Pharming Group N.V.

IEX Beleggersdag

June 2023

NASDAQ: **PHAR** | EURONEXT Amsterdam: **PHARM**

Forward-looking statements

This presentation may contain forward-looking statements. Forward-looking statements are statements of future expectations that are based on management's current expectations and assumptions and involve known and unknown risks and uncertainties that could cause actual results, performance, or events to differ materially from those expressed or implied in these statements. These forward-looking statements are identified by their use of terms and phrases such as "aim", "ambition", ''anticipate'', ''believe'', ''could'', ''estimate'', ''expect'', ''goals'', ''intend'', ''may'', "milestones", ''objectives'', ''outlook'', ''plan'', ''probably'', ''project'', ''risks'', "schedule", ''seek'', ''should'', ''target'', ''will'' and similar terms and phrases. Examples of forward-looking statements may include statements with respect to timing and progress of Pharming's preclinical studies and clinical trials of its product candidates, Pharming's clinical and commercial prospects, and Pharming's expectations regarding its projected working capital requirements and cash resources, which statements are subject to a number of risks, uncertainties and assumptions, including, but not limited to the scope, progress and expansion of Pharming's clinical trials and ramifications for the cost thereof; and clinical, scientific, regulatory and technical developments. In light of these risks and uncertainties, and other risks and uncertainties that are described in Pharming's 2022 Annual Report and the Annual Report on Form 20-F for the year ended December 31, 2022, filed with the U.S. Securities and Exchange Commission, the events and circumstances discussed in such forward-looking statements may not occur, and Pharming's actual results could differ materially and adversely from those anticipated or implied thereby. All forward-looking statements contained in this presentation are expressly qualified in their entirety by the cautionary statements contained or referred to in this section. Readers should not place undue reliance on forward-looking statements. Any forward-looking statements speak only as of the date of this presentation and are based on information available to Pharming as of the date of this presentation. Pharming does not undertake any obligation to publicly update or revise any forward-looking statement as a result of new information, future events or other information.

Building a sustainable rare disease business

Market RUCONEST® in all major international markets

Positive cash flow from RUCONEST® helps fund Joenja® (leniolisib) and pipeline development and management

Global approvals and commercialization of Joenja® (leniolisib)

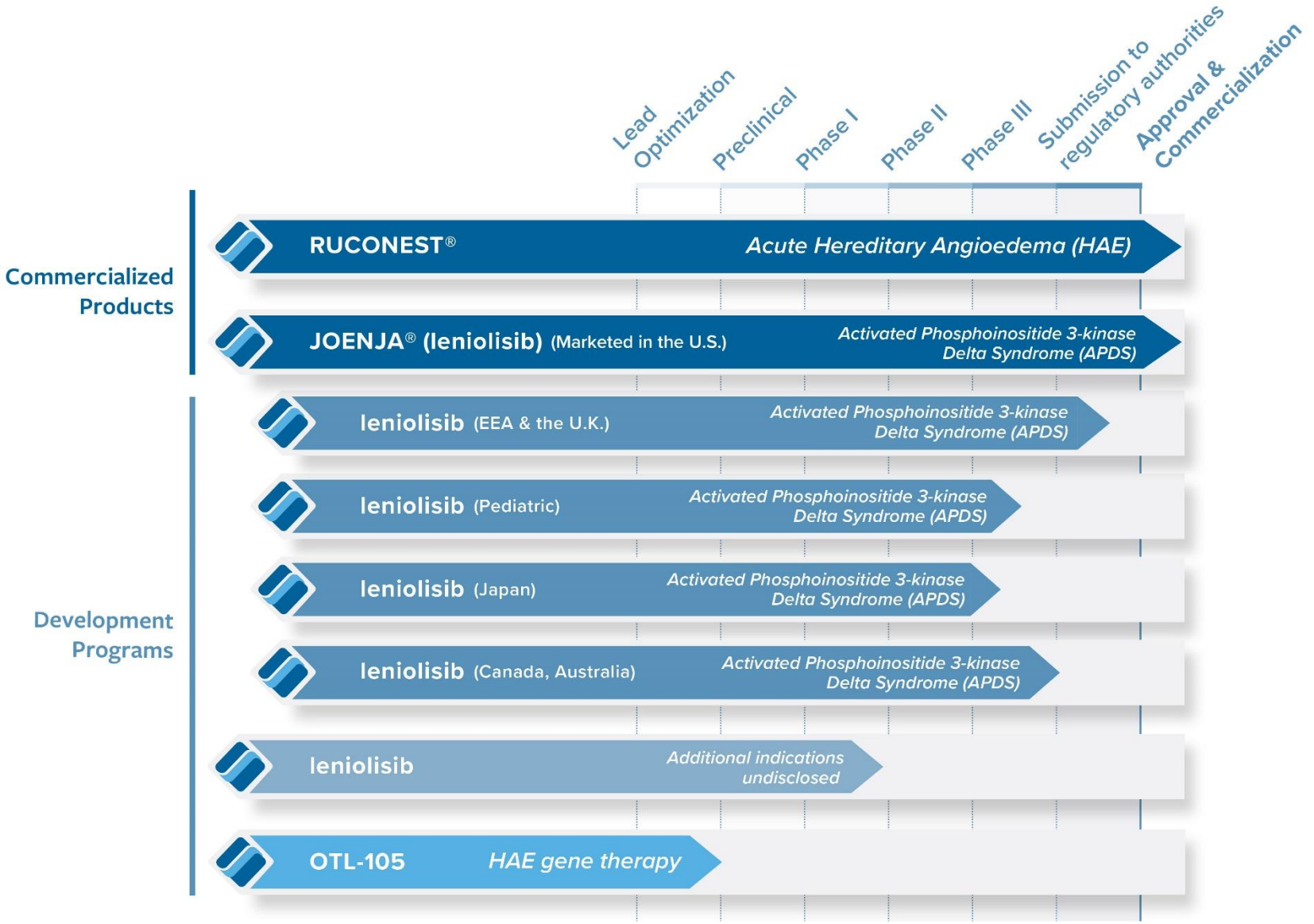
Successful commercialization of Joenja® (leniolisib) for APDS and additional rare disease indications

