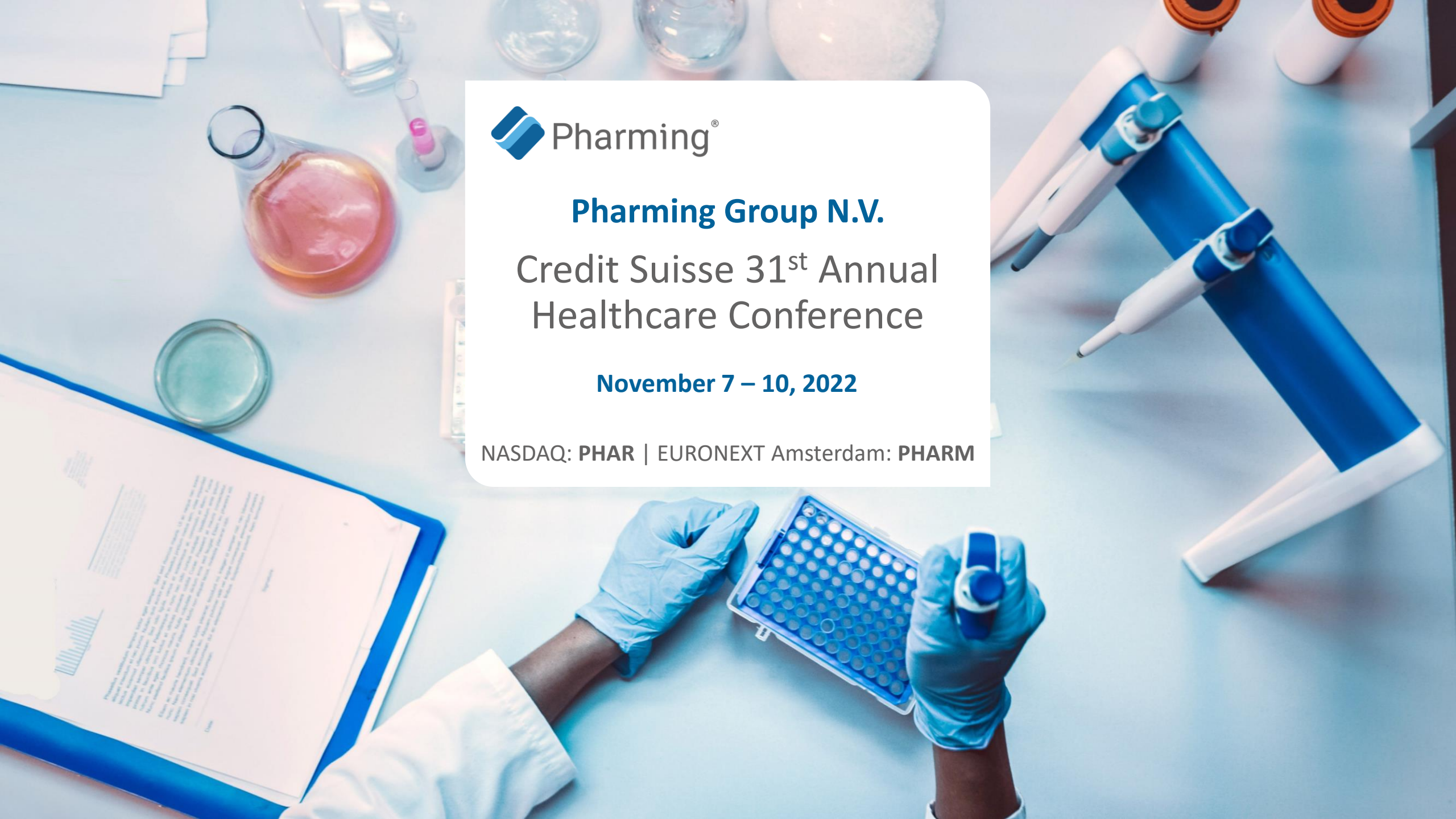


Pharming®

Pharming Group N.V.

Credit Suisse 31st Annual Healthcare Conference

November 7 – 10, 2022

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 2021 Annual Report and the Annual Report on Form 20-F for the year ended December 31, 2021, 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 press release 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 press release and are based on information available to Pharming as of the date of this release. 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.

