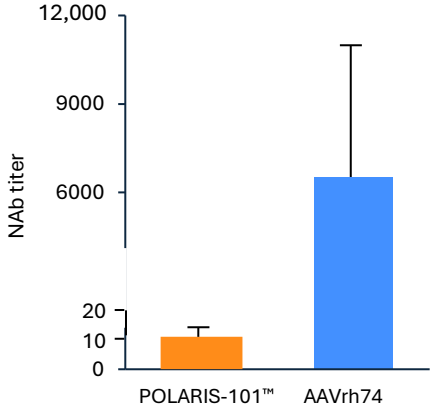
Assessment of NAbs After AAVrh74 Dosing

Longitudinal Assessment of POLARIS-101™ NAbs after rh74[1]



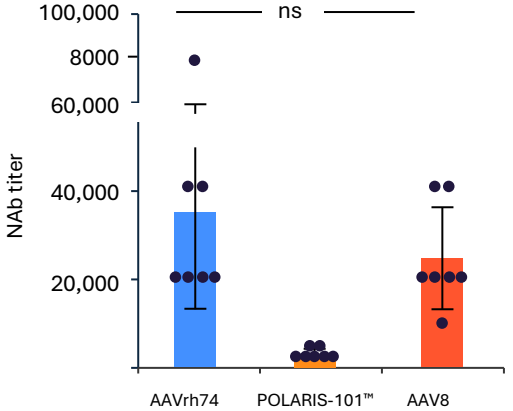
Day 30 Assessment of POLARIS-101™ NAbs after rh74[1]

(n=6)



NAb Titers in Humans Dosed With AAVrh74[2]

(n=7)



Prior exposure to AAVrh74 does not lead to high NAb formation against POLARIS-101™, setting the stage for potential repeat or sequential dosing strategies

NAb=neutralizing antibody.

1. Boehler J, et al. Presented at ASGCT, May 13–17, 2025, New Orleans, LA. 2. Patel K, et al. Presented at ASGCT, May 11-15, 2026, Boston, MA

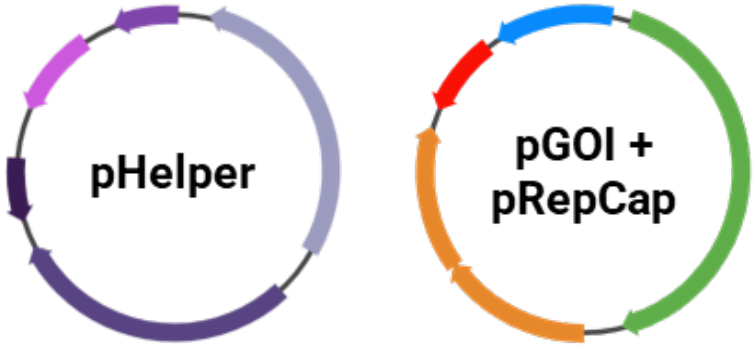
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Solid's Manufacturing Platform

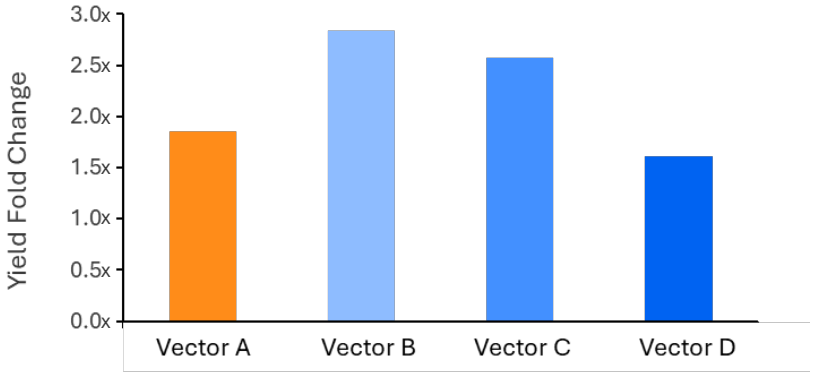
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Solid's Dual Plasmid Design Delivers a Significant Yield Increase Compared to Standard Triple Plasmid Transfection

