JP Morgan Conference

JANUARY 2024

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; risks arising from our technology transfer of ARCALYST drug substance manufacturing; 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 ability 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.

Who We Are

We’re relentless and focused on putting patients at the center of everything we do as we strive to develop life-changing medicines


KINIKSA

Building a Generational Company by Acquiring, Developing and Commercializing Assets

Kiniksa's Foundation

Creating a company with significant optionality:

- Acquired clinical programs with differentiated mechanisms, with the aim of helping patients with debilitating diseases

January 2024

Advancing a cardiovascular and autoimmune franchise through strategic, data-driven decisions:

- Commercial asset (ARCALYST) delivering growing revenues
- Pipeline asset (KPL-404/abiprubart) advancing through Phase 2

Kiniksa's Future

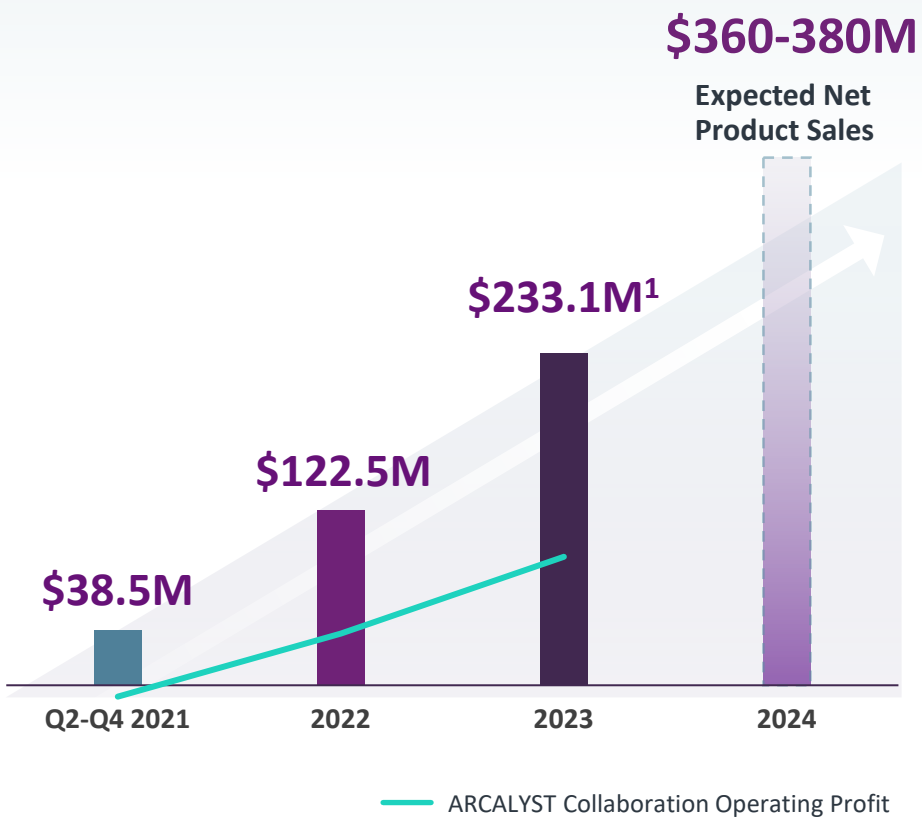
Diligent capital allocation & increasing value:

- Continue to build the recurrent pericarditis market with ARCALYST
- Complete Phase 2 trial of abiprubart and provide next steps for development program
- Maintain a strong financial position
- Allocate capital to the greatest value drivers

Kiniksa Offers a Unique and Compelling Value Proposition

Financial Strength Driven by ARCALYST® Revenue Growth

Accelerating Revenue Since Launch Through 2024 and Beyond



Financial Execution Priorities

- Strong Double-Digit Revenue Growth
- Increasing ARCALYST Collaboration Profit
- Fund Pipeline Growth

1) ARCALYST net product revenue (unaudited)

