Fourth Quarter and Full-Year 2022 Financial Results and Corporate Update

FEBRUARY 28, 2023

Agenda

Introduction | *Sanj K. Patel, Chief Executive Officer*

ARCALYST® Commercial Execution | *Ross Moat, Chief Commercial Officer*

Fourth Quarter and Full-Year 2022 Financial Results | *Mark Ragosa, Chief Financial Officer*

Closing Remarks | *Sanj K. Patel, Chief Executive Officer*

Q&A Session

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Forward Looking Statements

This presentation (together with any other statements or information that we may make in connection herewith) contains forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995 with respect to Kiniksa Pharmaceuticals, Ltd. (and its consolidated subsidiaries, collectively, unless context otherwise requires, "Kiniksa," "we," "us" or "our"). In some cases, you can identify forward looking statements by terms such as "may," "will," "should," "expect," "plan," "anticipate," "could," "intend," "goal," "design," "target," "project," "contemplate," "believe," "estimate," "predict," "potential," "strategy," or "continue" or the negative of these terms or other similar expressions, although not all forward-looking statements contain these identifying words. All statements contained in this presentation that do not relate to matters of historical fact should be considered forward-looking statements, including without limitation, statements regarding our strategy; potential value drivers; potential indications; potential market opportunities and competitive position; ongoing, planned and potential clinical trials and other studies; timing and potential impact of clinical data; regulatory and other submissions, applications and approvals; commercial strategy and commercial activities; expected run rate for our cash, cash equivalents and short-term investments; expected funding of our operating plan; financial guidance; third-party collaborations and licensing; and capital allocation.

These statements involve known and unknown risks, uncertainties, and other important factors that may cause our actual results, performance or achievements to be materially different from those expressed or implied by the forward-looking statements, including, without limitation, potential delays or difficulties with our clinical trials; potential inability to demonstrate safety or efficacy or otherwise producing negative, inconclusive or uncompetitive results; potential for changes in final data from preliminary or interim data; potential inability to replicate in later clinical trials positive results from earlier trials and studies; our reliance on third parties for manufacturing and conducting clinical trials, research and other studies; our ability to realize value from our licensing and collaboration arrangements; our ability to source sufficient drug product, as needed, to meet our clinical and commercial requirements; our inability to demonstrate safety and efficacy to the satisfaction of applicable regulatory authorities; potential for applicable regulatory authorities to not accept our filings or to delay or deny approval of, or emergency use authorization for, any of our product candidates or to require additional data or trials to support any such approval or authorization; delays, difficulty or inability to successfully execute on our commercial strategy for ARCALYST; potential changes in our strategy, clinical trial priority, operating plan and funding requirements; raw materials, important ancillary product and drug substance and/or drug product shortages; substantial new or existing competition; potential impact of the COVID-19 pandemic or any subsequent pandemic, and measures taken in response to such pandemics, on our business and operations as well as the business and operations of our manufacturers, CROs upon whom we rely to conduct our clinical trials, and other third parties with whom we conduct business or otherwise engage, including the FDA and other regulatory authorities; risks related to the ongoing war in Ukraine; risks arising from political and economic instability; and our ability to attract and retain qualified personnel.

These and the important factors discussed in our filings with the U.S. Securities and Exchange Commission, including under the caption "Risk Factors" contained therein could cause actual results to differ materially from those indicated by the forward-looking statements made in this presentation. These forward-looking statements reflect various assumptions of Kiniksa's management that may or may not prove to be correct. No forward-looking statement is a guarantee of future results, performance, or achievements, and one should avoid placing undue reliance on such statements. Except as otherwise indicated, this presentation speaks as of the date of this presentation. We undertake no obligation to update any forward-looking statements, whether as a result of new information, future events or otherwise, except as required by law.

This presentation also contains estimates, projections, and/or other information regarding our industry, our business and the markets for certain of our product candidates, including data regarding the estimated size of those markets, and the incidence and prevalence of certain medical conditions. Unless otherwise expressly stated, we obtained this industry, business, market and other data from reports, research surveys, clinical trials, studies and similar data prepared by market research firms and other third parties, from industry, medical and general publications, and from government data and similar sources. Information that is based on estimates, forecasts, projections, market research, or similar methodologies is inherently subject to uncertainties and actual events or circumstances may differ materially from events and circumstances reflected in this information.

