



Issuer Free Writing Prospectus
Filed Pursuant to Rule 433
Registration Number 333-284368
August 5, 2025



Investor Presentation

NASDAQ:SLRX

Forward-Looking Statements

This presentation contains “forward-looking statements” within the meaning of the Private Securities Litigation Reform Act of 1995 regarding Salarius Pharmaceuticals, Inc. (Saliarius or the Company), Decoy Therapeutics Inc. (Decoy), the proposed merger, Salarius’ ability to regain compliance with the Nasdaq continued listing requirements and other matters, including without limitation, statements relating to plans and expectations relating to the business, scientific advisory board, product candidates and products, including expected achievement of milestones for its lead asset and future prospects of Salarius, Decoy and the combined company. These statements may discuss goals, intentions and expectations as to future plans, trends, events, results of operations or financial condition, or otherwise, based on current beliefs of the management of Salarius, as well as assumptions made by, and information currently available to, management. Forward-looking statements generally include statements that are predictive in nature and depend upon or refer to future events or conditions, and include words such as “may,” “will,” “should,” “would,” “expect,” “anticipate,” “plan,” “likely,” “believe,” “estimate,” “project,” “intend,” and other similar expressions. Statements that are not historical facts are forward-looking statements. Forward-looking statements are based on current beliefs and assumptions that are subject to risks and uncertainties and are not guarantees of future performance. Actual results could differ materially from those contained in any forward-looking statement as a result of various factors, including, without limitation: the risk that the conditions to the closing are not satisfied, including uncertainties as to the timing of the consummation of the proposed merger; the ability of each of Salarius and Decoy to consummate the merger; risks and uncertainties related to Salarius’ ability to regain compliance with the Nasdaq continued listing standards in the requirement timeframe; risks related to the combined company’s ability to satisfy the initial listing standards in the required timeframe; Salarius may not receive any additional extensions from Nasdaq if Salarius is unable to regain compliance within the required timeframe; risks related to Salarius’ ability to estimate and manage its operating expenses and its expenses associated with the proposed merger pending the closing; risks that the combined company will not achieve the synergies expected from the proposed merger; risks that Salarius and the combined company will not obtain sufficient financing to execute on their business plans and risks related to Decoy’s products and development plans, including unanticipated issues with any IND application process and the potential of the IMP³ACT™ platform. Readers are urged to carefully review and consider the various disclosures made by Salarius in the Registration Statement on Form S-1 (File No. 333-284368), in its reports filed with the SEC, including its Annual Report on Form 10-K for the fiscal year ended December 31, 2024, as revised or supplemented by its Quarterly Reports on Form 10-Q and other documents filed with the United States Securities and Exchange Commission. If one or more of these risks or uncertainties materialize, or if the underlying assumptions prove incorrect, Salarius’ actual results may vary materially from those expected or projected.

Free Writing Prospectus

This presentation highlights basic information about the Company, Decoy and the offering. Because it is a summary that has been prepared solely for informational purposes, it does not contain all of the information that you should consider before investing in our Company. Except as otherwise indicated, this presentation speaks only as of the date hereof. We have filed a registration statement (including a prospectus) with the SEC for the offering to which this presentation relates. The registration statement has not yet become effective. Before you invest, you should read the prospectus in the registration statement (including the risk factors described therein) and other documents we have filed with the SEC for more complete information about us and the offering. You may access these documents for free by visiting EDGAR on the SEC web site at <http://www.sec.gov>. Alternatively, we or any underwriter participating in the offering will arrange to send you the prospectus if you contact Ladenburg Thalmann & Co. Inc., Prospectus Department, 640 Fifth Avenue, 4th Floor, New York, New York 10019 or by email at prospectus@ladenburg.com

This presentation does not constitute an offer to sell, nor a solicitation of an offer to buy, any securities by any person in any jurisdiction in which it is unlawful for such person to make such an offering or solicitation.

Neither the SEC nor any other regulatory body has approved or disapproved of our securities or passed upon the accuracy or adequacy of this presentation. Any representation to the contrary is a criminal offense.