Company overview

- One commercialized asset: RUCONEST® (conestat alfa) for the treatment of acute hereditary angioedema (HAE)
- Preparing for anticipated regulatory approvals and launch of leniolisib, a PI3Kδ inhibitor in development for APDS, in 2023
- Global headquarters: Leiden, the Netherlands (founded 1988)
  US headquarters: Warren, New Jersey
- Active in over 30 markets, the largest markets include: United States, Europe, United Kingdom, Middle East & North Africa
- EURONEXT Amsterdam: PHARM: Since 1999
  Nasdaq: PHAR: Since 2020

Pharming's strategic objectives

- **Building a sustainable business by focusing on RUCONEST® sales**
- **Focus on market approval, launch and commercialization of leniolisib in key markets of US, UK and EEA**
- **Ongoing pipeline development and management of rare disease assets**

Continuing to build a sustainable business in rare diseases

Building a sustainable business by focusing on RUCONEST® sales

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

- Fully commercialize RUCONEST® in all major international markets with our own sales forces

Anticipated approval and commercialization of leniolisib

Successful commercialization of leniolisib and life cycle management of future indications

- Market opportunity with an estimated >1,350 patients* (500 US, 675 EU, 190 Japan) living with APDS and more than 400 patients already identified by Pharming
- Developing PI3Kδ for additional indications for rare disease patients

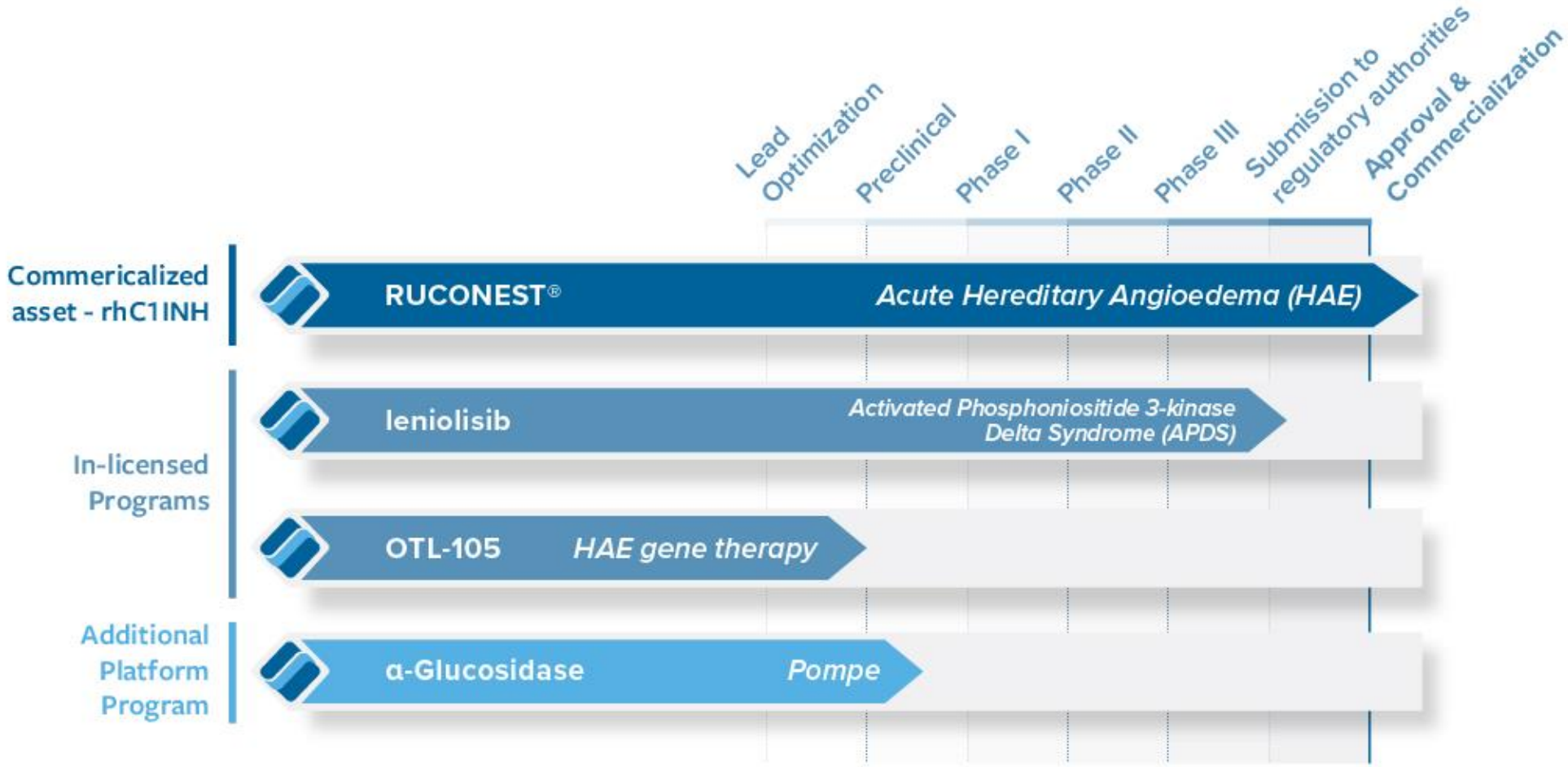
* Size based on population and available literature