Ongoing pipeline development and management of rare disease assets

Advance internal projects and potential acquisitions of new, late-stage assets through in-licensing and M&A

Pharming is committed to transforming the lives of patients who suffer from rare diseases

Pipeline – multiple commercial stage rare disease products



Strong rare disease product commercial infrastructure

- Dedicated sales force and marketing in US, EU, and MENA
- Market access teams
- Patient support and reimbursement teams
- Disease educators and specialists for APDS and HAE
- Medical Affairs teams
- High conference penetration & Support for educational KOL speaker programs

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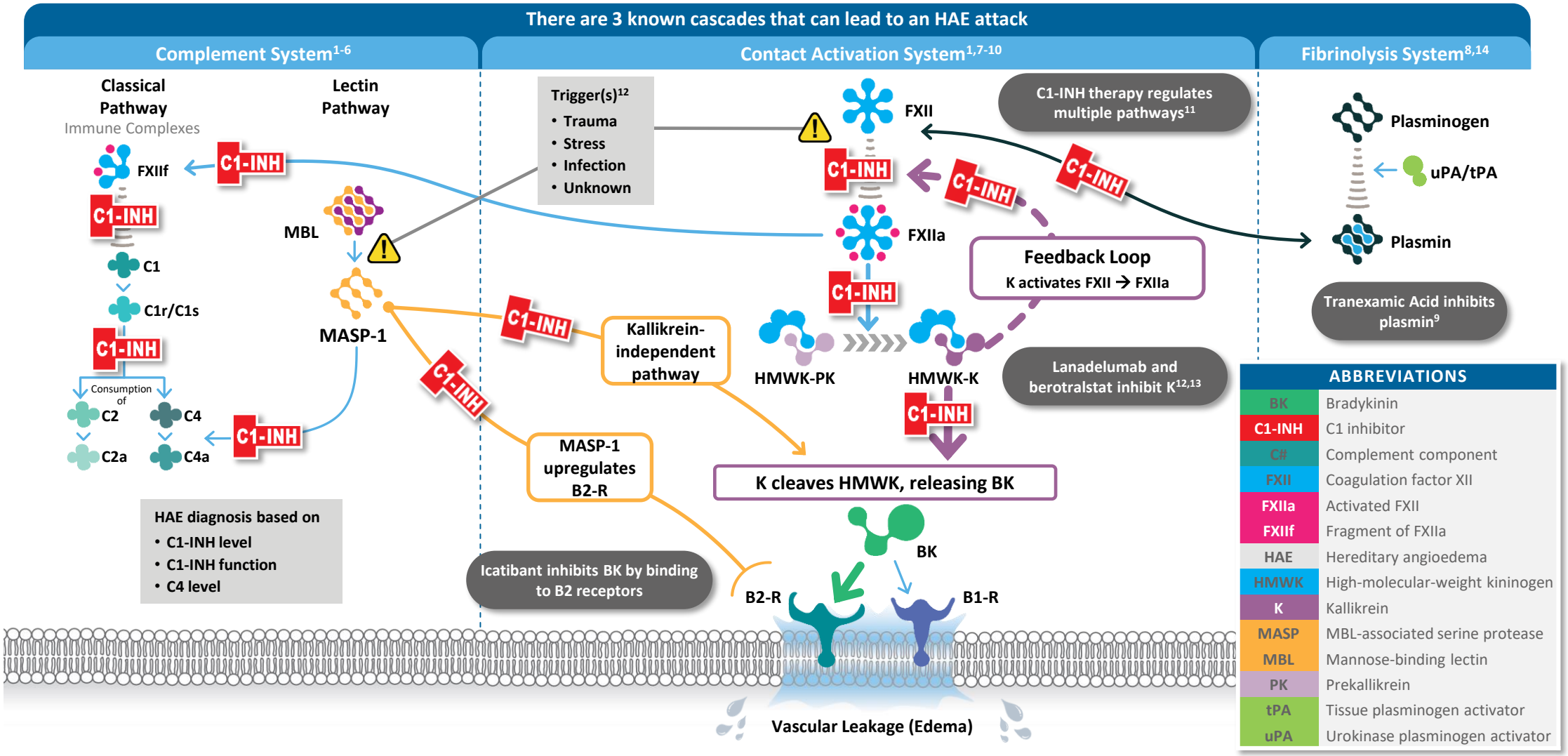
RUCONEST®

C1-INH targets the root cause of HAE



Adapted from a clinical cascade developed in partnership with Dr. Allen Kaplan. This is a current scientific understanding of the cascades. Clinical implications are unknown.

RUCONEST® (rhC1INH): durable commercialized asset

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RUCONEST® sales >US$200m (trailing 12 months)

Outlook of single digit revenue growth for 2023

The only recombinant treatment that targets the root cause of HAE by replacing missing or dysfunctional C1-INH

Well-tolerated and effective treatment option for acute hereditary angioedema (HAE) - including breakthrough attacks

Second most prescribed product detailed for acute attacks

97% of acute attacks needed just one dose of RUCONEST®[1]

93% of attacks were stopped with RUCONEST® for at least three days[2]

Patients are well managed and feel confident to administer treatment themselves[3]

References: 1. RUCONEST®. Prescribing information. Pharming Healthcare Inc; 2020. 2. Bernstein JA, et al. *Ann Allergy Asthma Immunol.* 2017;118(4):452-453. 3. Data on file. Pharming Healthcare Inc; 2019
The most common adverse reactions (incidence ≥2%) were headache, nausea and diarrhea. The most serious adverse reaction reported in clinical trials was anaphylaxis.