This presentation includes industry and market data that we obtained from industry publications and journals, third-party studies and surveys, internal company studies and surveys, and other publicly available information. Industry publications and surveys generally state that the information contained therein has been obtained from sources believed to be reliable. Although we believe the industry and market data to be reliable as of the date of this presentation, this information could prove to be inaccurate. Industry and market data could be wrong because of the method by which sources obtained their data and because information cannot always be verified with complete certainty due to the limits on the availability and reliability of raw data, the voluntary nature of the data gathering process and other limitations and uncertainties. In addition, we do not know all of the assumptions that were used in preparing the forecasts from the sources relied upon or cited herein.

Risk Factors

- The Merger may be completed even though certain events occur prior to Merger Closing that materially and adversely affect Salarius or Decoy.
- Nasdaq may delist the combined company's securities from trading on its exchange, which could limit investors' ability to make transactions in its securities and subject the combined company to additional trading restrictions.
- Stockholders of the combined company may not realize a benefit from the Merger commensurate with the ownership dilution they will experience in connection with the Merger and the Qualified Financing.
- The historical unaudited pro forma condensed combined financial information may not be representative of the combined company's results after the Merger.
- During the pendency of the Merger, Salarius and Decoy may not be able to enter into a business combination with another party at a favorable price because of restrictions in the Merger Agreement, which could adversely affect their respective businesses.
- Certain provisions of the Merger Agreement may discourage third parties from submitting alternative takeover proposals, including proposals that may be superior to the arrangements contemplated by the Merger Agreement.
- Pursuant to the terms of the Merger Agreement, Salarius is required to recommend that its stockholders approve the conversion of all outstanding shares of its Preferred Stock into shares of its Common Stock. Salarius cannot guarantee that its stockholders will approve this matter, and if they fail to do so its operations may be materially harmed.
- Because the lack of a public market for Decoy's capital stock makes it difficult to evaluate the value of Decoy's capital stock, the stockholders of Decoy may receive shares of Salarius common stock in the Merger that have a value that is greater than the fair market value of Decoy's capital stock.
- The combined company may become involved in securities class action litigation that could divert management's attention and harm the combined company's business and insurance coverage may not be sufficient to cover all costs and damages.

Overview

Salaris has agreed to a definitive merger¹ with Decoy Therapeutics, a preclinical biopharmaceuticals company engineering the next generation of peptide conjugate therapies.

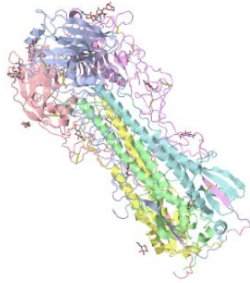


Transaction Overview	
Structure:	Stock-for-Stock
Pro-Forma Ownership ² :	92.4% - Decoy 7.6% - SLRX

1. Closing contingent on minimum proceeds of \$6 million and meeting the continued listing of Salaris common stock on NASDAQ.
2. Before taking into account the dilutive effects of any financing transactions

DECOY

therapeutics

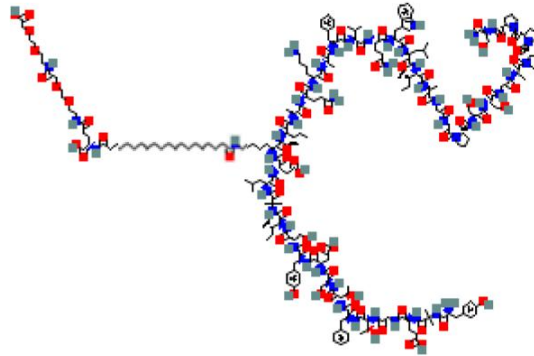


We are a biotech company dedicated to applying an **engineering mindset** to peptide conjugate drug discovery and development, leveraging machine learning and rapid synthesis to **decrease** time, cost, and risk

What's So Special About Peptide-Conjugates? The Whole Is Greater Than The Sum Of The Parts

The individual components of Tirzepatide are **not effective drugs** ...