Ongoing pipeline development and management of rare disease assets

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

- Development of OTL-105, an ex-vivo HSC gene therapy candidate for HAE
- Development of rhaGLU, an enzyme replacement therapy for Pompe disease

Pipeline at a glance



RUCONEST® (rhC1INH): sustainable commercialized asset

Pharming®

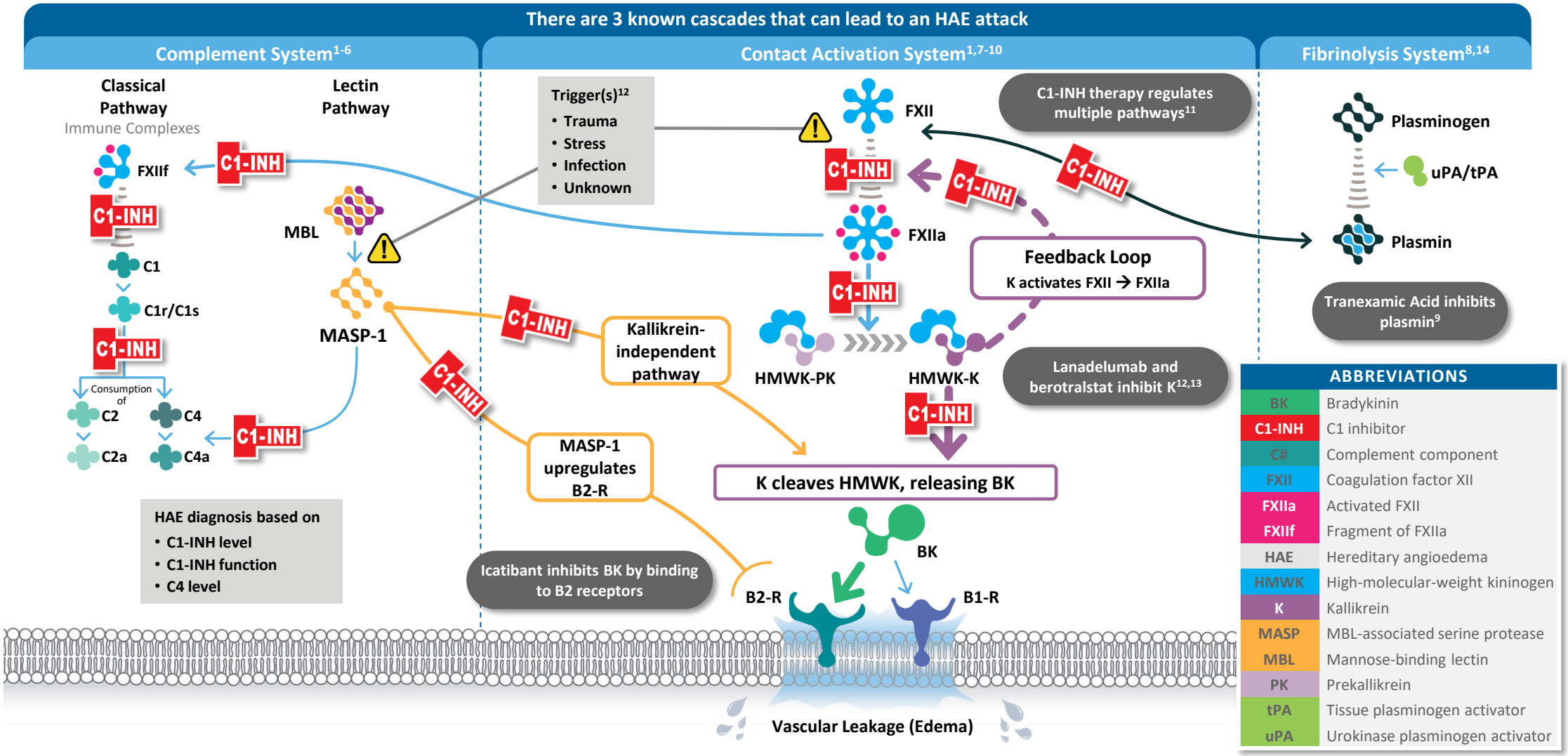
RUCONEST® sales of US$198.9 million (FY2021), US$151.0 million (first 9M of 2022)

Stable revenue stream. Allocating resources to leniolisib and pipeline to accelerate future growth

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

Continued single digit growth of revenues expected for the remainder of 2022

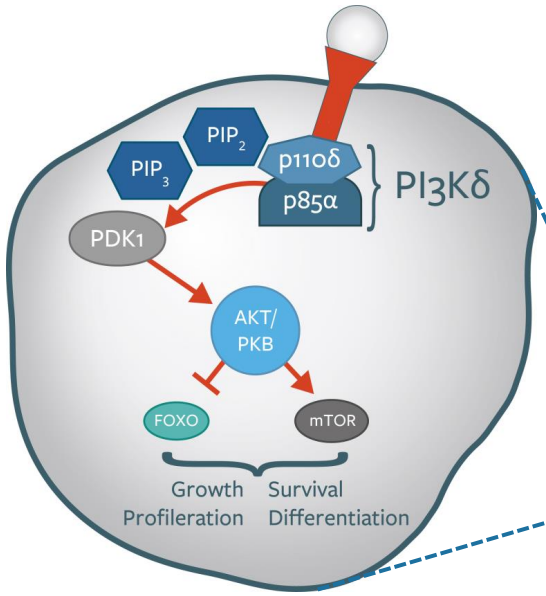
C1-INH stops bradykinin production across all known pathways



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.