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APDS Overview

APDS is a rare, primary immunodeficiency (PI) first characterized in 2013

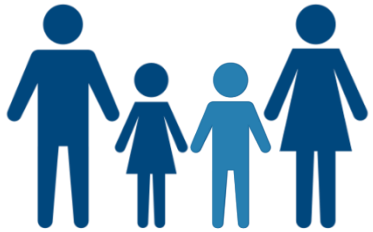
Activated phosphoinositide 3-kinase delta (PI3Kδ) syndrome (APDS) affects >1500 patients*

To date, Pharming has identified >500 of these patients

(as of December 2022 for US, Europe, UK, Japan, Canada, Australia)

Until now, treatments for APDS have addressed the symptoms of the disease which manifest early in childhood, but not the root cause of APDS

Without an indicated treatment specifically for APDS, physicians could only manage symptoms



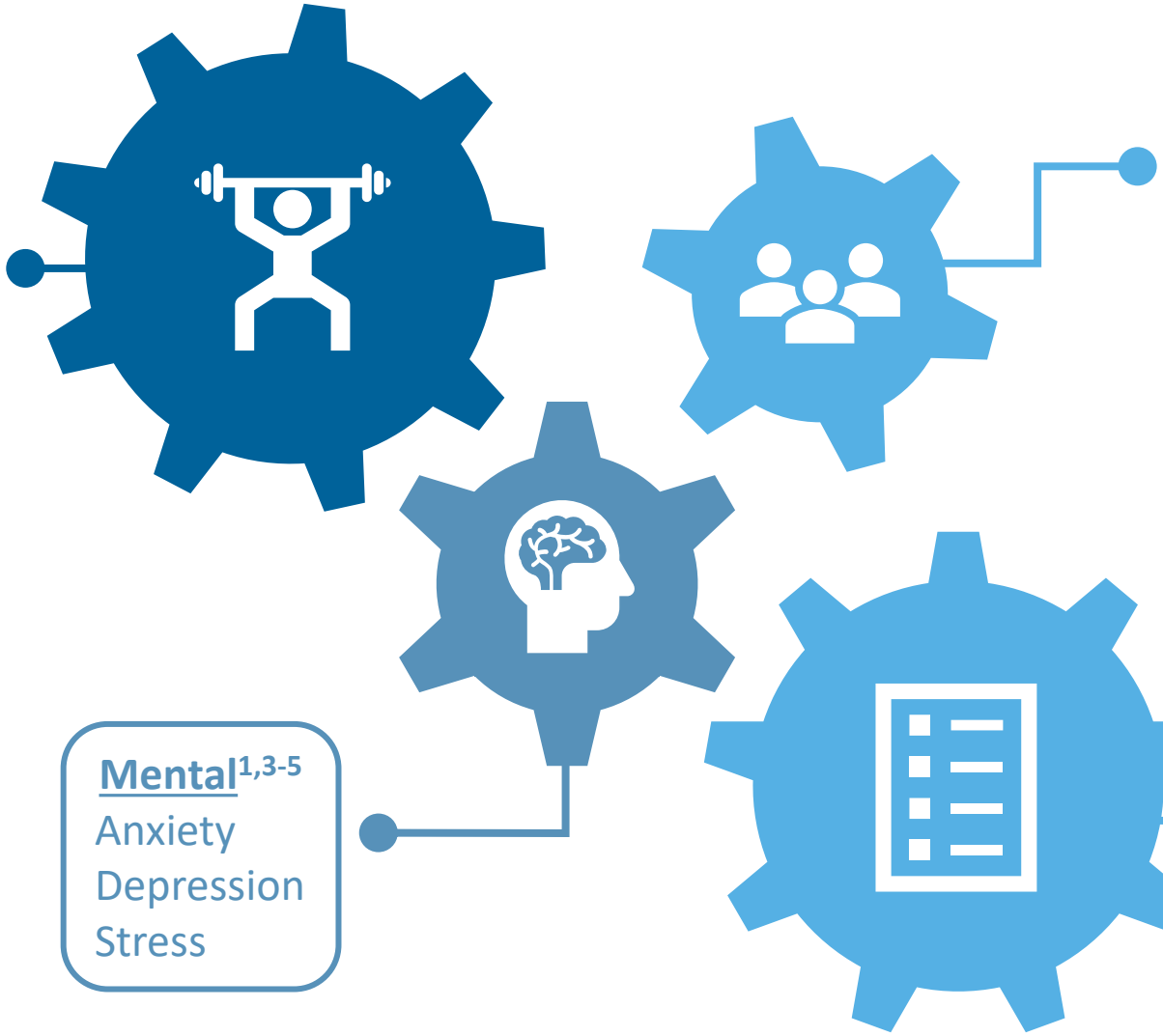
The signs and symptoms of APDS vary widely, even among family members with the same genetic variant, resulting in potential delays in diagnosis and care

A genetic test can provide a definitive diagnosis of APDS

*Size based on estimate of 1.5 APDS patients per million (based on available literature) for US, Europe, UK, Japan, Canada and Australia

APDS can impact many facets of life

Physical[1,2]
Frequent infections
Swollen glands
Shortness of breath
Coughing/wheezing
Chest or joint pain
Fatigue
Inability to exercise
Hearing loss
Diarrhea
Skin problems



Social[3,4]
Missing school, work, or daily activities

Treatment Burden[1-4]
Frequent hospitalizations
Surgeries
Visiting multiple doctors
Invasive or time-consuming treatments

