Fourth Quarter and Full-Year 2023 Financial Results and Recent Portfolio Execution

FEBRUARY 28, 2024

Agenda

- **Introduction** | *Sanj K. Patel, Chief Executive Officer*
- **ARCALYST® Commercial Execution** | *Ross Moat, Chief Commercial Officer*
- **Abiprubart Program Review** | *John F. Paolini, Chief Medical Officer*
- **Fourth Quarter and Full-Year 2023 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 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; 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; risks arising from our technology transfer of ARCALYST drug substance manufacturing; 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 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, business development strategy or funding requirements; raw materials, important ancillary product and drug substance and/or drug product shortages; substantial new or existing competition; 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.

Introduction

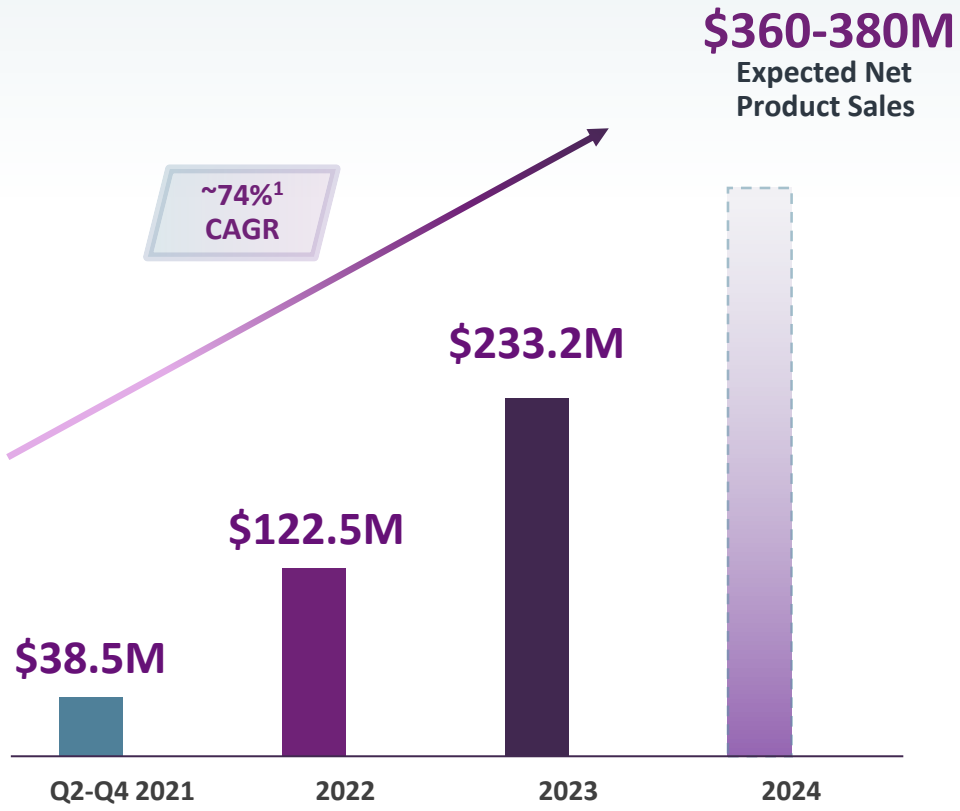
Sanj K. Patel
Chief Executive Officer

ARCALYST Commercial Execution

Ross Moat
Chief Commercial Officer

Long-Term Growth Potential Through Commercialization Maturation

Accelerating Revenue with Long-Term Growth Horizon



Total Prescribers	**>1,700**
Repeat Prescribers (% of Total)	**~24%**
Payer Approval (% of Completed Cases)	**>90%**
Average Total Duration of Therapy	**~23 months**
Patient Compliance	**>85%**