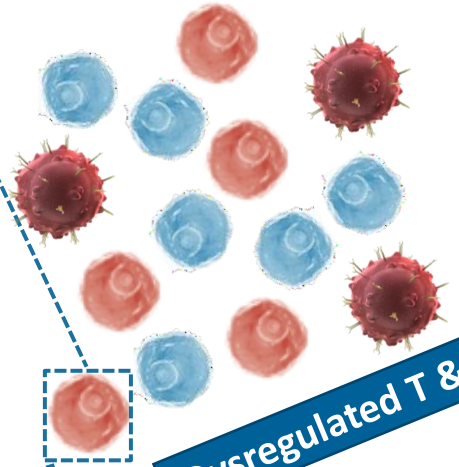
Leniolisib opportunity
Genetic defect leads to PI3Kδ hyperactivity, causing APDS symptoms

Hyperactive PI3Kδ activity



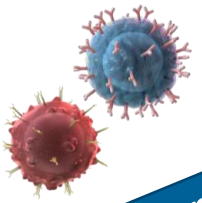
[1,2] Inside a T or B cell

Excess of immature or senescent cells



[3-6]
- ↑ CD8+ effector/memory T cells
- ↑ CD8+ T cell senescence
- ↻ Inverted CD4+/CD8+ T cell ratio
- ↑ Transitional B cells
  - ↔ or ↑ IgM

Deficit of functional cells



- ↓ Naïve and CD4+ T cells
  - ↓ Memory T cell function
- ↓ B cells (lymphopenia)
- ↓ Memory B cells
  - ↔ or ↓ IgG/IgA

Dysregulated T & B cell development

Common Symptoms of APDS[4,5]

Severe, Recurrent, Persistent Infections:
- Sinopulmonary
- Herpesvirus (especially EBV and CMV)

Lymphoproliferation:
- Lymphadenopathy
- Splenomegaly/hepatomegaly
- Nodular lymphoid hyperplasia