Lipid 'tail' targets nothing, but stays in circulation for **days or weeks**

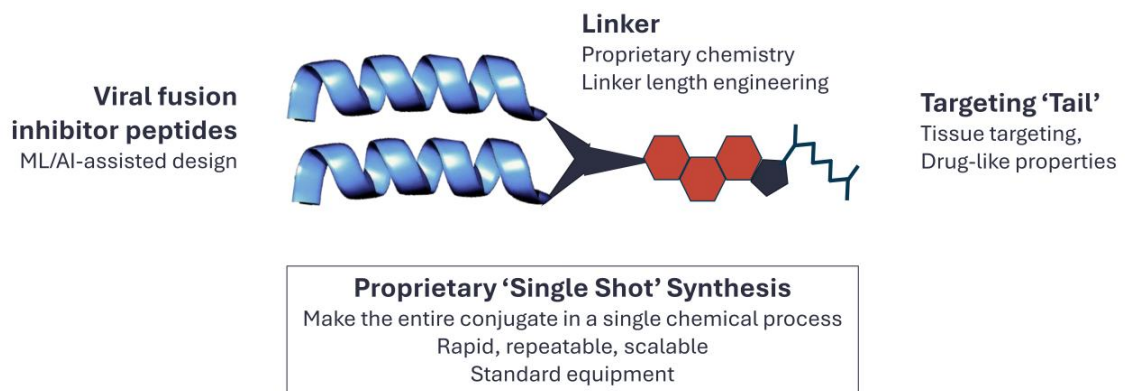


Peptide targets GLP-1 & GIP, but lasts in circulation for only a **few hours**

... but put them together in a **conjugate** and you get →

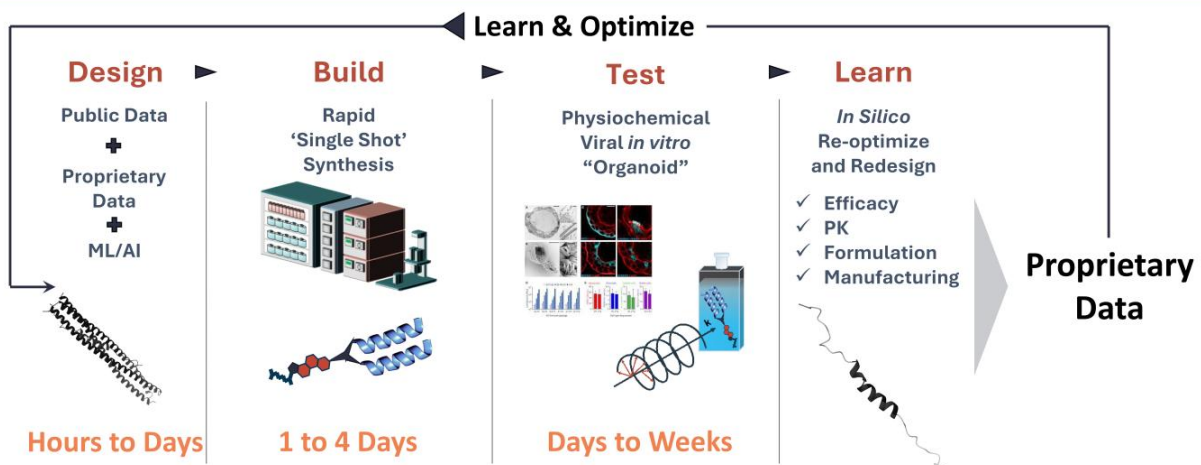


IMP³ACT* Peptide Conjugate Fusion Inhibitors: A Novel, Flexible, 'Designable' Antiviral Platform



