First Quarter 2022 Financial Results and Corporate Update

MAY 3, 2022

Agenda

- **Introduction** | *Sanj K. Patel, Chief Executive Officer*
- **ARCALYST® Commercial Execution** | *Ross Moat, Chief Commercial Officer*
- **First Quarter 2022 Financial Results** | *Mark Ragosa, Chief Financial Officer*
- **Closing Remarks** | *Sanj K. Patel, Chief Executive Officer*
- **Q&A Session**

KINIKSA

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 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 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 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, and measures taken in response to the pandemic, 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; 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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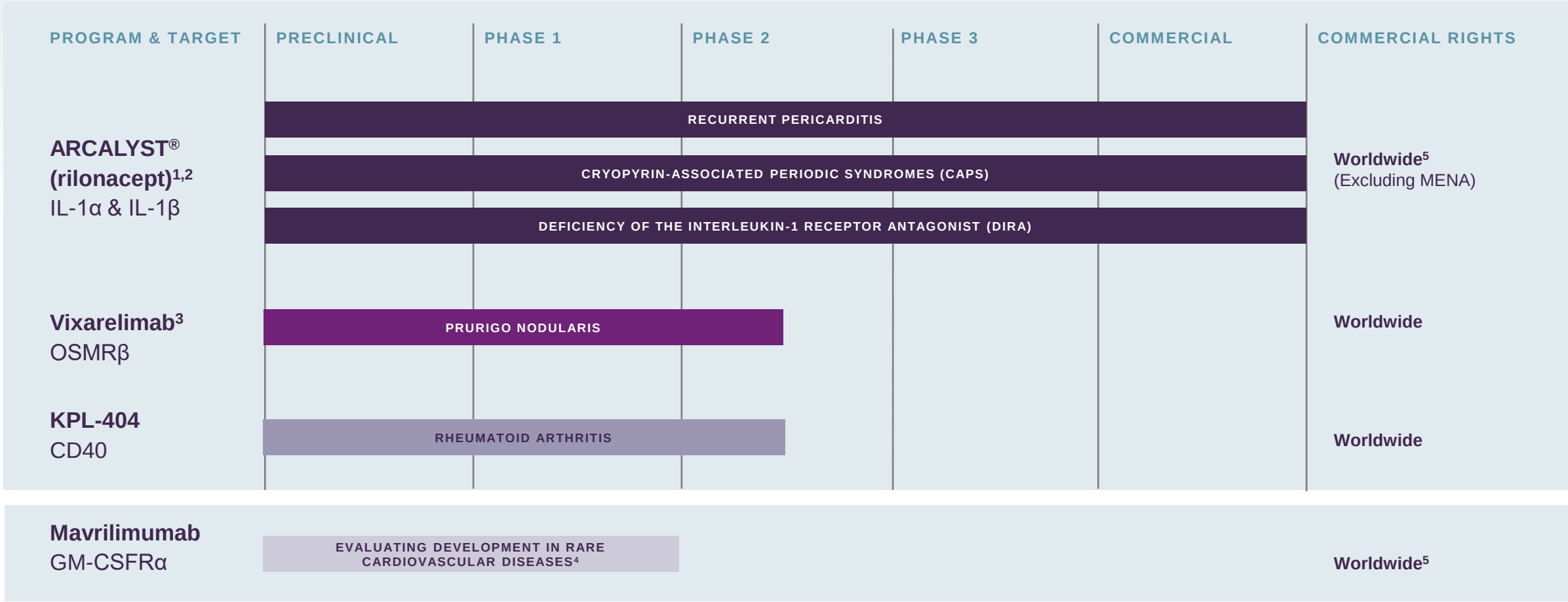
Introduction

Sanj K. Patel
Chief Executive Officer

Portfolio of Four Immune-Modulating Assets



1) Approved in the U.S; 2) The FDA granted Breakthrough Therapy designation to ARCALYST for recurrent pericarditis in 2019; the FDA granted Orphan Drug exclusivity to ARCALYST in March 2021 for the treatment of recurrent pericarditis and reduction in risk of recurrence in adults and pediatric patients 12 years and older. The European Commission granted Orphan Drug designation to ARCALYST for the treatment of idiopathic pericarditis in 2020.; 3) The FDA granted Breakthrough Therapy designation to vixarelimab for the treatment of pruritus associated with prurigo nodularis in 2020; 4) Phase 2 clinical trials of mavrilimumab in rheumatoid arthritis and giant cell arteritis achieved their primary and secondary endpoints with statistical significance; 5) Kiniksa granted Huadong Medicine exclusive rights in the Asia Pacific Region, excluding Japan; IL-1α = interleukin-1α ; IL-1β = interleukin-1β; GM-CSFRα = granulocyte macrophage colony stimulating factor receptor alpha; OSMRβ = oncostatin M receptor beta; MENA = Middle East and North Africa