Enteropathy

Autoimmunity:
- Cytopenias
- Autoimmune disorders
- Autoinflammatory disorders

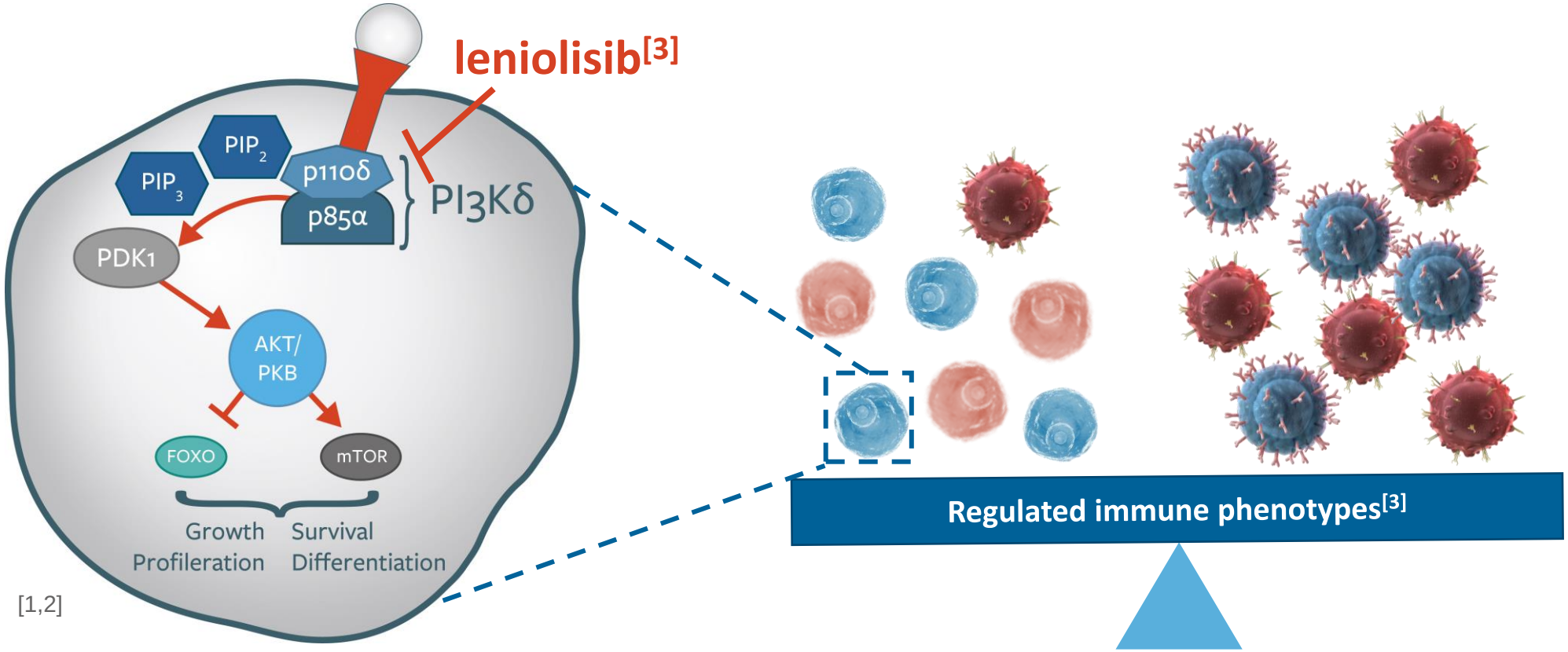
Bronchiectasis

Lymphoma

APDS, activated phosphoinositide 3-kinase δ syndrome; CMV, cytomegalovirus; EBV, Epstein-Barr virus; FOXO, forkhead box O; Ig, immunoglobulin; PDK1, phosphoinositide-dependent protein kinase 1; PIP_2, phosphatidylinositol 4,5-bisphosphate; PIP_3, phosphatidylinositol 3,4,5-trisphosphate; PI3Kδ, phosphoinositide 3-kinase δ; PKB, protein kinase B.

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. Lucas CL, et al. *Nat Immunol.* 2014;15(1):88-97. 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.

Leniolisib: a targeted disease modifying treatment for APDS

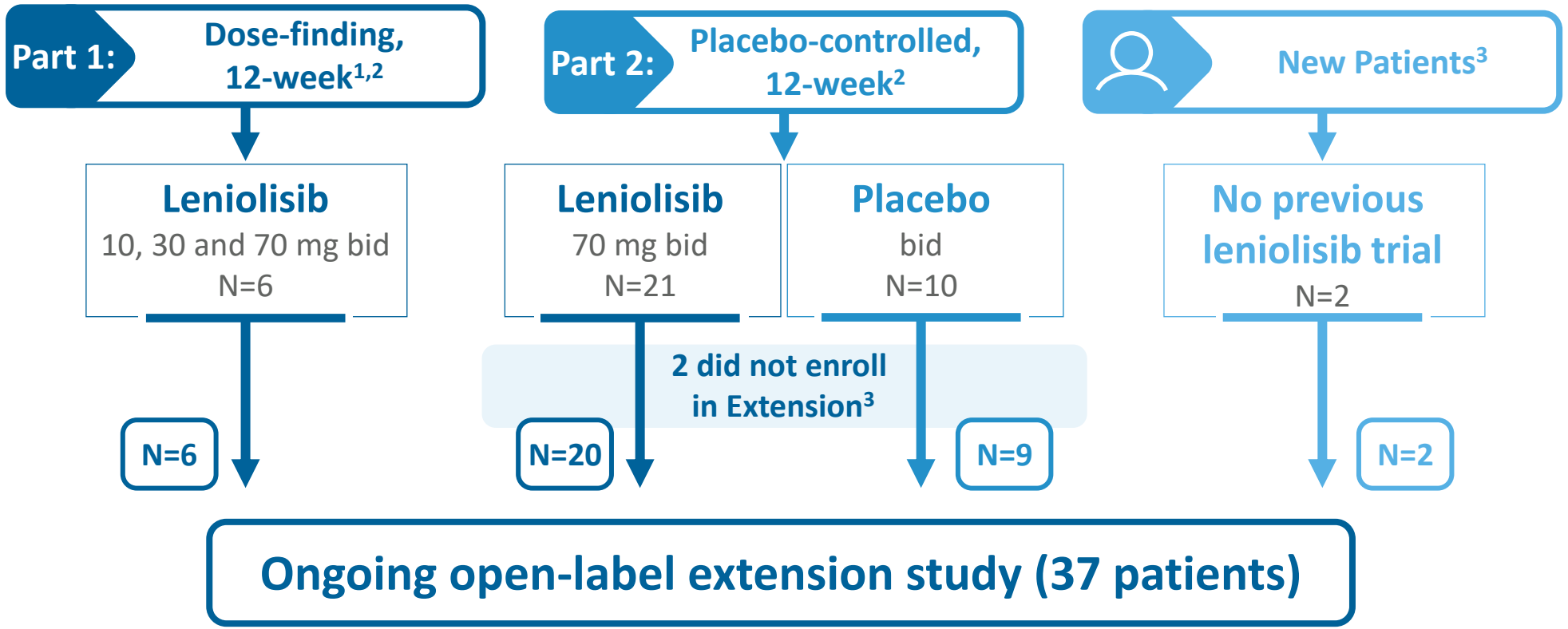


Leniolisib balances PI3Kδ enzyme activity
Addressing immune deficiency and dysregulation

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. Rao VK, et al. *Blood*. 2017;130(21):2307-2316.