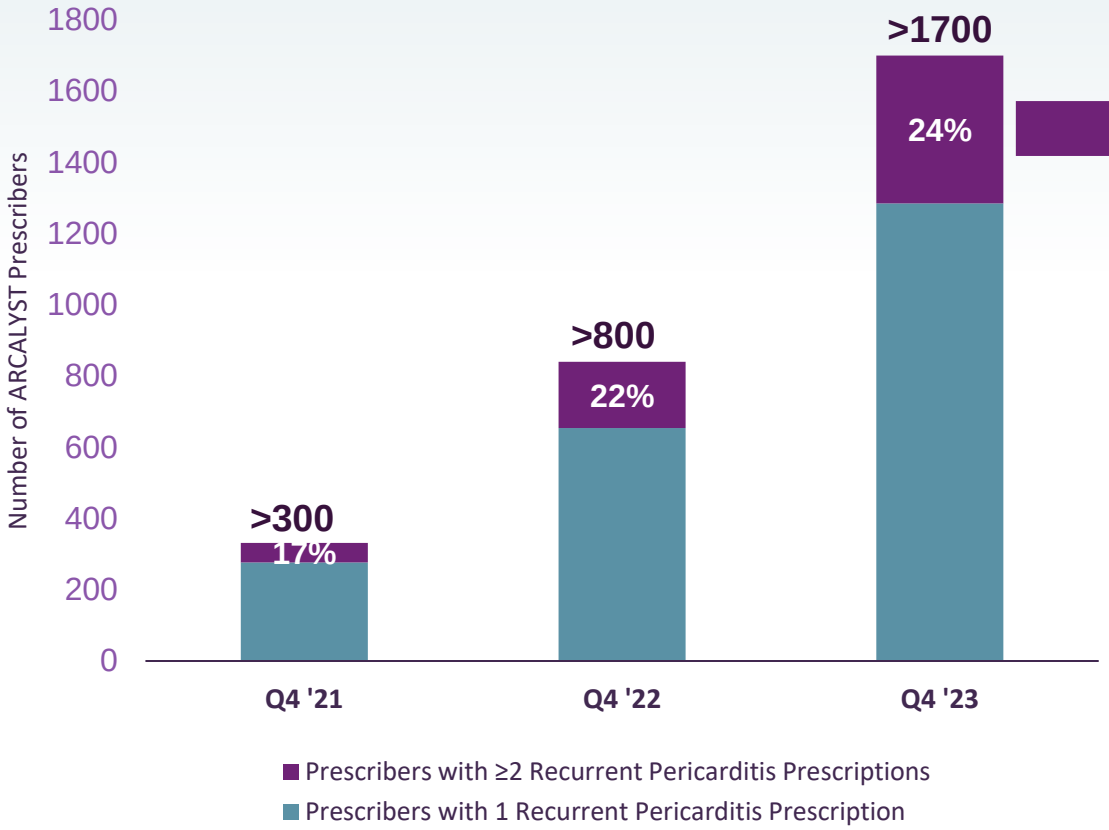
ARCALYST Collaboration Operating Profit

2021	2022	2023
($8.0M)[2]	$36.2M	$113.0M

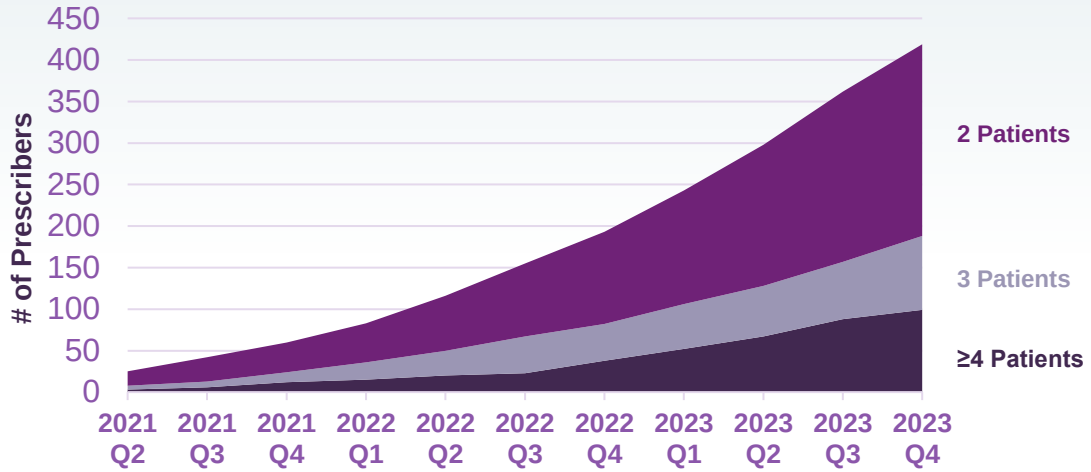
[1]Implied 2022-2024 Compound Annual Growth Rate assuming midpoint of projected 2024 net product sales
[2]The ARCALYST collaboration achieved profitability in the fourth quarter of 2021, following three quarters of commercial availability for recurrent pericarditis