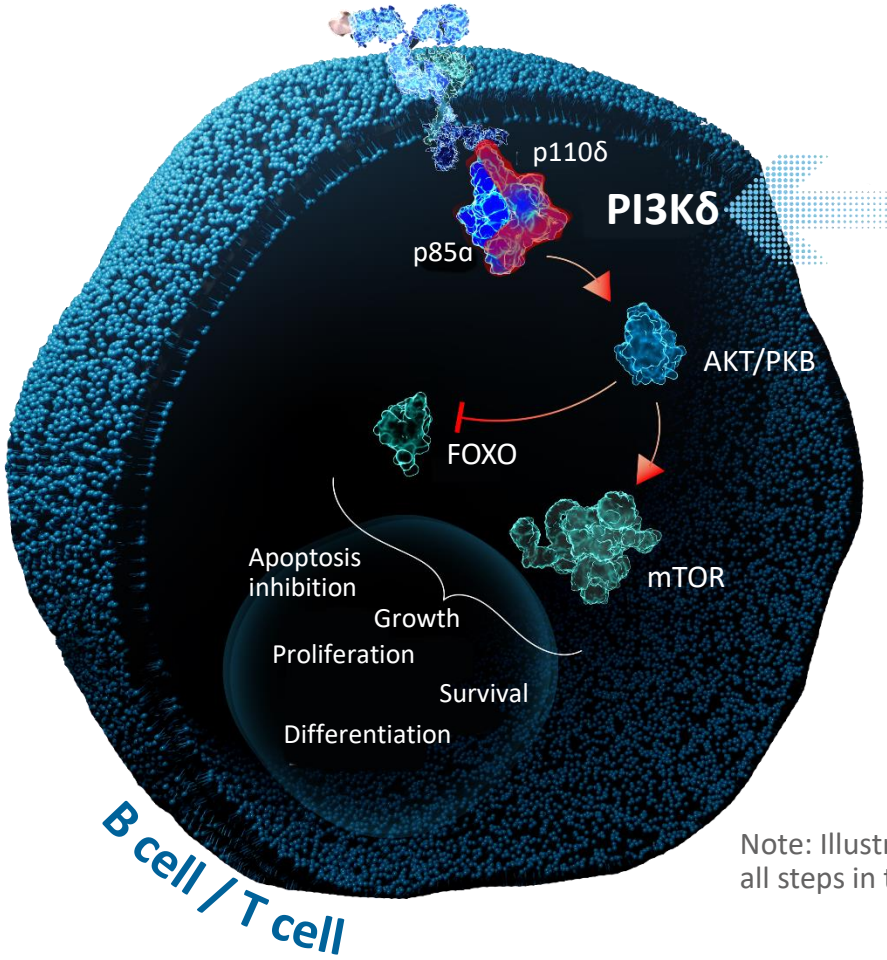
Mental[1,3-5]
Anxiety
Depression
Stress

APDS, activated phosphoinositide 3-kinase δ syndrome.

1. Coulter TI, et al. *J Allergy Clin Immunol*. 2017;139(2):597-606. 2. Elkaim E, et al. *J Allergy Clin Immunol*. 2016;138(1):210-218. 3. Rider NL, et al. *J Clin Immunol*. 2017;37(5):461-475.
4. Jiang F, et al. *Allergy Asthma Clin Immunol*. 2015;11:27. 5. Kuburovic NB, et al. *Patient Prefer Adherence*. 2014;8:323-330.

Genetic defect leads to PI3Kδ hyperactivity, disrupting immune cell balance

Hyperactive PI3Kδ results in dysregulated B and T cell development[1-3]

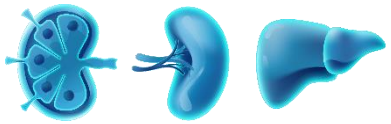


The PI3Kδ enzyme is at the beginning of a complex signaling pathway

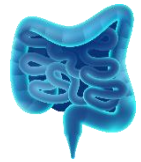
Note: Illustration does not include all steps in the signaling pathway.

Immune imbalance leads to diverse signs and symptoms[1,4-6]

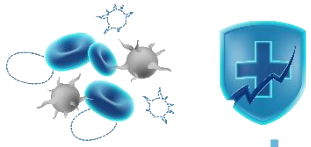
Severe, recurrent, persistent infections
- Sinopulmonary
- Herpesvirus (especially EBV and CMV)



Lymphoproliferation
- Lymphadenopathy
- Splenomegaly/hepatomegaly
- Nodular lymphoid hyperplasia



Enteropathy



Autoimmunity
- Cytopenias
- Autoimmune disorders
- Autoinflammatory disorders

Bronchiectasis

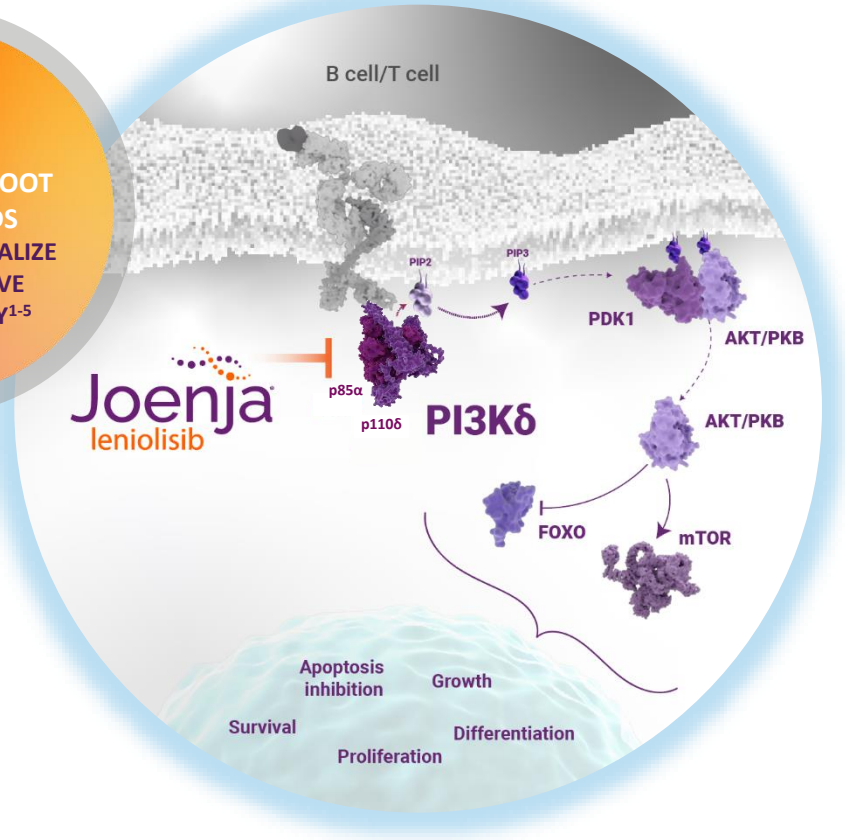
Lymphoma

FOXO, forkhead box O; mTOR, mammalian target of rapamycin; PI3Kδ, phosphoinositide 3-kinase delta; PKB, protein kinase B.