Establishing ARCALYST as the Standard of Care for Recurrent Pericarditis

Our goal is to help as many recurrent pericarditis patients as possible

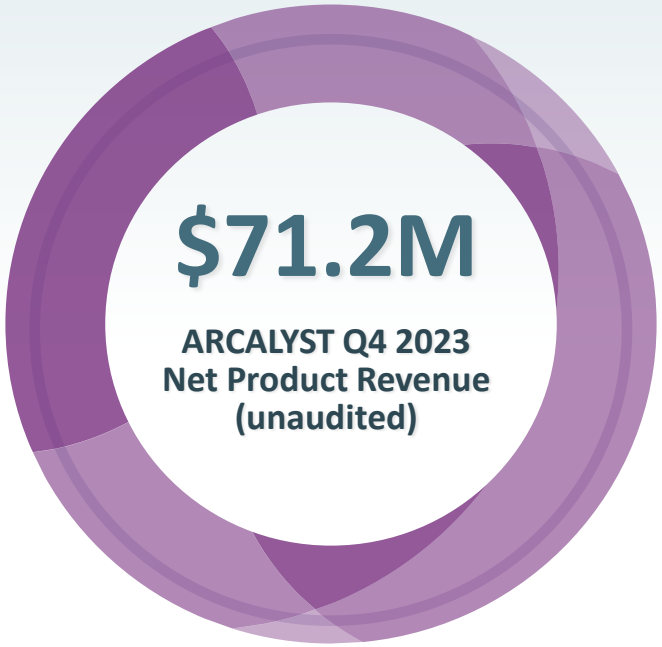
- Emphasis on **salesforce excellence**
- Initially focused on the **~14,000 patients** who have suffered from 2 or more recurrent pericarditis events; there are an additional **~26,000 patients** who are on their first recurrence
- Registry and other initiatives designed to **expand the knowledge** around ARCALYST and recurrent pericarditis
- Providing **personalized treatment support** for patients prescribed ARCALYST