Opportunity for Continued ARCALYST Growth Remains High

Total and Repeat Prescribers of ARCALYST for Recurrent Pericarditis Patients



The Growing Repeat Prescriber Base is Delivering ~40% of All New Patient Prescriptions



- Strong sequential growth in **both new and repeat prescribers**, underscoring the dispersed patent population
- Both physicians and patients are gaining **positive experiences with ARCALYST** as the first and only approved therapy for recurrent pericarditis
- Cardiologist market research shows a steady **increase in their level of comfort with prescribing biologics**
- **Greater than 40% of all new prescriptions in 2023 came from repeat prescribers**

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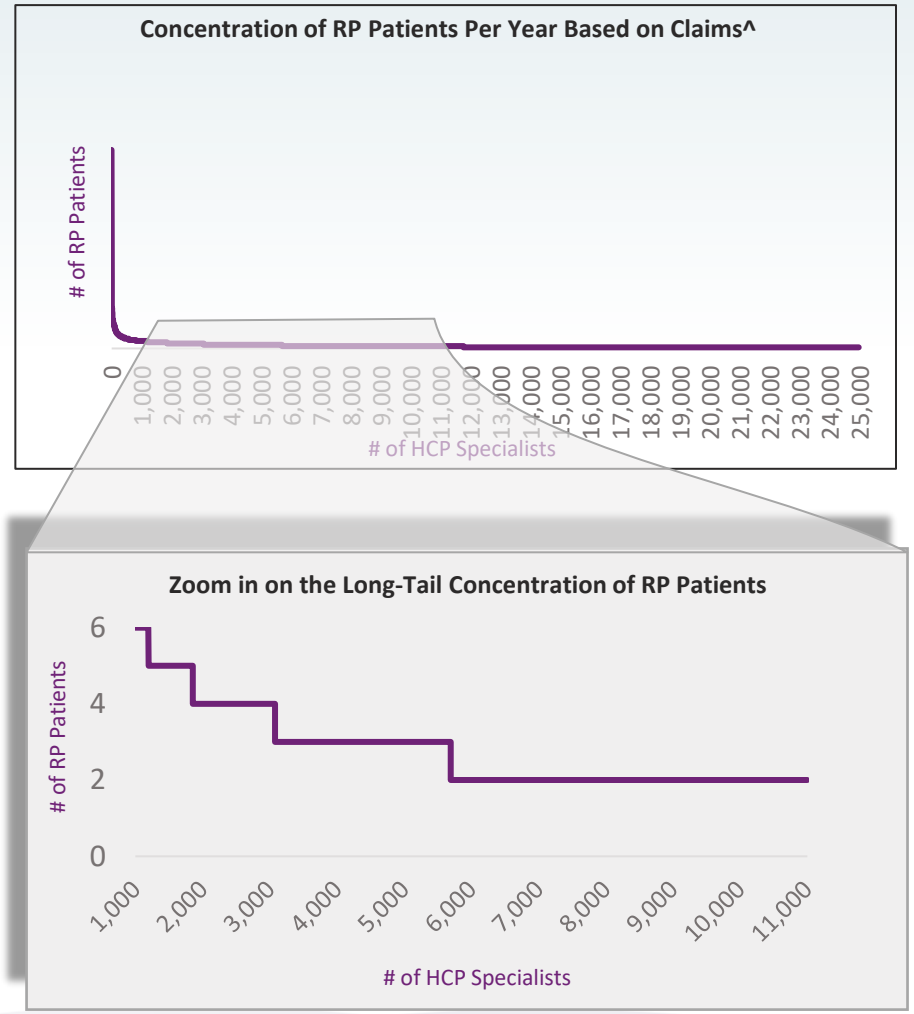
Driving Greater Patient & Physician Adoption