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Introduction

Sanj K. Patel
Chief Executive Officer

Building Blocks for Value Creation in 2023 and Beyond

Kiniksa is an Emerging Leader in the Development of **Immune-Modulating Therapies**

Cardiovascular Franchise
(ARCALYST/ Mavrilimumab)
+
Autoimmune Franchise
(KPL-404)

Commercial Asset Delivering Steady, Sequential Growth Today

- Expected ARCALYST net product revenue of **$190-$205M** in 2023
- Significant **additional upside** remains with only 5% penetration of target recurrent pericarditis population as of Q422

Pipeline Delivering for the Future

- **KPL-404** is a potentially best-in-class asset; now in multiple-ascending-dose Phase 2 study
- Pursuing collaborative study agreements for **mavrilimumab** in rare cardiovascular diseases

Strong Financial Position to Support Growth

- **$190.6M Q422 cash position**
- **Cash runway into at least 2025** supported by profitable ARCALYST collaboration, non-dilutive capital from out-licensing transactions, and financial discipline

Innovative Business Development Execution to Optimize Portfolio

- Established track record of executing strategic transactions
- Targeting differentiated science **synergistic with existing infrastructure**

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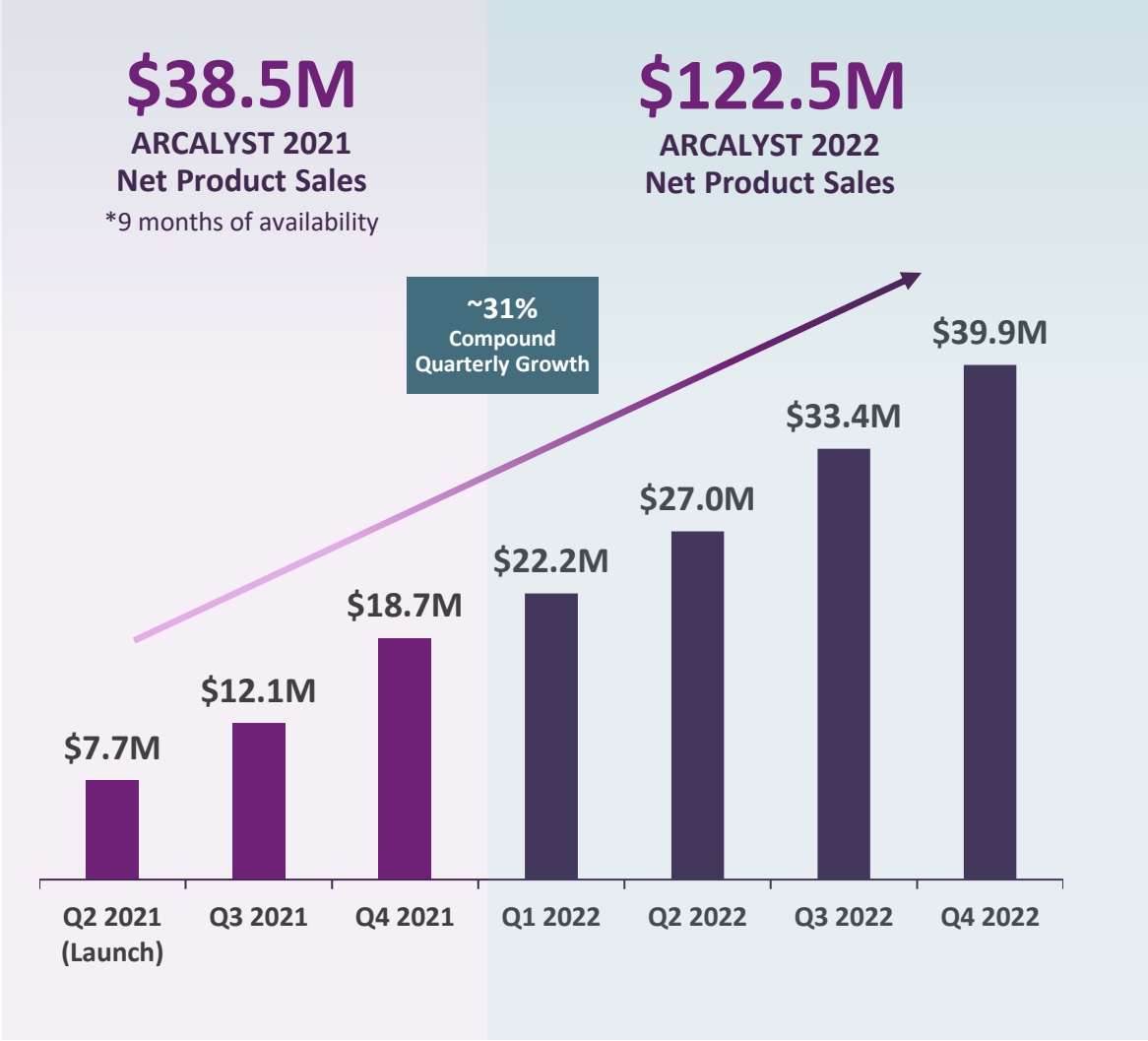
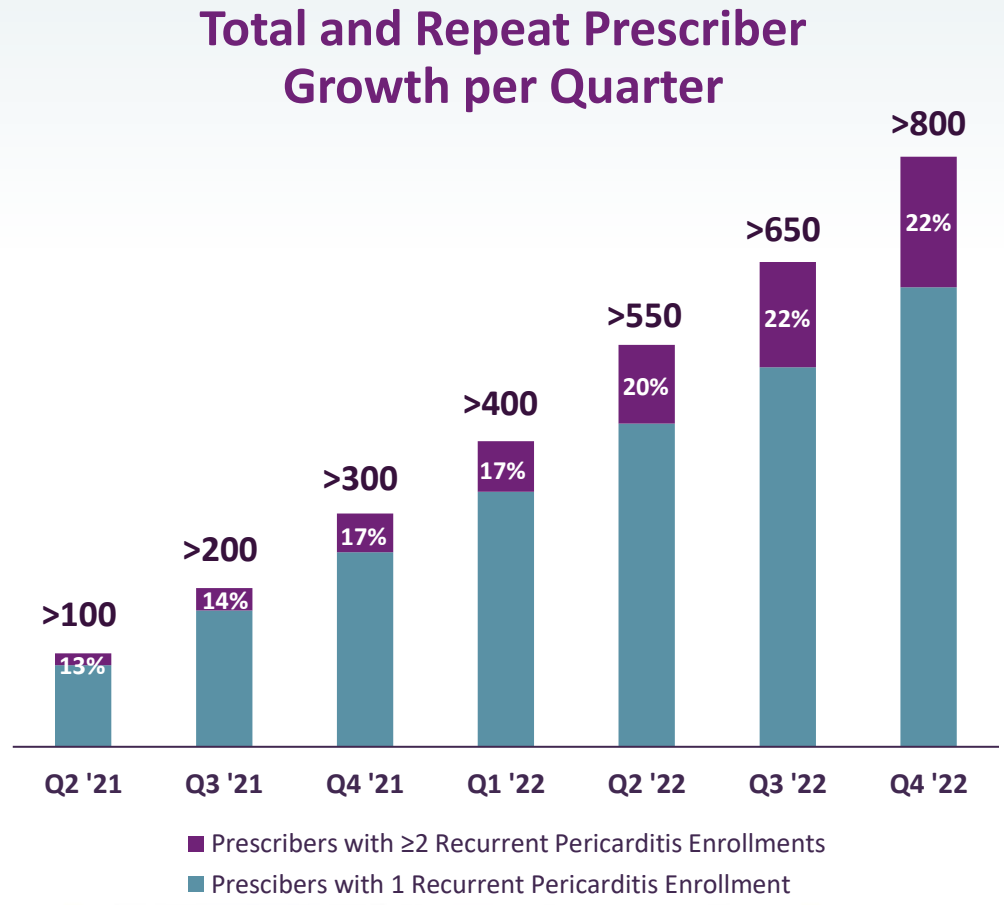
ARCALYST Commercial Execution