Leniolisib clinical development program

Completed Ph2/3 DBPC Registrational Trial



Data cutoff: December 13, 2021

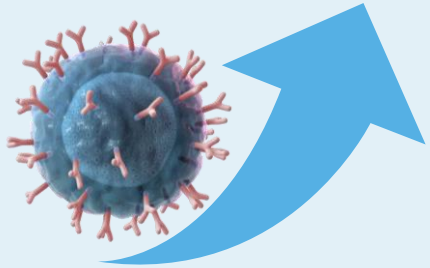
bid, twice a day.

1. Rao VK, et al. *Blood*. 2017;130(21):2307-2316. 2. NCT02435173. ClinicalTrials.gov. https://clinicaltrials.gov/ct2/show/NCT02435173. Updated August 10, 2022. Accessed August 18, 2022.
3. Data on file. Pharming Healthcare Inc. 2022. 4. NCT02859727. ClinicalTrials.gov. https://clinicaltrials.gov/ct2/show/NCT02859727. Updated July 25, 2022. Accessed August 18, 2022.

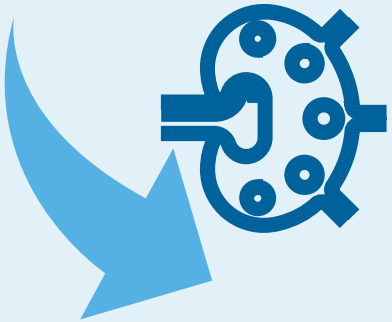
Leniolisib clinical summary
Highly effective therapy addresses underlying cause of APDS

Primary Outcomes

Increased naïve B cells



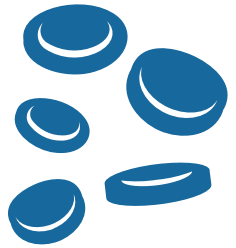
Decreased lymphadenopathy



Other Efficacy Outcomes

Decreased spleen size

Improved cytopenias



- Met both primary endpoints (p=0.0002, p=0.0006)
- Results demonstrate long-term leniolisib administration was well tolerated and effective in patients with APDS
- The improvement in immunodeficiency is evidenced by the reduction in infections with concomitant reductions in immunoglobulin replacement therapy (IRT) usage
- The correction of immune dysregulation is seen in the continued improvement in lymphoproliferation as well as multilineage cytopenias

Leniolisib regulatory progress (1/2)

USA

SEP 28

Filing and acceptance for Priority Review of New Drug Application to the FDA. Assigned a Prescription Drug User Fee Act (PDUFA) goal date of March 29, 2023

OCT 1

International Classification of Diseases, 10th Revision, Clinical Modification (ICD-10-CM) by the US CDC for APDS took effect

Q1 2023

Remain on track for commercial approval of leniolisib in the first quarter of 2023. Commercialization in the second quarter of 2023

Leniolisib regulatory progress (2/2)

EEA

JAN 6

Pharming receives positive EMA decision on pediatric investigation plan (PIP) for leniolisib in Europe

AUG 1

Announced EMA Accelerated Assessment granted for adults and adolescents aged 12 and older

OCT 2022

Marketing Authorisation Application (MAA) submitted to EMA and validated for scientific evaluation under an Accelerated Assessment