~80% annual growth vs end of Q4 2022

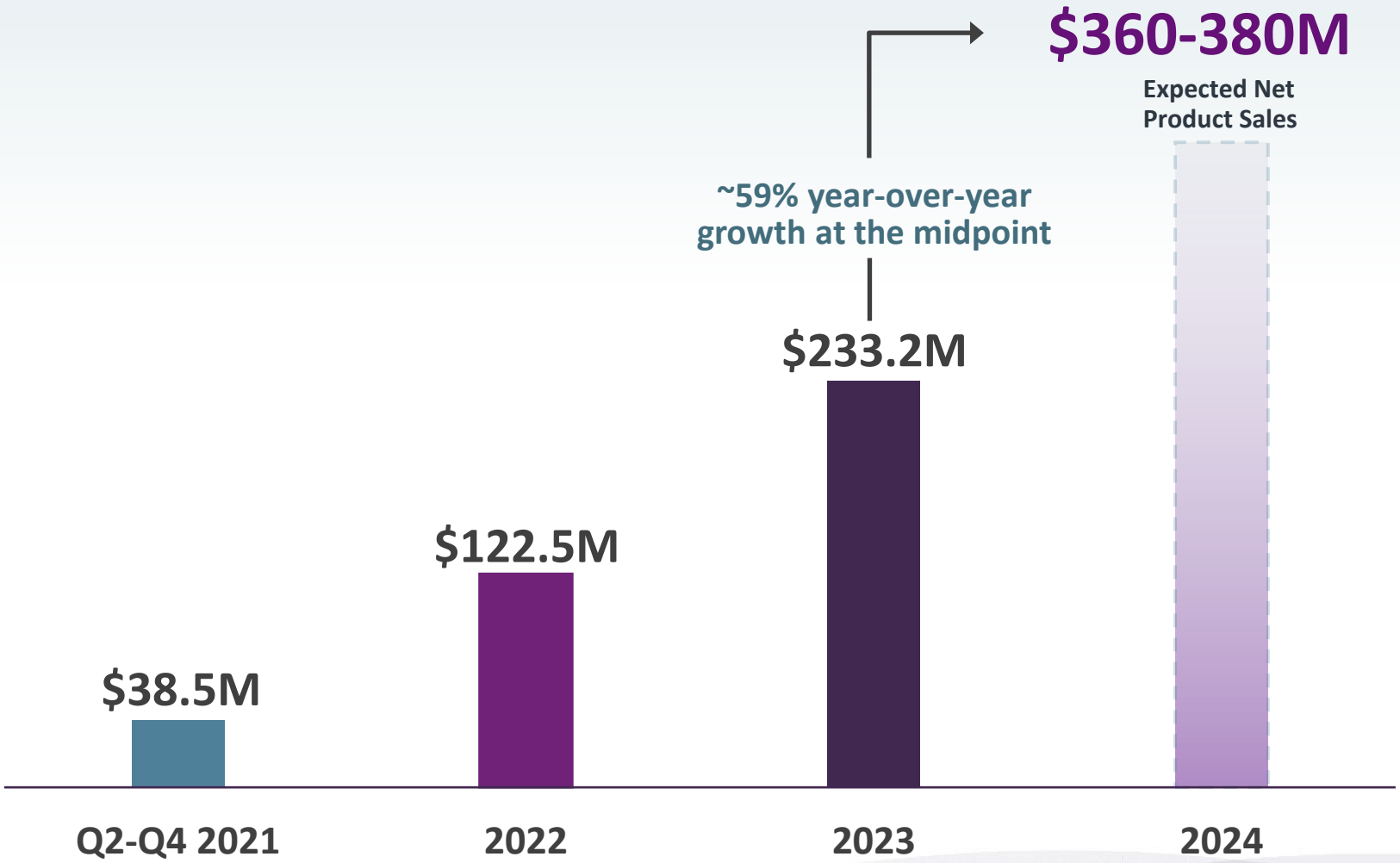
Evolving ARCALYST Field Strategy: Targeting an Increased Number of Top and Mid-Tier Physicians