1. Lucas CL, et al. *Nat Immunol*. 2014;15(1):88-97. 2. Fruman DA, et al. *Cell*. 2017;170(4):605-635. 3. Okkenhaug K, Vanhaesebroeck B. *Nat Rev Immunol*. 2003;3(4):317-330. 4. Coulter TI, et al. *J Allergy Clin Immunol*. 2017;139(2):597-606. 5. Elkaim E, et al. *J Allergy Clin Immunol*. 2016;138(1):210-218. 6. Jamee M, et al. *Clin Rev Allergy Immunol*. 2020;59(3):323-333.

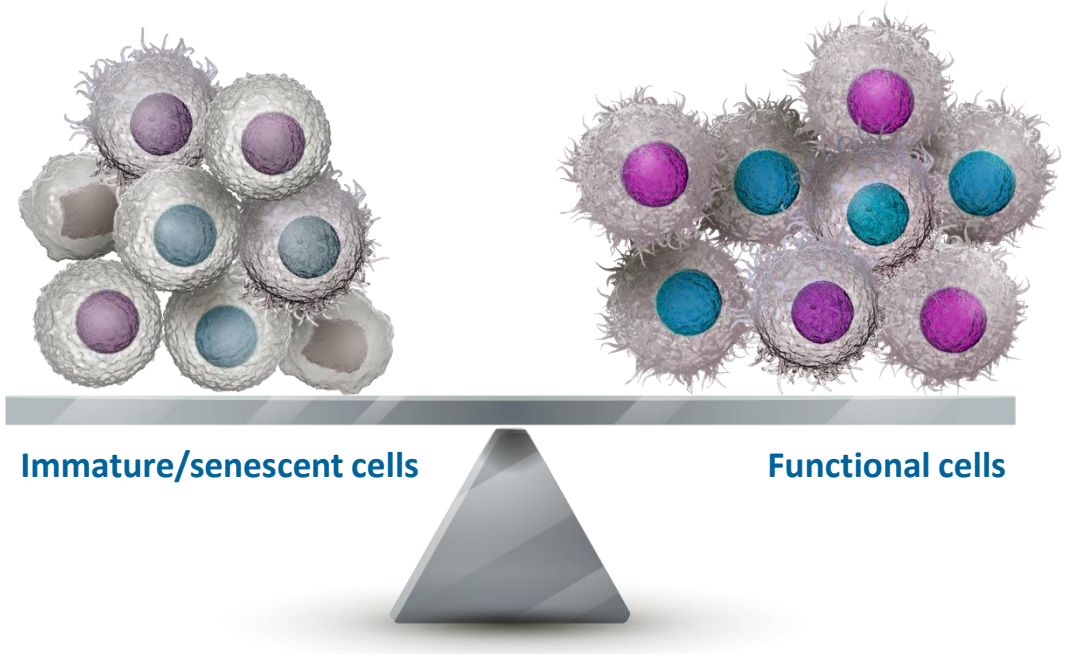
Joenja®: immune modulator that targets the root cause of APDS

JOENJA WAS DESIGNED TO TARGET THE ROOT CAUSE OF APDS TO HELP NORMALIZE THE HYPERACTIVE PI3Kδ PATHWAY[1-5]



Note: Illustration does not include all steps in the signaling pathway.

Joenja® facilitates a balanced PI3Kδ pathway to support proper immune function[6]



This is a graphical representation of a complex biological process.

AKT/PKB, protein kinase B; FOXO, forkhead box O; mTOR, mammalian target of rapamycin; p85α, the regulatory subunit of the PI3Kδ enzyme; p110δ, the catalytic subunit of the PI3Kδ enzyme.

1. Fruman DA, et al. *Cell*. 2017;170(4):605-635. 2. Okkenhaug K, Vanhaesebroeck B. *Nat Rev Immunol*. 2003;3(4):317-330. 3. Hoegenauer K, et al. *ACS Med Chem Lett*. 2017;8(9):975-980. 4. Rao VK, et al. *Blood*. 2017;130(21):2307-2316. 5. Rao VK, et al. *Blood*. 2023;141(9):971-983. 6. Nunes-Santos CJ, et al. *J Allergy Clin Immunol*. 2019;143(5):1676-1687.

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Joenja® (leniolisib)

FDA approval of Joenja®: a much-needed treatment for patients with APDS and another win for Pharming

Joenja® (leniolisib) is a prescription medicine that is used to treat activated phosphoinositide 3-kinase delta (PI3Kδ) syndrome (APDS) in adults and pediatric patients 12 years of age and older

In a randomized placebo-controlled trial of patients with APDS

- Joenja® met both primary end points with significant efficacy results
- Demonstrated significant improvement in other secondary and exploratory parameters

There were no drug-related serious adverse events or study withdrawals in Joenja® trials

Joenja® reported additional findings from an ongoing long-term open-label extension study interim analysis: reductions/discontinuations in IRT and reduction in infection rates

Extension study interim analysis demonstrated safety consistent with the randomized, controlled trial. We continue to collect observational long-term data on lymphadenopathy, naive B cells and IgM

Pharming is well-positioned to hit the ground running with Joenja®

Please see Important Safety Information and full Prescribing Information available at joenja.com

Rao VK, et al. Blood. 2023;141(9):971-983
Rao VK, et al. Poster presented at: 64th Annual American Society of Hematology Annual Meeting; December 10-13, 2022; New Orleans, LA.