ARCALYST Commercial Execution

Ross Moat
Chief Commercial Officer

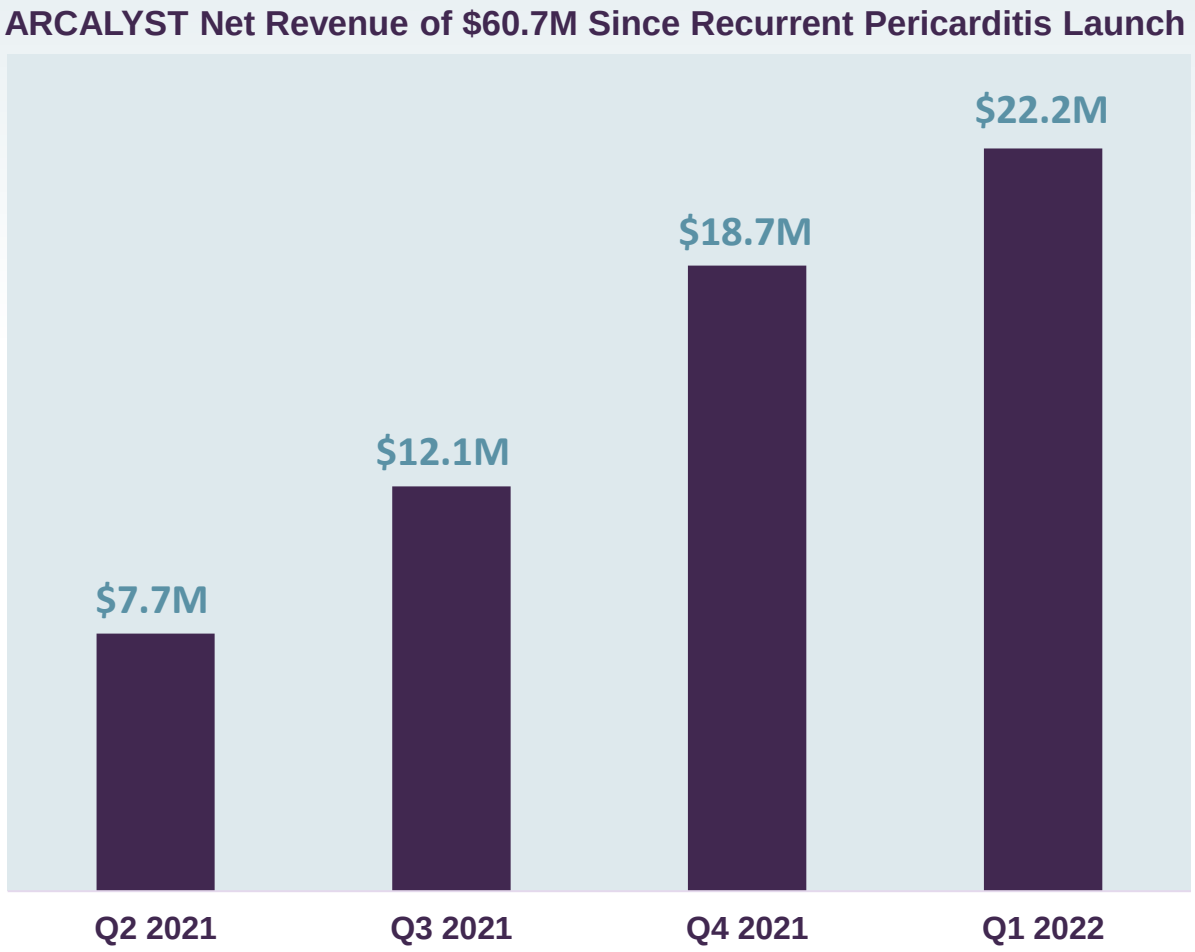
Robust Commercial Execution led to Continued ARCALYST Growth in Q1 2022