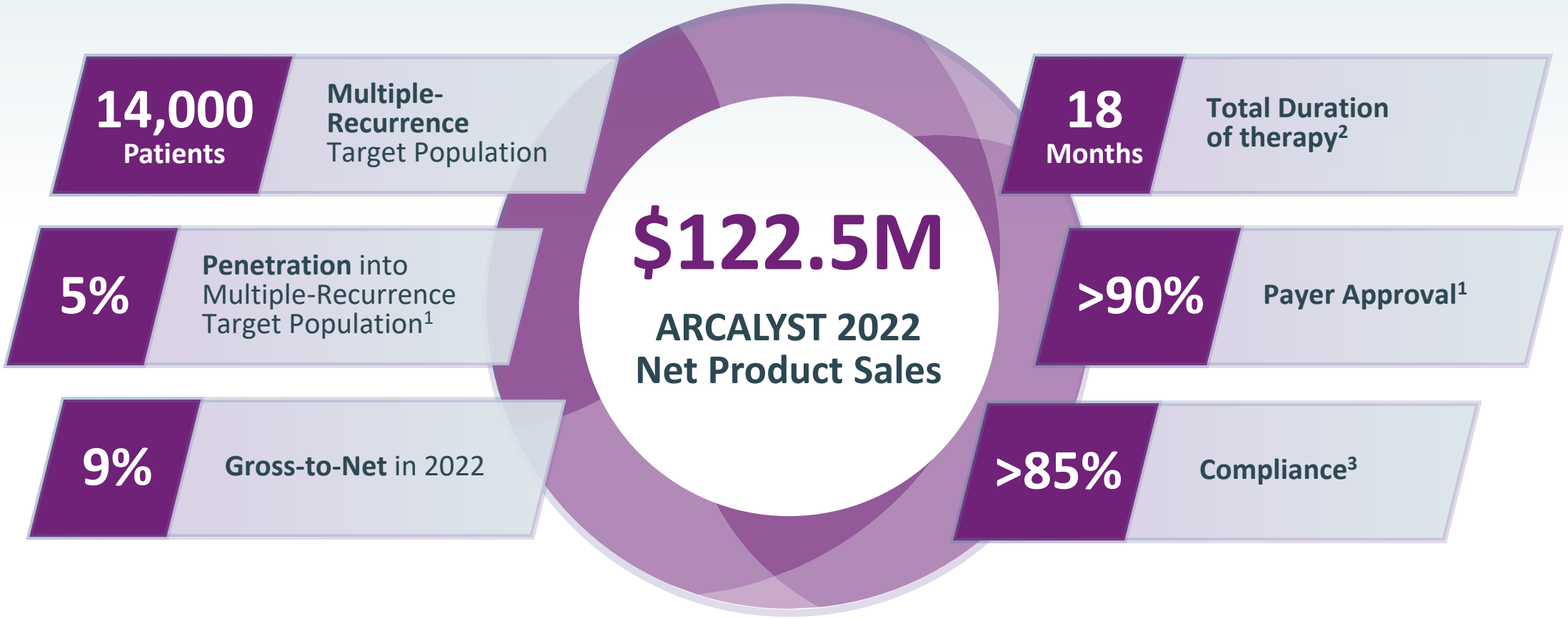
Ross Moat
Chief Commercial Officer

Robust Commercial Execution Resulted in Strong 2022 Revenue Growth





ARCALYST Commercial Growth in 2022: By The Numbers



1. As of 12/31/22; 2. As of 12/31/22, accounting for ~45% of patients restarting ARCALYST following discontinuation; 3. Actual vials dispensed to active patients divided by expected vials dispensed to active patients based on 100% compliance

ARCALYST Average Total Duration of Therapy as of Q4 2022 ~18 Months, Accounting for Patient Restarts

Advancing the treatment paradigm to treat continuously throughout disease duration, ensuring adequate disease control and preventing recurrences