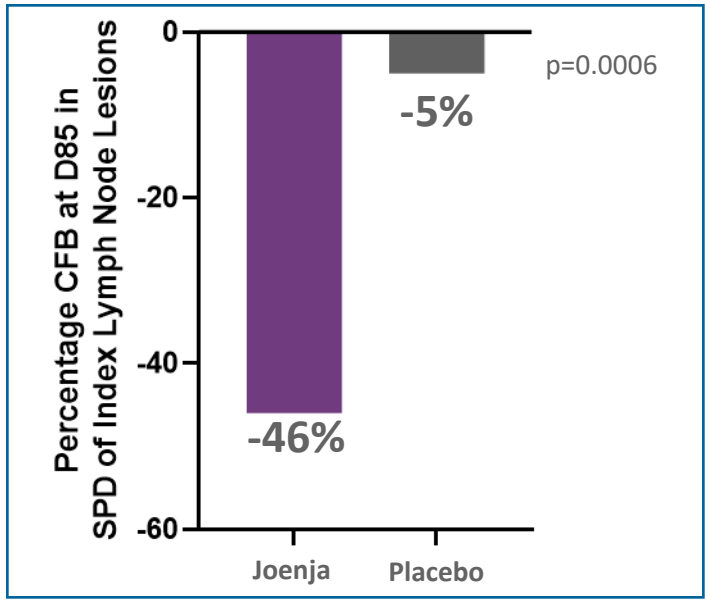
Joenja® addresses the underlying cause of APDS to help restore immune balance – Phase 3 co-primary endpoints

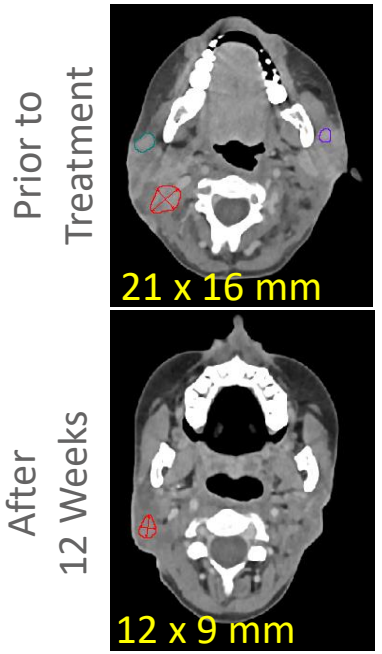
At 12 weeks Joenja® decreased lymphadenopathy and increased naïve B cells

Immune Dysregulation

Change from baseline in index nodes*

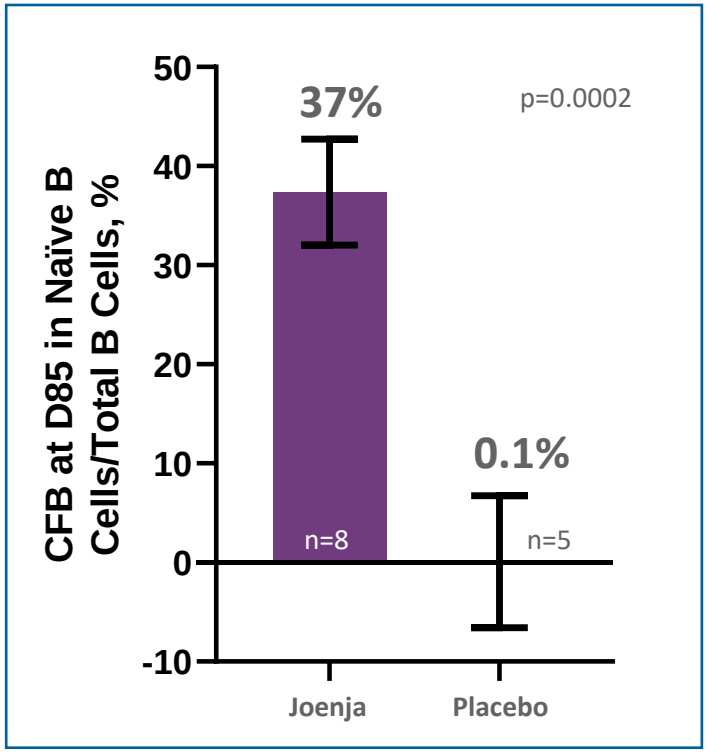
Log_{10}-transformed SPD of index lesions	Joenja (n=18)	Placebo (n=8)
Baseline mean (SD)	3.03 (0.42)	3.05 (0.39)
Change from baseline, LS mean (SE)	-0.27 (0.04)	-0.02 (0.05)
Difference vs placebo (95% CI)		-0.25 (-0.38, -0.12)





Immune Deficiency

Change from baseline in naïve B cells†



Data were analyzed using an ANCOVA model with treatment as a fixed effect and baseline as a covariate. Use of glucocorticoids and IRT at baseline were both included as categorical (Yes/No) covariates. Baseline is defined as the arithmetic mean of the baseline and D1 values when both are available, and if either baseline or the D1 value is missing, the existing value is used. P-value is 2-sided. Least square means are graphed. Error bars are standard error of the mean.

*The analysis excluded 2 patients from each treatment group due to protocol deviations and 1 Joenja patient having complete resolution of the index lesion identified at baseline.