^Internal analysis based on Komodo Claims Data; includes patients with at least 1 recurrence

2024 ARCALYST Net Product Sales Guidance

Well-positioned to expand the breadth and depth of ARCALYST in recurrent pericarditis



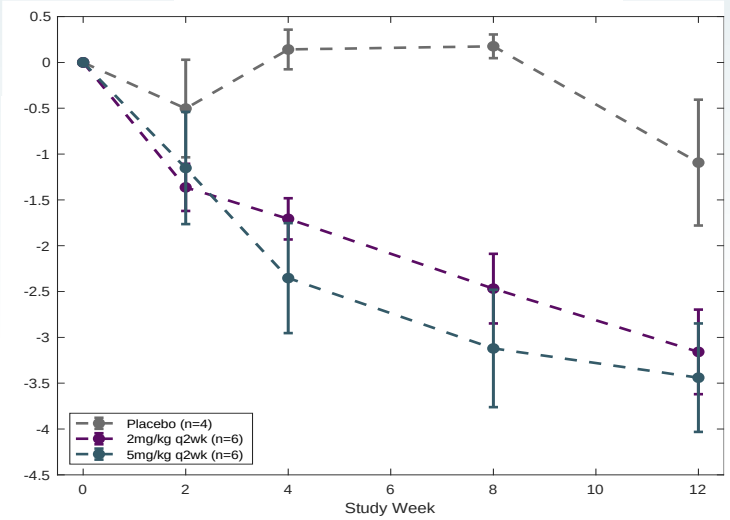
Abiprubart Program Review

John F. Paolini
Chief Medical Officer

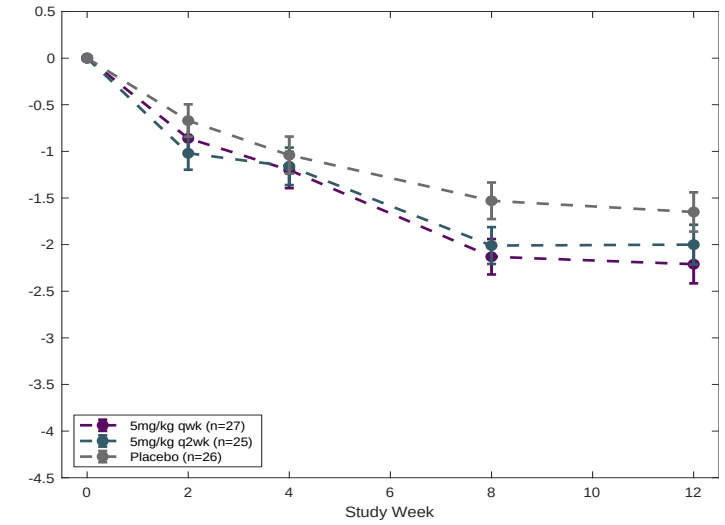
Phase 2 Data of Abiprubart in Rheumatoid Arthritis

Meaningful clinical effect in first three cohorts

Cohorts 1 & 2



Cohort 3[1]



Cohorts 1 & 2: multiple doses of abiprubart were well-tolerated and supported Cohort 3 (PoC)

Cohort 3: primary efficacy endpoint statistically significant at the 5mg/kg weekly dose level and was not statistically significant at the 5mg/kg biweekly dose level

Abiprubart was well-tolerated, and no dose-related adverse experiences were observed

1) Modified Intention to Treat (mITT) analysis population (all randomized subjects who received at least one dose of study drug and had a baseline assessment and at least one post-baseline assessment for the primary efficacy endpoint), calculated as a Least Squares mean; the Phase 2 study of abiprubart in rheumatoid arthritis is ongoing, this topline analysis includes all patients having reached Week 12, and follow-up to Week 24 is ongoing

DAS28-CRP = Disease Activity Score of 28 Joints Using C-reactive Protein; SC = Subcutaneous; LS = Least Squares; CI = Confidence Interval