Average ***Initial*** Duration of Therapy

12 Months

~45%

Of Patients Restart Therapy Following Initial Discontinuation

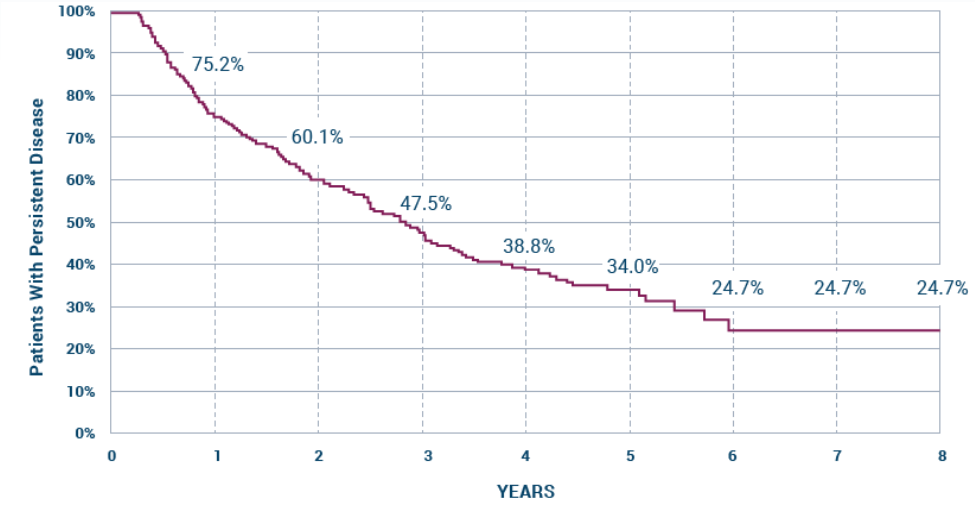
(Typically within ~8 weeks)

Average ***Total*** Duration of Therapy*

18 Months

*After accounting for patient restarts

60% of Patients with Multiple Recurrences Suffer at 2 Years, and 34% Continue to Experience Flares at 5 Years[1]



Data from Optum Health Care Solutions, Inc., collected from January 1, 2007, through March 31, 2017, were analyzed for this observational study (N=375 patients with ≥2 recurrences of RP).

1) Lin D, Laliberté F, Majeski C, et al. Disease and economic burden associated with recurrent pericarditis in a privately insured United States population. Adv Ther. 2021;38(10):5127-5143. doi:10.1007/s12325-021-01868-7