Net Revenue

- ARCALYST net revenue for Q1 2022 was $22.2 million
- Represents $3.5 million (+19%) net revenue growth over Q4 2021 despite headwinds from transient Q1 payer dynamics

Revenue Drivers

- Strong recurrent pericarditis demand was the primary growth lever, driven by new patient initiations, strong adherence and compliance.
- CAPS and DIRA patient demand remained stable and broadly consistent with the previous quarters.
- Growth rate represents continued uptake and adoption of ARCALYST from prescribers, payers and patients in this previously unmet and debilitating autoinflammatory cardiovascular disease.



Kiniksa is expecting 2022 ARCALYST net revenue of $115-130 million

CAPS = cryopyrin-associated periodic syndromes; DIRA = deficiency of IL-1 receptor antagonist

Continued Execution and Early Patient Experiences Have Driven Desired Results and Set ARCALYST Up for Strong Future Growth

Continued Broad Prescriber Adoption with Growing Depth

- More than 400 prescribers have prescribed ARCALYST for recurrent pericarditis since approval
- Steady growth in prescribers who have prescribed ARCALYST for two or more recurrent pericarditis patients

Strong Payer Experience

- In Q1, 95% of completed patient enrollment cases for recurrent pericarditis were approved for coverage

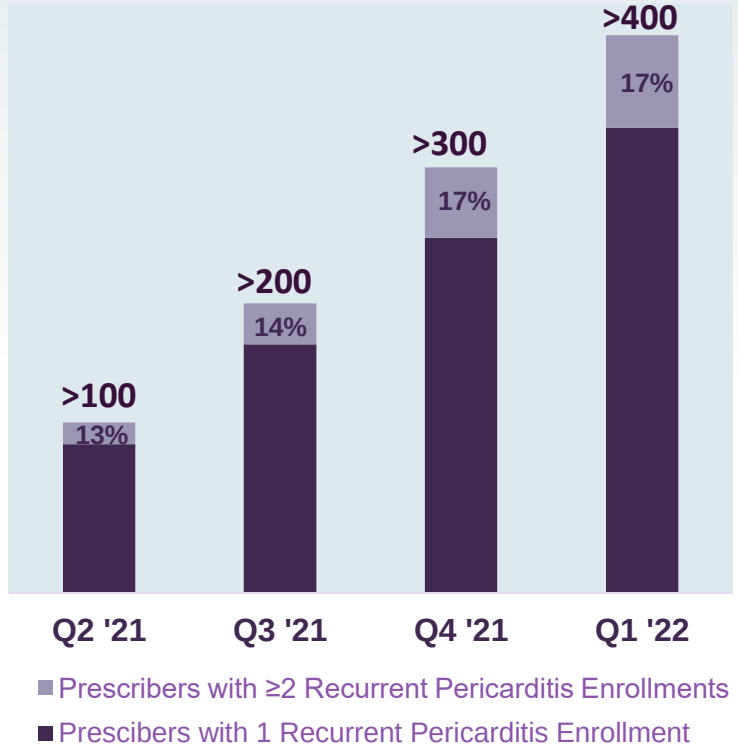
Adherence and Duration

- Adherence to ARCALYST in recurrent pericarditis continues to be strong, with refills generally happening on time
- Approximately 60% of recurrent pericarditis patients who started ARCALYST in Q2 2021 remained on continuous therapy at the end of Q1 2022

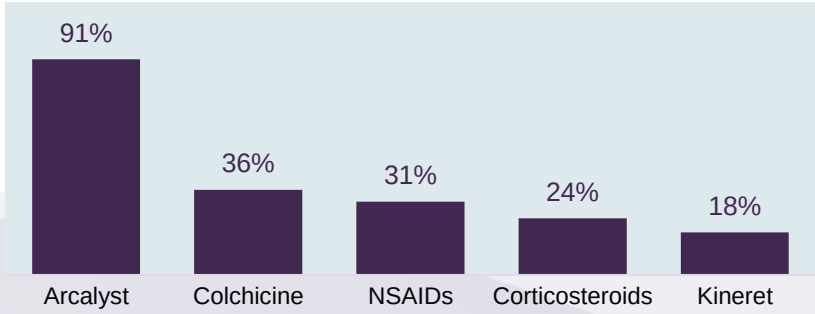
High Satisfaction Among ARCALYST Patients

- Patients report high product satisfaction when treated with ARCALYST; increasing interest in patients sharing their experiences with recurrent pericarditis and on ARCALYST
- Satisfaction leading to minimal patient abandonment of therapy

BREADTH AND DEPTH OF PRESCRIBER ADOPTION



OVERALL PATIENT PRODUCT SATISFACTION[1]



1: Among Patients with prior experience on each therapy for recurrent pericarditis. Data on file.