*Immediate Peptide/PPMO/P-PROTAC Alpha-helical Conjugate Technology

Our Platform Is Built Around A *Rapid* Design-Build-Test-Learn (DBTL) Loop



Our Program has been supported by Leading Non-Dilutive Funders

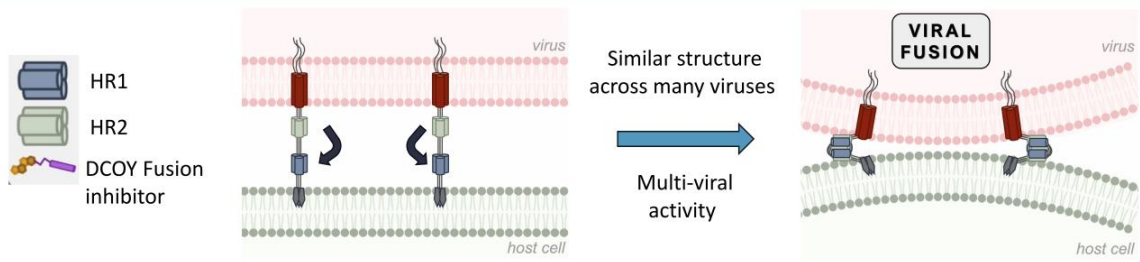
\$6.5M in non-dilutive funding to-date



Gates Foundation



Our Viral Target Is A “Weakness” Shared By 250+ Human Infecting Viruses

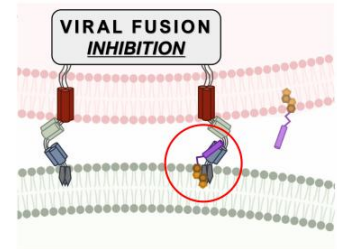


Applicable To










11 viral families → 250+ viruses

<i>Corona</i>	<i>Retro</i> (HIV)	<i>Arena</i> (Lassa)
<i>Influenza</i>	<i>Filo</i> (Ebola)	<i>Bunya</i> (VHFs)
<i>Paramyxo</i> (RSV+)	<i>Flavi</i> (Dengue, Zika)	<i>Rhabdo</i> (Rabies)
<i>Herpes</i>	<i>Toga</i> (EEE)	

Bird Flu **New Coronavirus** **Measles** **Ebola**



Combined Company's Antiviral Pipeline Expected to Focus On Multi-Viral Inhibitors

	Peptide Conjugate Drug Development Programs	Indication(s)	Status				Next Milestone
			Discovery	Preclinical	Ph1	Ph2	
Multi-Viral Respiratory Antivirals							
   	COV: Pan-Coronavirus Fusion Inhibitor Conjugate <i>Funded to IND by Gates Foundation</i>	COVID+ Protection for Immunocompromised					Ph1 Start 1H26
	TRI: Broad Acting Respiratory Fusion Inhibitor Conjugate	Influenza/COVID/RSV+					Multi-family activity 3Q25
Non-Viral Targets		Confidential					
SP-3164 Protein Degradar (PROTAC)		Exploratory					
Small Molecule Program							
	SP-2577 LSD-1 Inhibitor + azacytidine	MDS/CML					Under review