Expanding Breadth & Depth of ARCALYST Use for Recurrent Pericarditis

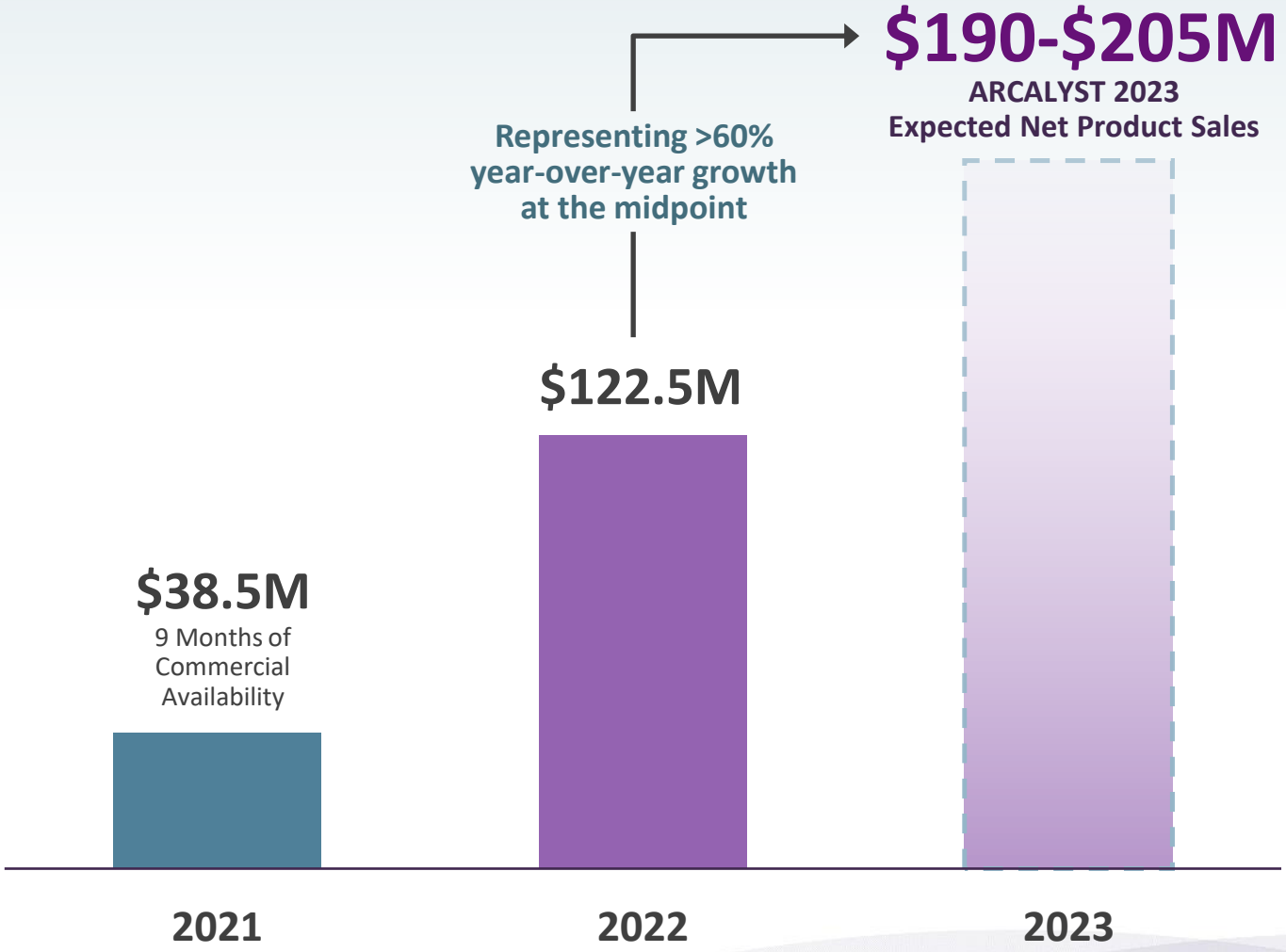
Expanding Base of New Prescribers

- Salesforce Expansion
- Disease Education
- Pericardial Disease Networks
- Brand Awareness
- Evidence Generation
- Kiniksa OneConnect™ Program

Driving Growth with Existing Prescribers

2023 ARCALYST Net Product Sales Guidance

Significant growth expected through continued execution



Fourth Quarter and Full-Year 2022 Financials

Mark Ragosa
Chief Financial Officer

Fourth Quarter and Full-Year 2022 Financial Results

Income Statement	Three Months Ended December 31,		Year Ended December 31,	
	2022	2021	2022	2021
Product Revenue	$39.9M	$18.7M	$122.5M	$38.5M
License and Collaboration Revenue	$21.9M	$0.0M	$97.7M	$0.0M
Total Revenue	**$61.9M**	**$18.7M**	**$220.2M**	**$38.5M**
Cost of Goods Sold	$6.7M	$3.9M	$22.9M	$9.1M
Collaboration Expenses	$7.5M	$0.8M	$24.1M	$0.8M
Research and Development	$14.4M	$27.4M	$65.5M	$99.3M
Selling, General and Administrative	$27.2M	$22.7M	$98.0M	$85.9M
Total Operating Expenses	**$55.8M**	**$54.9M**	**$210.4M**	**$195.2M**
Income Tax Benefit (Provision)	**$(2.4M)**	**($0.3M)**	**$172.3M**	**($1.4M)**
Net Income (Loss)	**$4.5M**	**$(36.3M)**	**$183.4M**	**($157.9M)**

Balance Sheet	December 31, 2022	December 31, 2021
Cash, Cash Equivalents and Short-term Investments	$190.6M	$182.2M

Cash reserves expected to fund operations into at least 2025

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Closing Remarks

Sanj K. Patel

Chief Executive Officer

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