Expanded Live Education and Sales Engagements Anticipated to Drive Further Adoption

Increasing levels of prescriber awareness with more significant opportunities to further broaden knowledge on horizon

- Return of live national and regional conferences after pandemic move to virtual
- Significant attendee engagement at American College of Cardiology (ACC), held in April ’22, though booth traffic and product theatre
- American College of Rheumatology (ACR) and American Heart Association (AHA) coming in November 2022

Sales interactions are having a major impact with target base

- Prescribers with recent field sales representative interactions are more knowledgeable and subsequently indicate higher expectation of increasing ARCALYST use

Most new ARCALYST patients continue to come from existing field targets

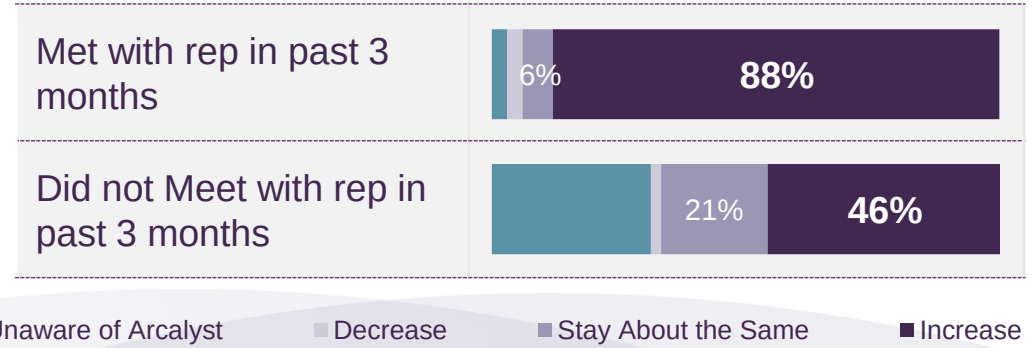
- Additional prescribing also coming from the long tail of prescribers treating 1-2 recurrent pericarditis patients per year

ACC HIGHLIGHTS

ARCALYST BOOTH
>400 individual details with Cardiologists

ARCALYST PRODUCT THEATRE
>120 prescribers attended our branded symposium

EXPECTATION OF ARCALYST PRESCRIBING OVER NEXT 6 MONTHS[1]



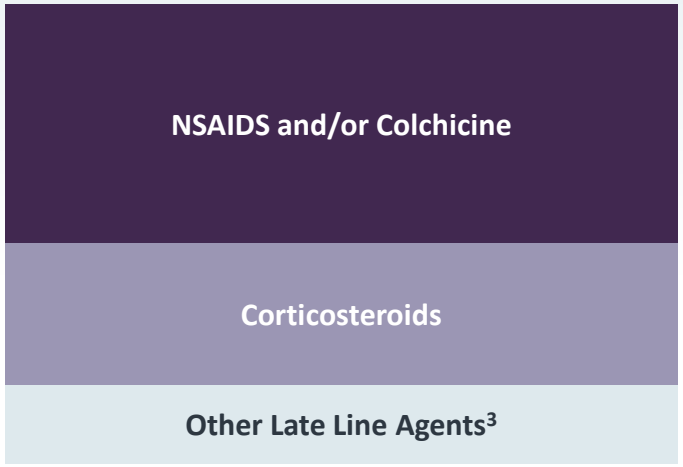
1: Among Cardiologists. Data on file.