Our Viral MOA Allows For Broad Multi-Viral Activity From A Single Drug

DCOY-COV Pan-Coronavirus Activity

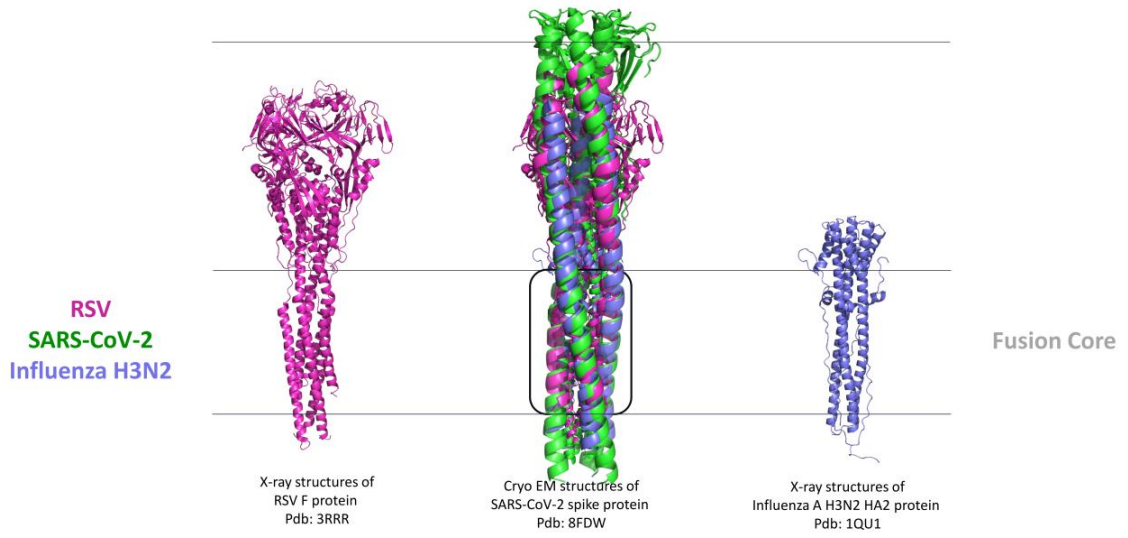
	Pseudotype Assay IC50 (µM) Performed at BIDMC			Live Virus Assay IC50 (µM) Performed at iiTRI		
	DCOY101	DCOY102	DCOY103	DCOY101	DCOY102	DCOY103
WT (D614G)	0.027	0.027	0.052	0.096	0.184	0.124
Alpha	0.015	0.020	0.033			
Gamma	0.029	0.035	0.087			
Delta	0.020	0.031	0.054	0.035	0.106	0.085
P1				0.025	0.013	0.022
Beta	0.017	0.036	0.103			
BA.1	0.021	0.024	0.042	0.022	0.012	0.019
BA.2	0.017	0.021	0.054			
SARS-CoV-1				0.0009	0.000004	0.00007
MERS				0.103	0.468	0.246

Very Robust Results:

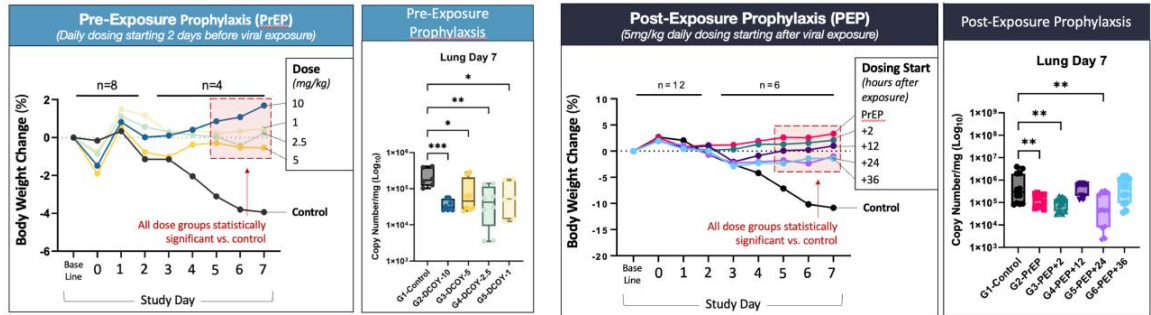
- Nanomolar activity
- All human *Coronaviruses*
- Multiple constructs
- Multiple CROs
- Multiple assay types
- Multiple manufacturing lots