Solid Dual Plasmid Design



Relative Yield Improvement Using Solid Dual Plasmid vs 3 Plasmid System*



1.6-2.8x increase in upstream yields with Solid's dual plasmid independent of capsid/GOI combination

detailed manufacturing data available under CDA

*Relative yield increase when using Solid Dual Plasmid transfection compared to triple plasmid transfection

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By Increasing Yields and Purity, Solid's Manufacturing Platform Has The Potential to Further Enhance Safety and Reduce CoGS

Efficient full capsid enrichment → **Scalable to 500L with identical performance** → **High, consistent yield & recovery across sites and scales**

>200 operating parameters defined between the production bioreactor and drug substance step with deep process knowledge and robustness established around ~40 of these parameters to ensure consistent batch to batch yield & quality



Solid's manufacturing platform process is scalable and transferrable

ddPCR = digital droplet polymerase chain reaction, vg/mL = vector genome per milliliter, brx = bioreactor

**detailed manufacturing data available under CDA*

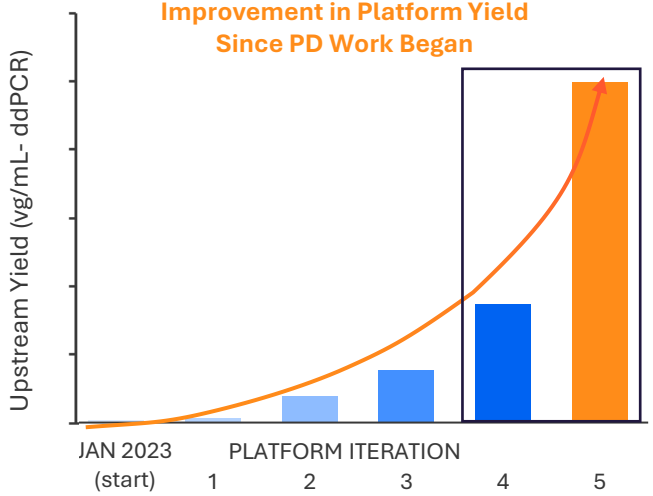
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Pioneering Best Practices to Continuously Innovate and Stay at the Forefront of CMC Excellence

Solid Platform Improvements

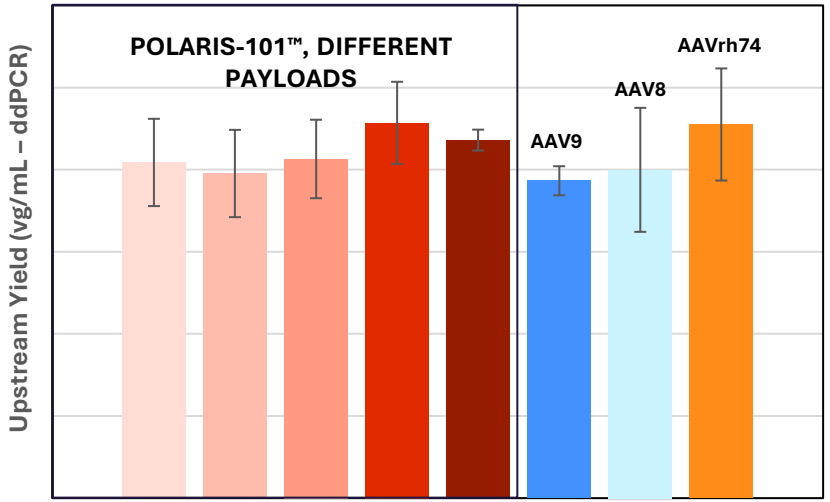
>Up to100x

Improvement in Platform Yield Since PD Work Began



Platform iteration 5 was designed to seamlessly scale and integrate into the 500L process established at Solid's CDMO partner

Platform yields are consistently high independent of capsid or GOI (Platform iteration 4)



**detailed manufacturing data available under CDA*

ddPCR = digital droplet polymerase chain reaction, vg/mL = vector genome per milliliter, brx = bioreactor

Error bars represent average of replicate runs +/- 1 SD, GOI = Gene of Interest

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Thank you

Please Contact BusinessDevelopment@SolidBio.com For Additional Information

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