Vanessa

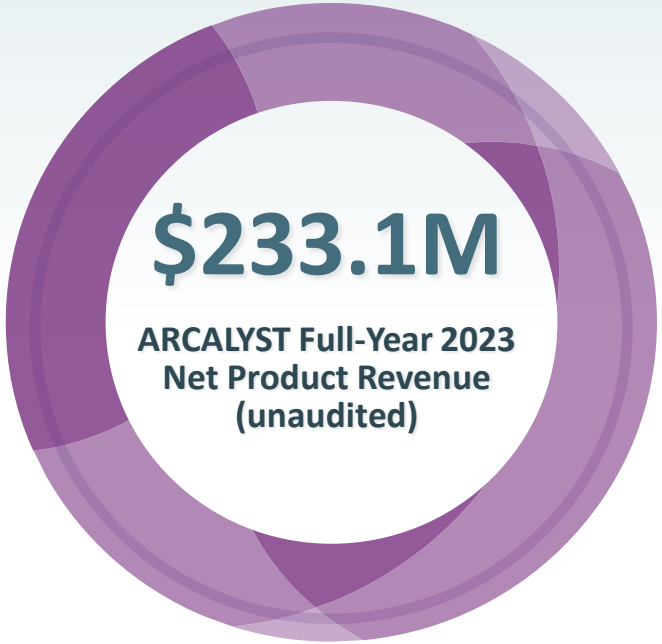
Living with Recurrent Pericarditis

KINIKSA

ARCALYST Commercial Growth in 2023: By the Numbers



~78% annual growth vs Q4 2022



~90% annual growth vs full-year 2022

~80% annual growth vs end of Q4 2022

KINIKSA

Core Priorities to Increase Patient and Physician Adoption

Drive a **proactive mindset** with physicians and patients

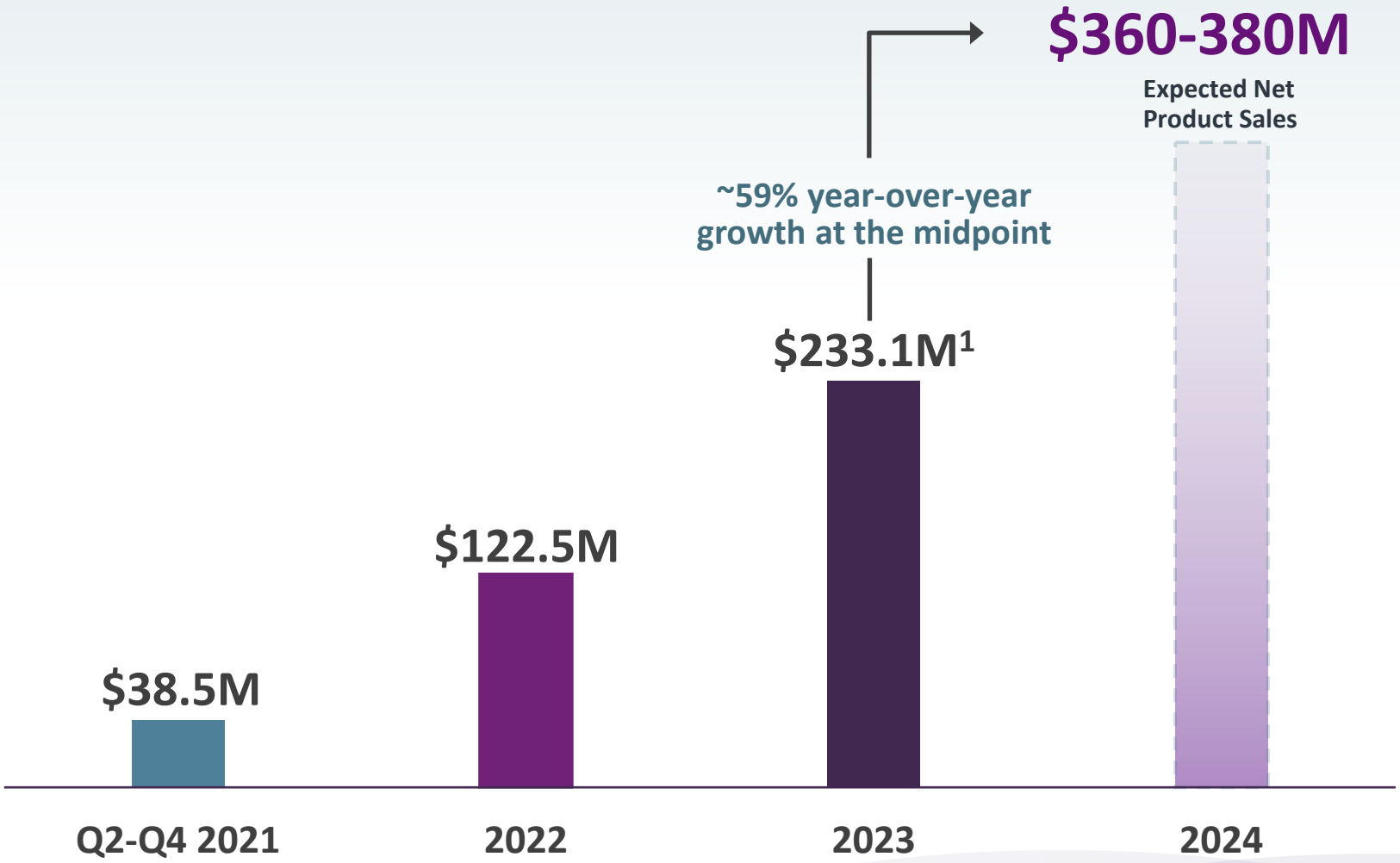
Increase **ARCALYST awareness**

Advance the steroid-sparing **treatment paradigm**

Educate on **duration of disease** and **treatment duration**

2024 ARCALYST Net Product Sales Guidance

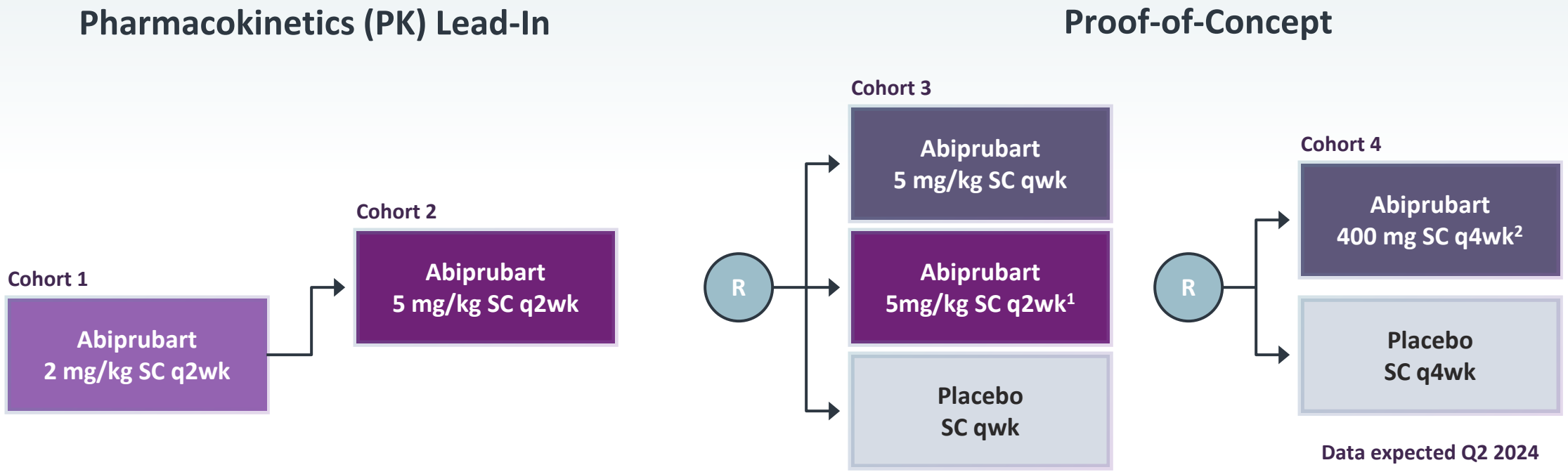
Well-positioned to expand the breadth and depth of ARCALYST in recurrent pericarditis