Same sequence in animal coronaviruses

SARS-CoV-2, Influenza A, and RSV Fusion Cores Are Very Structurally Similar

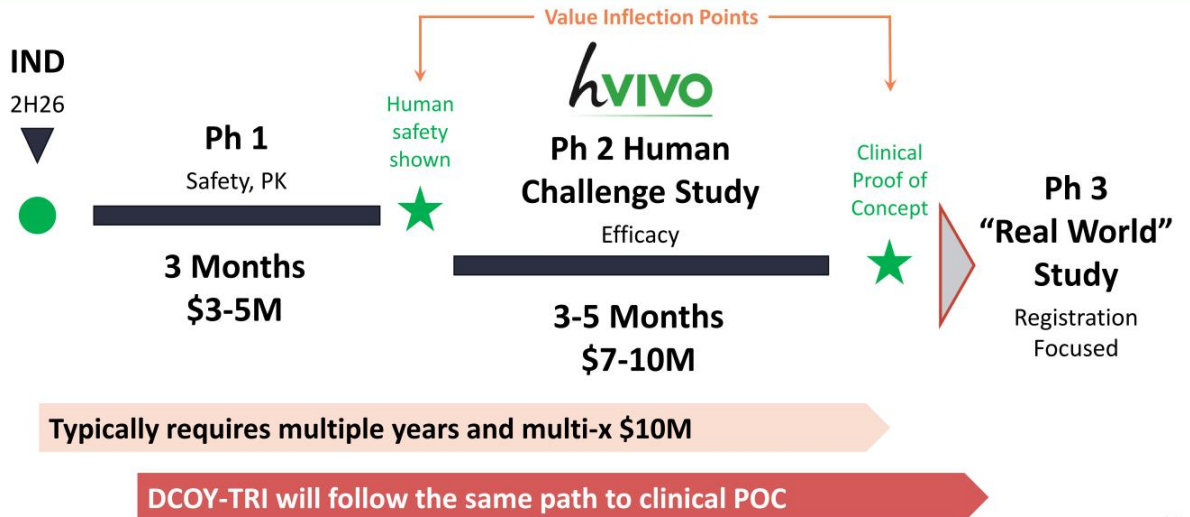


DCOY-COV Is Highly Effective *In Vivo* Up To 36 Hours Post-Viral Exposure



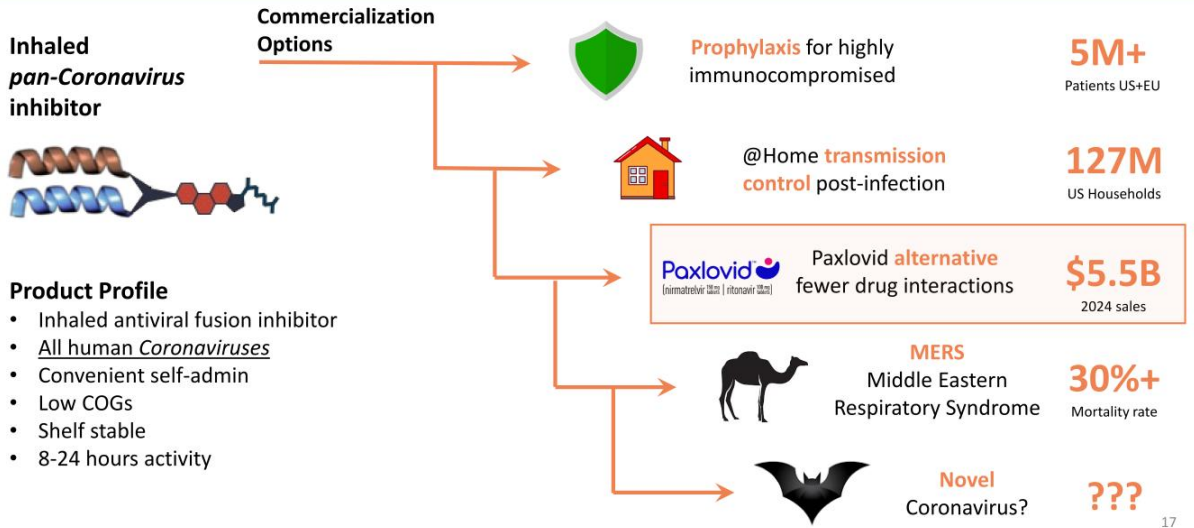
DCOY-COV prevents SARS-CoV-2 infections in the nose & lungs up to **36 hours post exposure** when dosed daily