Aligned with our Data and Promotional Campaign, we are Seeing Momentum to Move ARCALYST Ahead of, or as an Alternative to, Corticosteroids

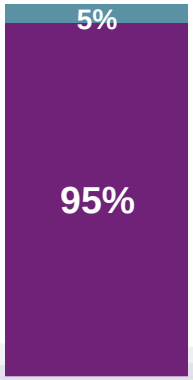
RECURRENT PERICARDITIS THOUGHT LEADER POSITIONING OF ARCALYST IN TREATMENT ALGORITHM[1]

Acute Pericarditis	Index Episode	• NSAIDs (week(s)) • Colchicine (3 months)
Recurrent Pericarditis	First Recurrence	• NSAIDs (weeks to months) • Colchicine (≥6 months)
	Second (or more) Recurrence	• ARCALYST (rilonacept), including ahead of corticosteroids and other drugs if intolerant
Additionally	• ARCALYST can be used in colchicine resistant and/or corticosteroid dependent patients, including while tapering down steroids and other agents	

ARCALYST PATIENTS BY PRIOR PRODUCT[2]



MINIMAL STEP EDITS FOR ARCALYST[1]



Documented step through of corticosteroids or later line therapy

No mandated step through of corticosteroids or later line therapy

1) Wang and Klein. Current Cardiology Reports (2022) 24:23-30. https://doi.org/10.1007/s11886-021-01621-0; 2) Kiniksa Pharmaceuticals data on file 2022. 3) Other late line agents include anakinra, azathioprine, methotrexate

Strong Launch Execution One Year Post Launch

- ✓ Steady, sequential growth in new prescriber adoption and repeat prescribing activity
- ✓ Payers are recognizing the benefits of ARCALYST in this rare and debilitating disease, with a 95% approval rate of all completed cases
- ✓ Patient adherence continues to be strong with extremely high reported product satisfaction
- ✓ 12-month net revenue of $60.7 million, with nearly 20% growth between Q4 2021 and Q1 2022 despite usual specialty payer dynamics

The Kiniksa team remains steadfast and excited by the opportunities ahead, striving to create the new Standard of Care for Recurrent Pericarditis patients

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First Quarter 2022 Financials

Mark Ragosa
Chief Financial Officer

First Quarter 2022 Financial Results

Income Statement	Q1 2022	Q1 2021
Product Revenue	$22.2M	N/A
Collaboration Revenue	$10.0M	N/A
Total Revenue	**$32.2M**	**N/A**
Cost of Goods Sold	$4.2M	N/A
Collaboration Expenses	$8.3M	N/A
Research and Development Expenses	$20.8M	$28.7M
Selling, General and Administrative Expenses	$22.2M	$20.6M
Total Operating Expenses	**$55.5M**	**$49.3M**
Net Loss	**($25.2M)**	**($49.5M)**

Balance Sheet	March 31, 2022	December 31, 2021
Cash, Cash Equivalents and Short-term Investments	$145.6M	$182.2M

Q1 2022 Cash Reserves Expected to Fund Current Operating Plan Into at Least 2024

Closing Remarks

Sanj K. Patel

Chief Executive Officer

Kiniksa is Building a Foundation as an Emerging Leader in the Development of Immune-Modulating Therapies

BY THE NUMBERS

1 FDA-approved therapy

3 Clinical-stage assets

3 Orphan Drug designations

2 Breakthrough Therapy designations

2015 Company founded

2021 Commercial availability of first and only FDA-approved therapy for recurrent pericarditis in the US: ARCALYST® (rilonacept)

DISEASE AREAS

- **Recurrent Pericarditis**
- **Cryopyrin-Associated Periodic Syndromes (CAPS)**
- **Deficiency of IL-1 Receptor Antagonist (DIRA)**
- **Prurigo Nodularis**
- **Rheumatoid Arthritis**
- **Evaluating development in rare cardiovascular diseases**

- Successful commercialization of **ARCALYST** with collaboration becoming profitable after only 3 quarters of sales; guided to an estimated net revenue of $115-130 million, which would represent more than 200% growth year-over-year.
- Data from Phase 2b trial of **vixarelimab** in prurigo nodularis expected in 2H 2022.
- Enrolling a Phase 2 proof-of-concept study for **KPL-404** in rheumatoid arthritis; could provide optionality across a range of other autoimmune diseases.
- Utilizing the strength of the data from our **mavrilimumab** program to evaluate rare cardiovascular diseases that have synergies with our existing commercial infrastructure.
- Determined to continue to help patients in need and fulfill plan of becoming a generational company.

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Cash reserves expected to fund our current operating plan into at least 2024

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