1) ARCALYST net product revenue (unaudited)

Abiprubart (KPL-404) Phase 2 Trial in Rheumatoid Arthritis

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

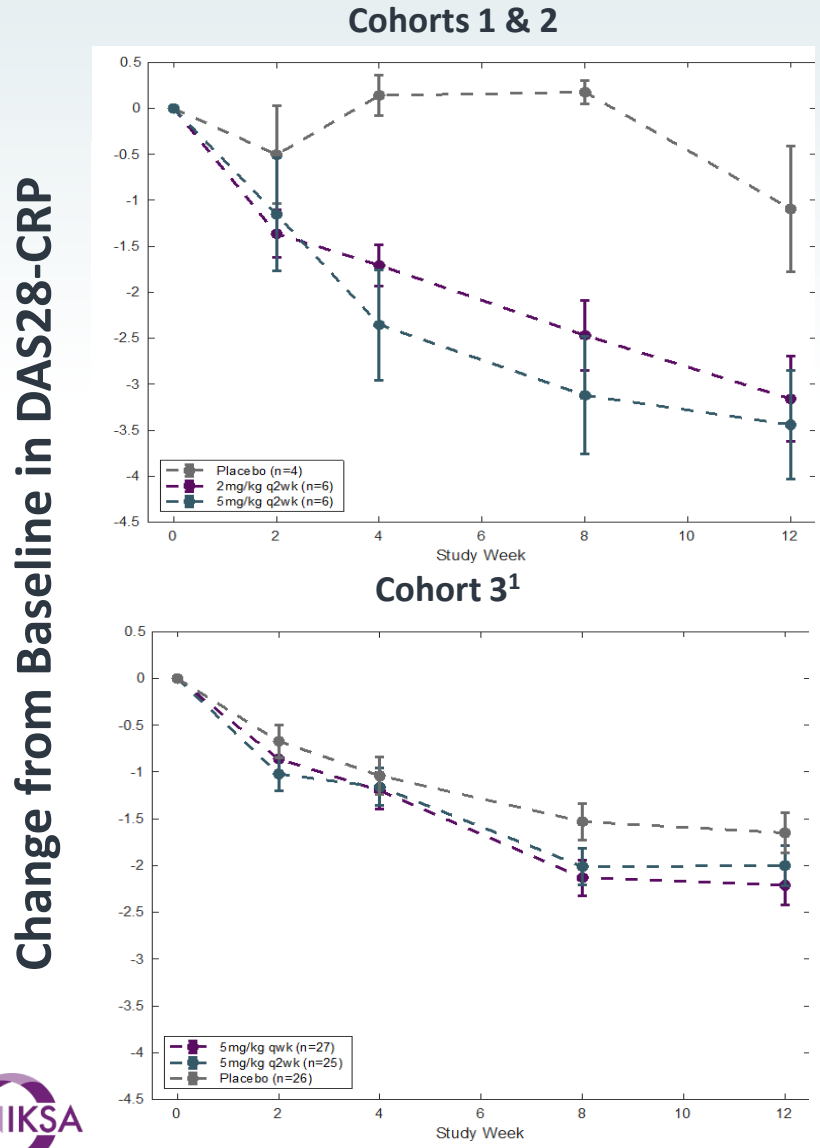


1) The 5 mg/kg SC q2wk group will receive weekly administrations of alternating active investigational product and matching blinded placebo
2) The Cohort 4 Abiprubart 400mg SC q4wk group includes a 600mg loading dose on Day 1

SC = subcutaneous; qwk = every week; q2wk = every other week; q4wk = every four weeks; R = Randomization