DCOY-COV: *Fast, Repeatable Path* To Human Proof Of Concept In Antivirals (Clinic In 2H26)



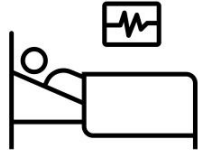
*Timeline and amounts are based upon current expectations and results are not guaranteed

DCOY-COV Has Multiple Commercial Opportunities



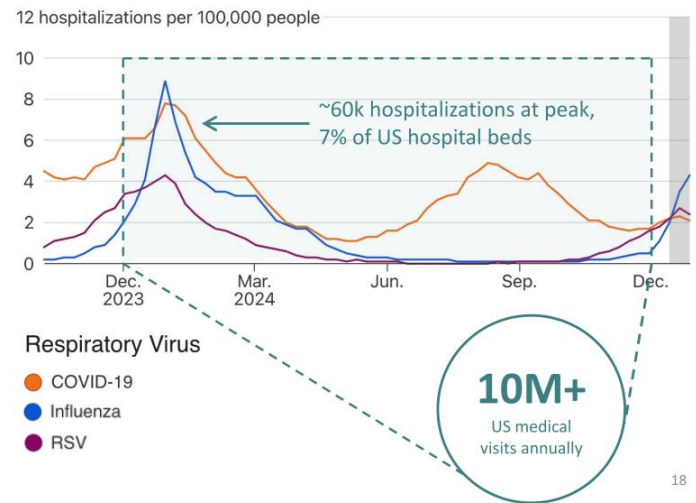
'Influenza-Like Illness': Significant Opportunity

US Hospitalizations Sep '23 to Dec' 24
(CDC Data)



Flu :	279,390
COVID-19:	663,300
RSV:	184,585
<hr/>	
Total	1,127,275

US Weekly Hospitalization Rate (CDC Data)



Building Global Low-Cost Manufacturing

- ✓ License & 'Tech Transfer' package
- ✓ Standard peptide equipment
- ✓ Existing or new facilities
- ✓ Local control
- ✓ Repeatable, multi-asset
- ✓ 'Virtual' manufacturing network



The Future: IMP³ACT* Is A Flexible, Modular Platform To Engineer Peptide-Conjugate Drugs For Many Diseases

Targeting 'Tails'

Tissue targeting,
long-lasting activity



Lipids
Targeting peptides
Cell penetrating peptides

Linker System

Proprietary conjugation
chemistry



'Warheads'

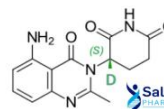
Hit targets across all human physiology
multi-target potential



Peptides



Oligonucleotides



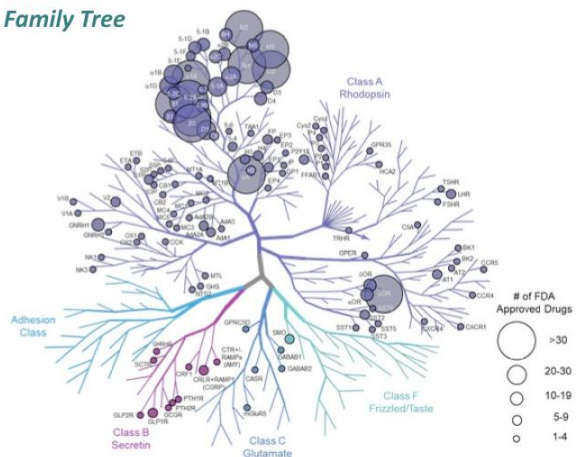
Small Molecules

Salaris
PHARMACEUTICALS

*Immediate Peptide/PPMO/P-PROTAC Alpha-helical Conjugate Technology

Decoy's Next Target Set: G-Protein Coupled Receptors (GPCRs)