Abiprubart Phase 2 Trial in Rheumatoid Arthritis

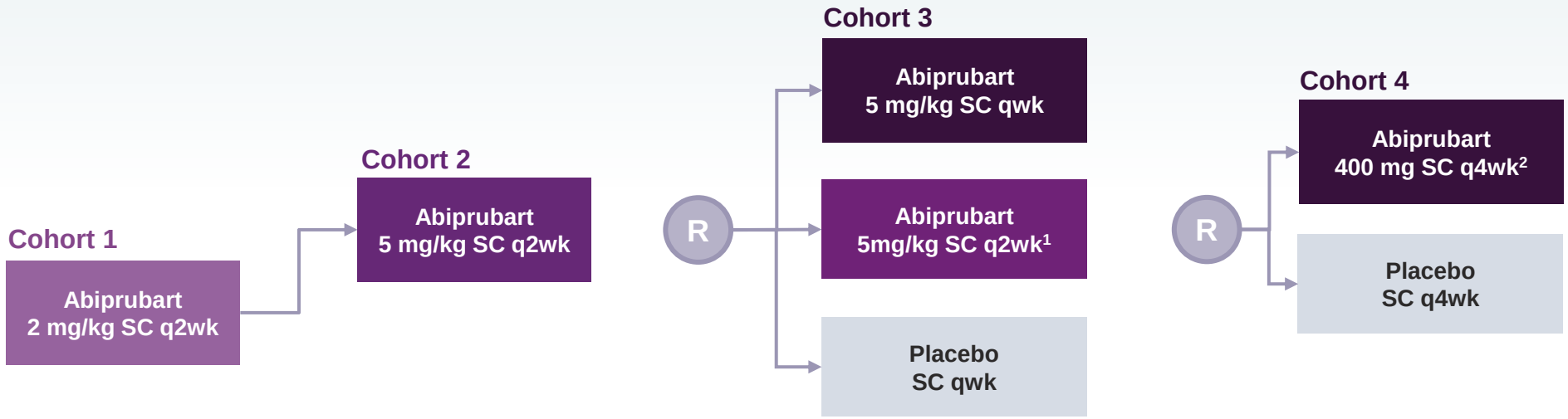
Study to evaluate the efficacy, dose response, PK, and safety of chronic SC dosing over a 12-week treatment duration

PATIENT POPULATION:

- Patients with active RA who have been treated with a biological disease-modifying anti-rheumatic drug (bDMARDs) AND/OR Janus kinase inhibitor (JAKi) therapy for RA for ≥ 3 months and who have had inadequate response or have had to discontinue bDMARD and/or JAKi therapy due to intolerance or toxicity, regardless of treatment duration.

DISEASE CRITERIA:

- Six or more swollen joints and ≥ 6 tender joints at screening and baseline line visits; levels of high sensitivity C-reactive protein ≥ 5 mg/L; seropositivity for serum RF and/or ACPA at screening.



PK Lead-In: Cohorts 1-2

- Each cohort sequentially randomized 8 patients in a 3:1 (active:placebo) ratio; placebo recipients from Cohorts 1 and 2 were pooled
- Primary Endpoints:
  - Incidence of treatment-emergent adverse events (TEAEs)
  - Pharmacokinetics (C_{max}, $AUC_{(0-t)}$)
- Secondary Efficacy Endpoint:
  - Change from baseline in DAS28-CRP at Week 12

Proof of Concept: Cohorts 3-4

- Cohort 3 randomized 78 patients in a 1:1:1 ratio (n~26/arm)
- Cohort 4 randomized 51 patients in a 3:2 ratio (n=~20-30/arm)
- Primary Efficacy Endpoint:
  - Change from baseline in DAS28-CRP at Week 12
- Secondary Endpoints :
  - Incidence of treatment-emergent adverse events (TEAEs)
  - Pharmacokinetics (C_{max}, $AUC_{(0-t)}$)

1) The 5 mg/kg SC q2wk group will receive weekly administrations of alternating active investigational product and matching blinded placebo
2) The Cohort 4 Abiprubart 400mg SC q4wk group includes a 600mg loading dose on Day 1