Phase 2 Data of Abiprubart in Rheumatoid Arthritis

Meaningful clinical effect in first three cohorts



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

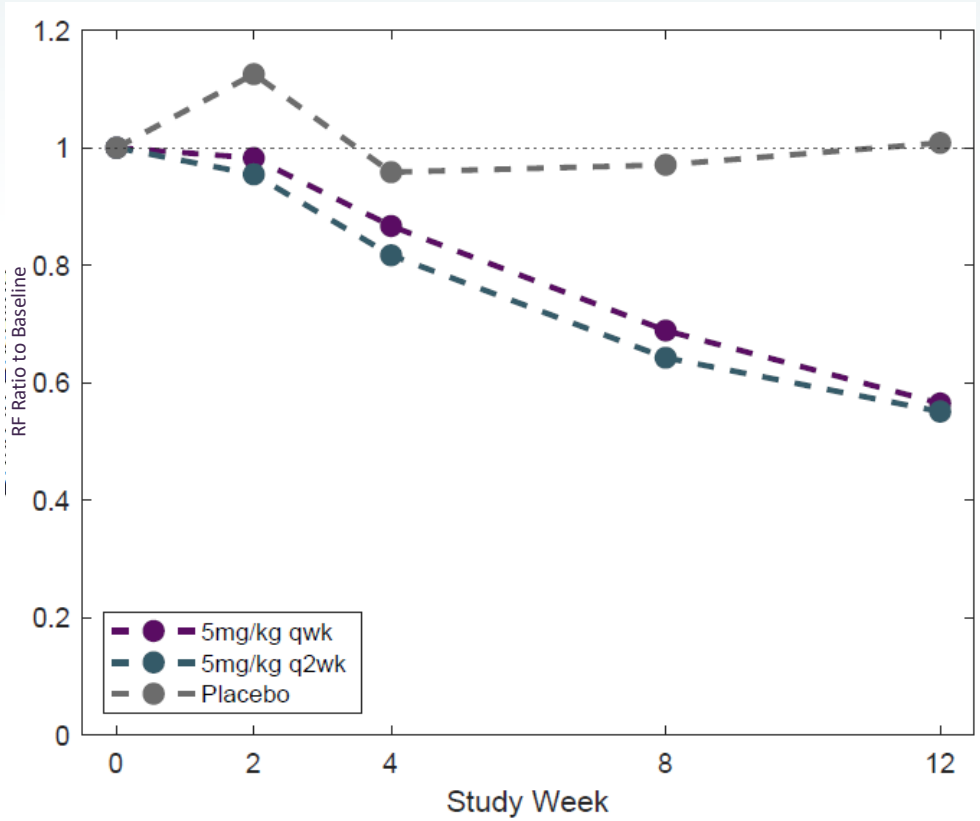
Abiprubart was well-tolerated, and no dose-related adverse experiences were observed

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 Significantly Reduced Rheumatoid Factor by >40% in Cohort 3

Rheumatoid Factor
Geometric Mean Ratio to Baseline[1]



Data demonstrate that abiprubart showed strong biological activity and potential to reduce autoantibody production in autoimmune disease

Data from Cohort 4 (monthly dosing) expected in Q2 2024 together with next steps for the program

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); 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

Progressing Portfolio of Immune-Modulating Assets

Program	Target	Preclinical	Phase 1	Phase 2	Phase 3	Commercial
CARDIOVASCULAR FRANCHISE						
ARCALYST® (rilonacept)[1,2,3] IL-1α & IL-1β	*Recurrent Pericarditis*					
Mavrilimumab[4] GM-CSFRα	*Evaluating Potential Partnership Opportunities*					
AUTOIMMUNE FRANCHISE						
Abiprubart (KPL-404) CD40/CD154	*Rheumatoid Arthritis*					

- **License agreement with Huadong Medicine to develop and commercialize ARCALYST and mavrilimumab across the Asia Pacific Region, excluding Japan**
- **License agreement with Roche Genentech for the global rights to develop and commercialize vixarelimab (anti IL-31 and OSM antibody)**

1) Approved in the U.S.; ARCALYST is also approved in the U.S. for cryopyrin-associated periodic syndromes (CAPS) and deficiency of the interleukin-1 receptor antagonist (DIRA); 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 2021; 3) Kiniksa has worldwide rights, excluding the Middle East and North Africa; Kiniksa granted Huadong Medicine exclusive rights in the Asia Pacific Region, excluding Japan; 4) Phase 2 clinical trials of mavrilimumab in rheumatoid arthritis and giant cell arteritis achieved their primary and secondary endpoints with statistical significance; 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

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 providing next steps for the development program**
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 $206.3M cash reserves expected to fund current operating plan into at least 2027[1]	**Maintaining strong financial position to create capital allocation optionality**

KINIKSA

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