The GPCR Family Tree



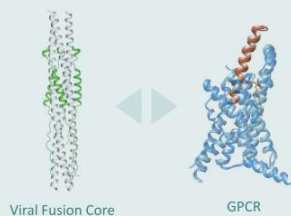
Competitive White Space

~500 approved drugs targeting GPCRs

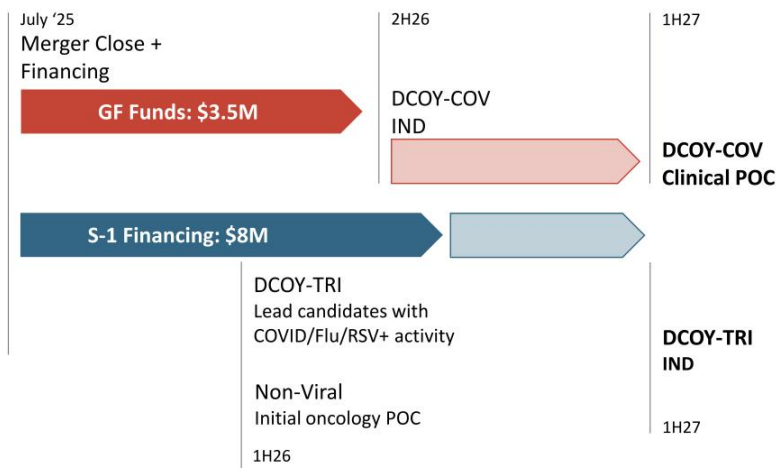
~75% of GPCR targets remain undrugged

Oncology, immunology, CNS, metabolism +

Similar 'α-Helical' Engineering



Combined Company Expects to Reach Multiple Value Creating Milestones With Low Burn Rate Over The Next Year



**This timeline is based upon current expectations and results are not guaranteed*

Merger Terms

The Decoy transaction is structured as a two-step transaction:

Step 1	Step 2
Decoy's equity exchanged into SLRX common and Series A Preferred and certain Decoy debt exchanged into SLRX Series B Preferred	Special shareholder meeting called to approve conversion of Series A Preferred Stock and Series B Preferred Stock into SLRX common stock ²
Post Merger Ownership ¹ : Decoy – 92.4% SLRX – 7.6%	

1. Before taking into account the dilutive effects of any financing transactions

2. NASDAQ has deemed the transaction constitutes a business combination that results in a change of control. The post-transaction entity will be required to satisfy all of NASDAQ's initial listing criteria. The Series A and Series B Preferred Stock will not be convertible into SLRX common stock until NASDAQ's approval of the initial listing application and stockholder approval.

Pro-Forma Cap Table¹

Capitalization as of July 30, 2025	Common Equivalents
SLRX Common Outstanding	7,645,594
Convertible Series A & B Preferred Stock	25,789,853
SLRX Options (Weighted Avg. Exercise Price \$66.75)	31,554
SLRX Warrants (Weighted Avg. Exercise Price \$87.60)	86,661
Fully Diluted	33,553,662

Related Party Loans - Due July 2026	\$139,823
Promissory Note – Due October 2025	\$31,969

1. Before taking into account the dilutive effects of any financing transactions

We Are Serial Drug Company Builders

Founders & Management: Multiple Drugs Approved Across Therapeutic Areas



Rick Pierce *CEO*
Investment Banking
Serial Biotech
Entrepreneur

JAVELIN LEHMAN BROTHERS



Mark Rosenblum *CFO*
ActiveCare
Advaxis
Haskin & Sells (Deloitte)

ADVAXIS IMMUNOTHERAPIES ActiveCare



Barb Hibner *PhD*
CSO
Bayer, Chiron, Takeda

BAYER MILLENNIUM CHIRON Takeda



Michael Lipp *PhD*
CTO
Alkermes, Acorda, Nocion

Alkermes ACORDA THERAPEUTICS



Peter Marschel *MS MBA*
CBO
Merck, Vertex, Takeda

MERCK VERTEX Takeda

Key Co-Founders & Advisors



Brad Pentelute *PhD*
SAB Member, Tech Advisor
Prof of Chemistry, MIT

MIT



Shahin Gharakhanian *MD*
Acting CMO/SAB Chair
Former VP R&D Vertex

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