SC = subcutaneous; qwk = every week; q2wk = every other week; q4wk = every four weeks; AUC = Area Under the Curve; RF = Rheumatoid Factor; ACPA = anti-citrullinated protein antibodies, PD = Pharmacodynamics; PK = Pharmacokinetics; R = Randomization

Fourth Quarter and Full-Year 2023 Financials

Mark Ragosa
Chief Financial Officer

Fourth Quarter and Full-Year 2023 Financial Results

Income Statement	Three Months Ended December 31,		Year Ended December 31,	
	2023	2022	2023	2022
Product Revenue	$71.2M	$39.9M	$233.2M	$122.5M
License and Collaboration Revenue	$12.2M	$21.9M	$37.1M	$97.7M
Total Revenue	**$83.4M**	**$61.9M**	**$270.3M**	**$220.2M**
Cost of Goods Sold	$9.6M	$6.7M	$33.4M	$22.9M
Collaboration Expenses[1]	$16.9M	$7.5M	$56.5M	$24.1M
Research and Development	$20.1M	$14.4M	$76.1M	$65.5M
Selling, General and Administrative	$36.7M	$27.2M	$129.4M	$98.0M
Total Operating Expenses	**$83.3M**	**$55.8M**	**$295.5M**	**$210.4M**
Income Tax Benefit (Provision)	$22.8M	($2.4M)	$30.7M	$172.3M
Net Income	**$25.2M**	**$4.5M**	**$14.1M**	**$183.4M**

Collaboration Expenses[1]	Three Months Ended December 31,		Year Ended December 31,	
	2023	2022	2023	2022
ARCALYST Net Sales	**$71.2M**	**$39.9M**	**$233.2M**	**$122.5**
Profit Split-Eligible Cost of Goods Sold[2]	($9.3M)	($6.5M)	($32.4M)	($21.8M)
Commercial, Marketing, Regulatory and Other Expenses	($28.0M)	($18.4M)	($87.7M)	($64.6M)
ARCALYST Collaboration Operating Profit	**$33.9M**	**$15.0M**	**$113.0M**	**$36.2M**
ARCALYST Licensing Proceeds	$0.0M	$0.0M	$0.0M	$6.0M
Collaboration Expenses[1]	**$16.9M**	**$7.5M**	**$56.5M**	**$24.1M**

Balance Sheet	December 31, 2023	December 31, 2022
Cash, Cash Equivalents and Short-term Investments	**$206.4M**	**$190.6M**

Cash reserves of $206.4M expected to fund current operating plan into at least 2027

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1) Subject to the terms of the definitive agreements between Kiniksa and Regeneron; 50% of ARCALYST Collaboration Operating Profit plus 50% of ARCALYST Licensing Proceeds;
2) Profit Split-Eligible Cost of Goods Sold = total cost of goods sold - amortization of Regeneron milestone payment

Closing Remarks

Sanj K. Patel

Chief Executive Officer

Executed Across Commercial and Clinical-Stage Portfolio in 2023

Setting the stage for continued advancement of Kiniksa's portfolio in 2024 and beyond

2023: Consistent Execution	2024: Driving Growth
90% year-over-year ARCALYST revenue growth	**Broadening reach with recurrent pericarditis physicians and patients with 2024 ARCALYST net revenue expected to be $360-380M**
Fully enrolled patients in Phase 2 trial of abiprubart in rheumatoid arthritis	**Completing the Phase 2 clinical trial of abiprubart in rheumatoid arthritis and advancing the asset in a new indication**
Continued to evaluate BD opportunities for assets with biologic rationale and validated mechanisms	**Continuing to evaluate BD opportunities for assets with biologic rationale and validated mechanisms**
Remained well capitalized with year end 2023 $206.4M cash reserves expected to fund current operating plan into at least 2027[1]	**Maintaining strong financial position to create capital allocation optionality**

1) As used herein the term, "Cash Reserves" means our cash, cash equivalents and short-term investments as of December 31, 2023

Fourth Quarter and Full-Year 2023 Financial Results and Recent Portfolio Execution

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