UK

APR 26

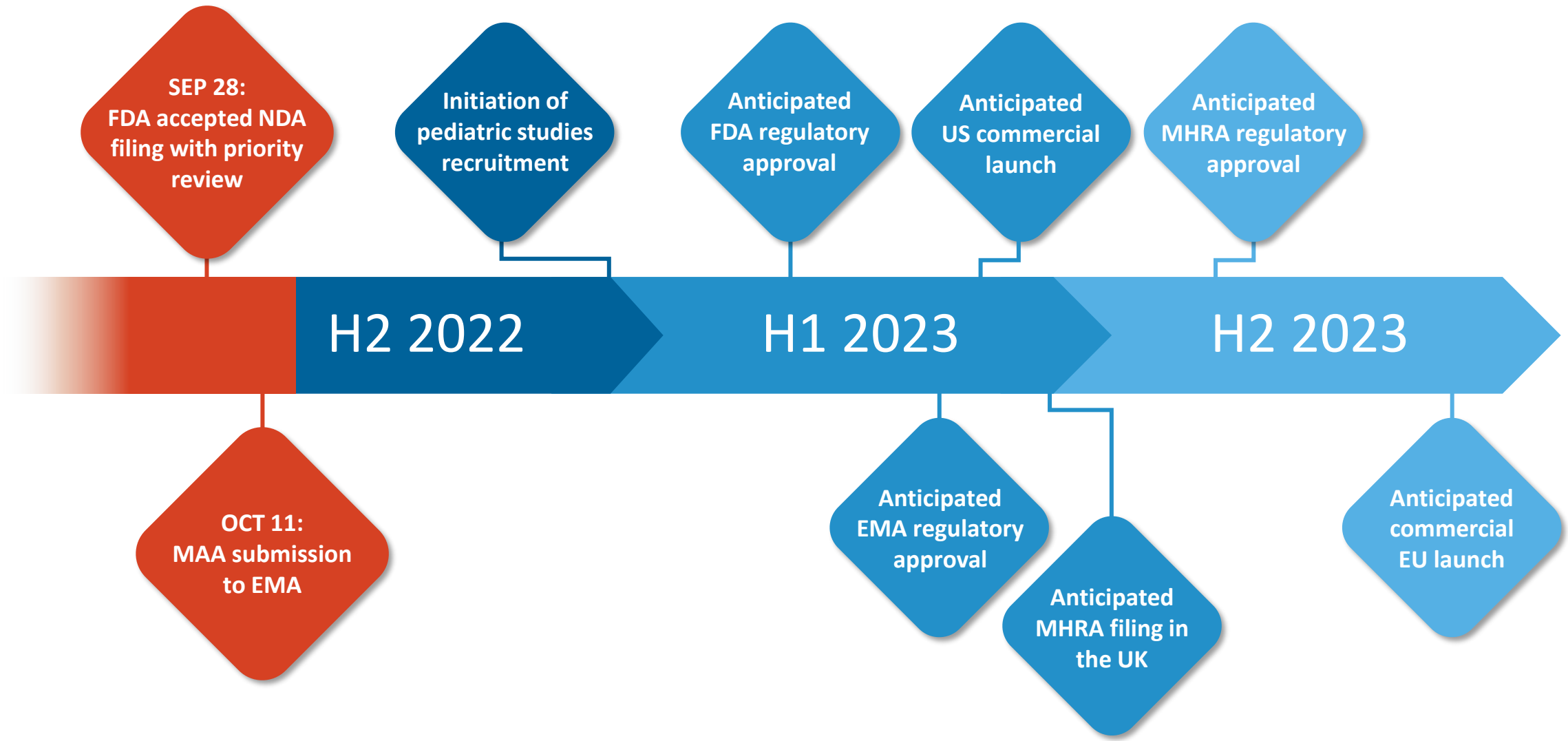
MHRA granted Promising Innovative Medicine (PIM) designation for the treatment of APDS in children 1 year of age to less than 18 years of age

H2 2023

MHRA filing will follow the ECDRP route

Anticipated MHRA decision known in H2 2023

Upcoming milestones for leniolisib*



*These dates are not an assurance of future performance; they are based on current expectations and assumptions regarding the future of our business. Please refer to our Forward-looking Statement on slide 2 of this presentation.

Leniolisib is an investigational new drug that has not been approved for any use.

Strategic highlights: OTL-105 & Pompe

Progress continues in preclinical studies

OTL-105

Good progress on developing the lentiviral vector to enhance C1-inhibitor expression, now testing in preclinical HAE disease models

Anticipate providing further updates as we move towards preparing an Investigational New Drug (IND) filing

POMPE

Study into the development of a next-generation alpha-glucosidase therapy for the treatment of Pompe disease is ongoing

Currently engaged in preclinical studies. As and when results from these preclinical studies become available, we will update the market

Financial highlights (9M 2022)

US$198.9 million total revenues for FY2021. Revenues for first 9M of 2022 increased by 3% compared to the first 9M 2021

Gross profit increased by 7% to US$139.7 million, driven by growth in revenues, production efficiencies, and favorable tailwind from currency translation effects

Net profit increased by 104% compared to first 9M 2021, driven by an increase in Other income