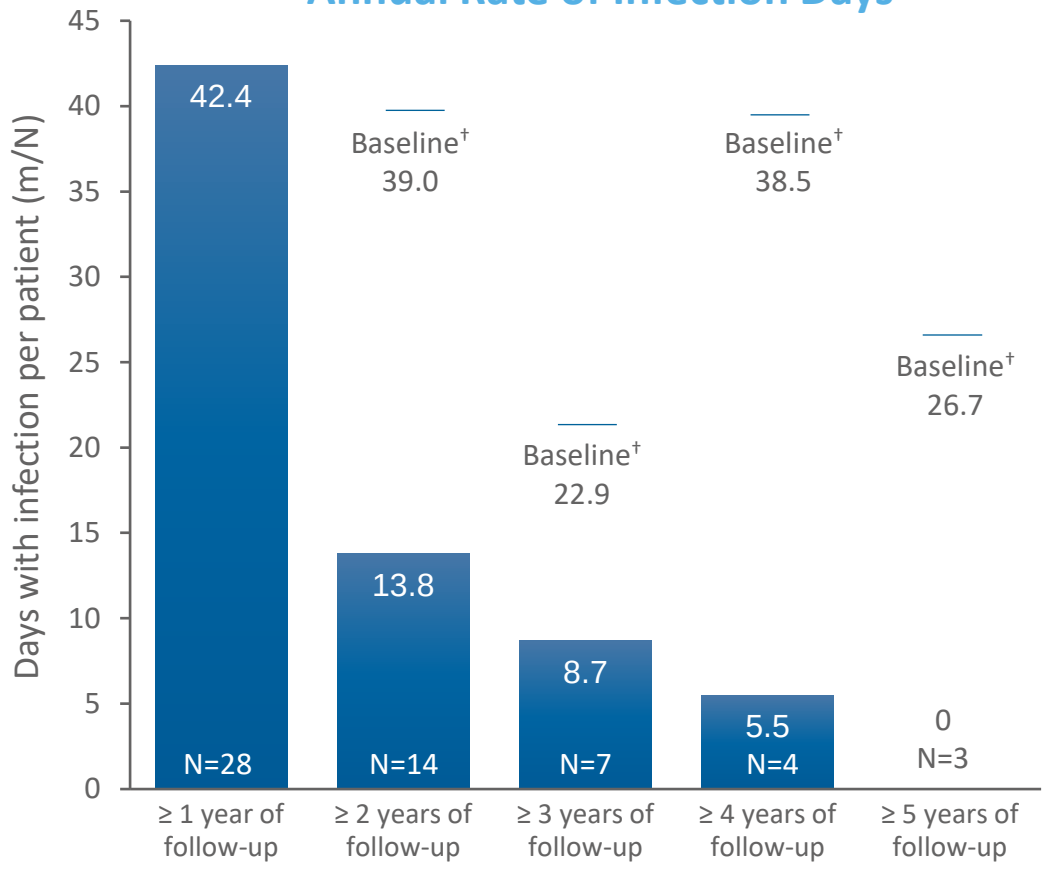
†Out of 27 patients in the PD analysis set, 13 patients met the analysis requirements, including having a percentage of <48% of naïve B cells at baseline, to form the B-PD analysis set.

Joenja [package insert]. Leiden, The Netherlands: Pharming Technologies B.V.; 2023.

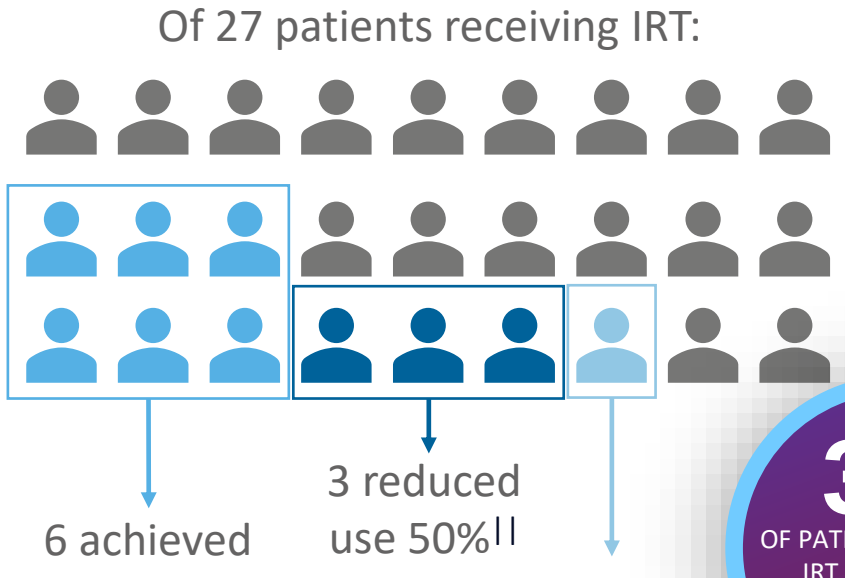
Please see Important Safety Information and full Prescribing Information available at joenja.com

Open-label extension interim analysis of days spent with infections and IRT reduction

Annual Rate of Infection Days*



Physician-reported IRT Reduction‡



37% OF PATIENTS RECEIVING IRT REDUCED OR DISCONTINUED DOSE

At the data cutoff, **4** of the patients who were **IRT free** had been so for **1 – 2.5 years**

Although safety was the primary objective of the open-label study, this post hoc analysis from the open-label study was not powered to provide any statistical significance of efficacy and therefore no conclusions should be drawn.

*Infections that developed during the study were reported as adverse events. Investigators were requested to inquire about signs and symptoms of infections at each visit, with a particular focus on bacterial enterocolitis. Patients were not provided an infection diary to document infections occurring between visits. One patient was excluded from the analysis due to an incorrect year that was recorded for an infection.
†Baseline infections are each group's year 1 annual rate of infections. N values changed because patients were in the OLE for different lengths of time. ‡Data on concomitant medication usage was reported at each patient visit. §One patient had a subsequent one-time dose. ||One patient achieved IRT freedom for 3 months but subsequently restarted IRT.
IRT, immunoglobulin replacement therapy; **m**, number of infection days; **N**, number of patients in follow-up category.
Rao VK, et al. Poster presented at: *64th Annual American Society of Hematology Annual Meeting*; December 10-13, 2022; New Orleans, LA.
Please see Important Safety Information and full Prescribing Information available at joenja.com

Joenja® – looking ahead

Joenja® launched & reimbursed commercial shipments to patients commenced early April

Europe – CHMP opinion on MAA expected 2H23 (approval ~ 2 months later)

UK – MHRA filing expected 2H23 (approval ~2 months later)

Initiation of Japan clinical study in 1H23 (Orphan Drug Designation ODD granted May 2023)

Development ongoing for pediatric patients 4 to 11 years old

Initiation of second pediatric study in children 1 to 6 years in 3Q23

Joenja® set up for commercial success

Commercial Field Team

Rare Disease Team of 27 focused on Allergy/Immunology

Institutional Team of 27 focused on multiple specialties

Patient Identification

- Work with HCPs to further identify patients and get them tested
- APDS clinical educators assist with family mapping

navigateAPDS by Pharming

All about APDS
Activated PI3K Delta Syndrome

Support Services

- Dedicated support, education and resources for patients and caregivers through the APDS Assist patient support program
- APDS Care Coordinators provide support for onboarding, coverage assistance and financial support resources

Patient Access

APDS Assist

- Partnered exclusively with PANTHERx Specialty Pharmacy
- Starter and Bridge program enables rapid access while navigating coverage
- Copay Assistance and Patient Assistance Programs for eligible patients ensure affordability to care

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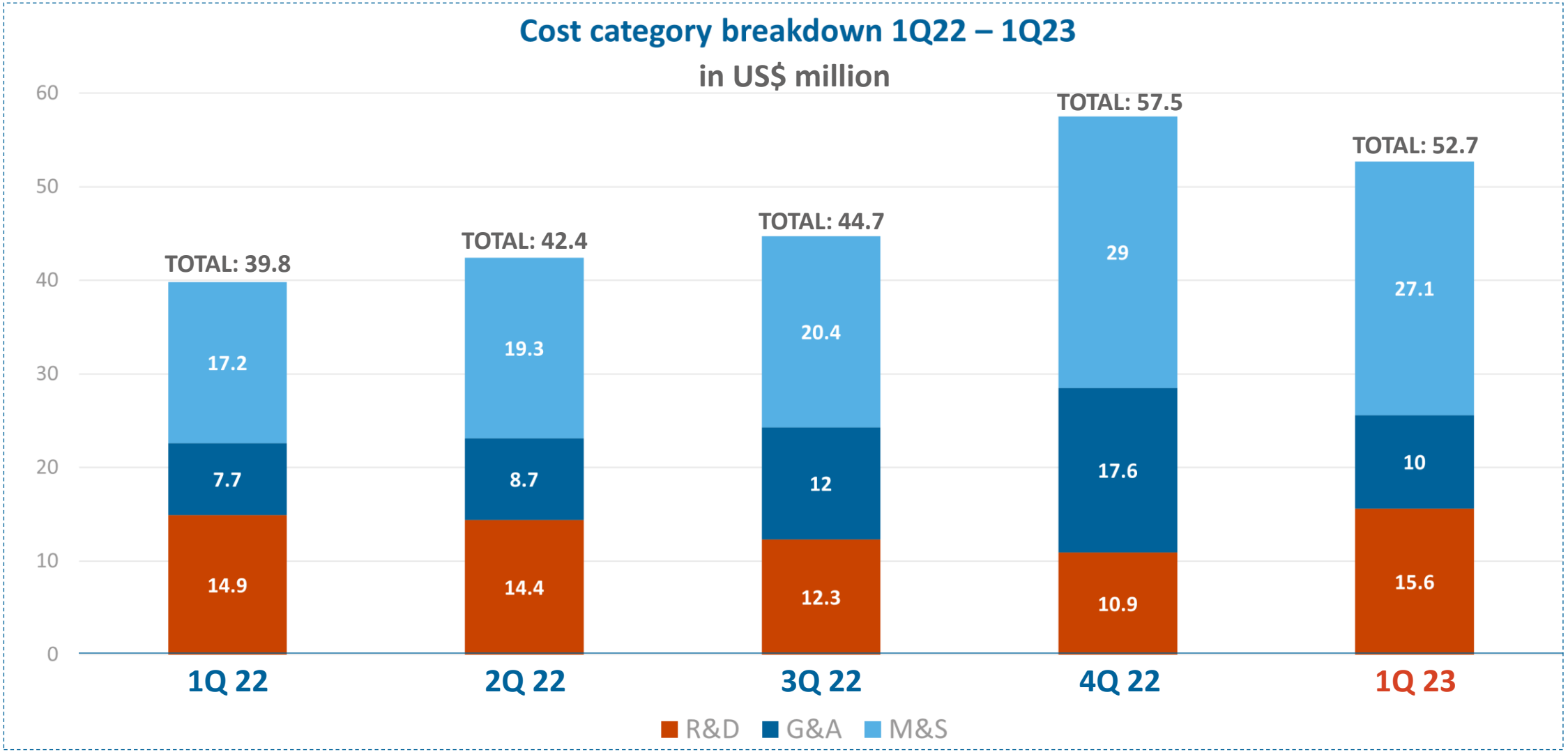
Financials and Outlook

Continued investment in the launch of Joenja



Outlook 2023

- Continued low single-digit growth in RUCONEST® revenues
- Joenja® approved by FDA March 24, 2023, commercializing in U.S. since early April 2023
- Positive CHMP opinion in 2H 2023, marketing authorization in Europe ~2 months later*
- File leniolisib with UK's MHRA following ECDRP route*
- Continued operating cost investments to accelerate future growth
- Further details on our plans to develop leniolisib in additional indications to be provided in 2H 2023
- Investment and continued focus on potential acquisitions and in-licensing of late-stage opportunities in rare diseases

*Subject to positive outcomes of the EMA CHMP review.

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