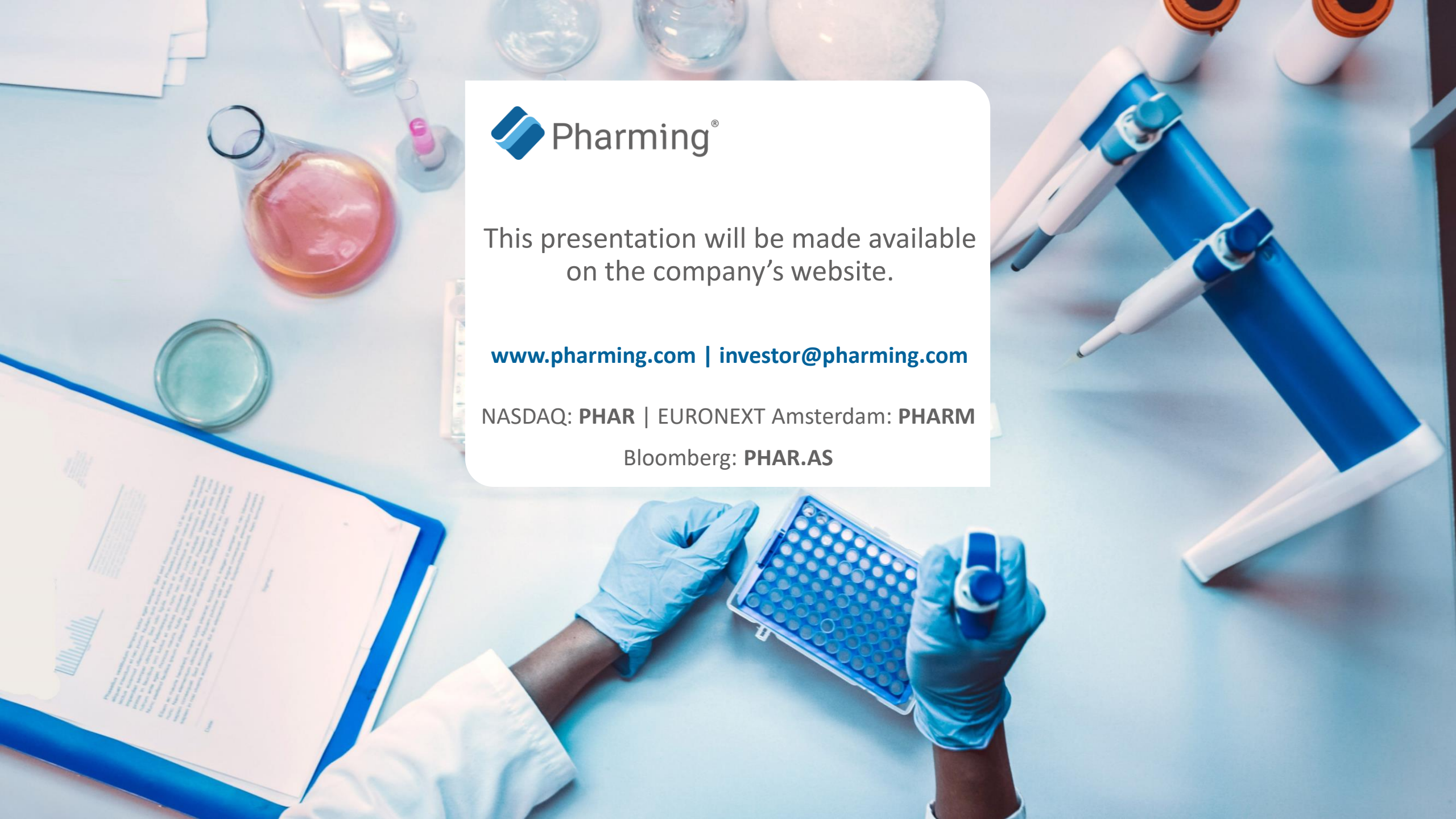
Cash and cash equivalents, together with restricted cash, decreased from US$193.0 million at the end of 2021, to US$189.9 million at the end of the third quarter 2022.

Financial highlights: 9M 2022 vs 9M 2021

TOTAL REVENUES 9M 2021	US$146.1 million	TOTAL REVENUES 9M 2022	US$151.0 million
GROSS PROFIT 9M 2021	US$130.6 million	GROSS PROFIT 9M 2022	US$139.7 million
R&D EXPENSES 9M 2021	US$37.6 million	R&D EXPENSES 9M 2022	US$41.6 million
NET PROFIT 9M 2021	US$13.9 million	NET PROFIT 9M 2022	US$28.3 million

Outlook

- **Single digit growth Group revenues from RUCONEST® sales in 2022**
- **Commercial approval of leniolisib from FDA in Q1 2023, with an anticipated launch and commercialization in US in H1 2023.** *subject to positive outcomes of the FDA review
- **Positive opinion of leniolisib from the CHMP, followed by issuance of MAA by European Commission end of H1 2023. Commercial launch in EU markets in H2 2023.**
- **Submit an ECDRP filing for leniolisib to MHRA, after anticipated positive CHMP opinion, MHRA decision expected in H2 2023.**
- **Continue to allocate resources towards the anticipated launch and commercialization of leniolisib and development of pipeline with the view of accelerating future growth**
- **Investment and continued focus on potential acquisitions and in-licensing of new, late- stage development opportunities and assets in rare diseases.**



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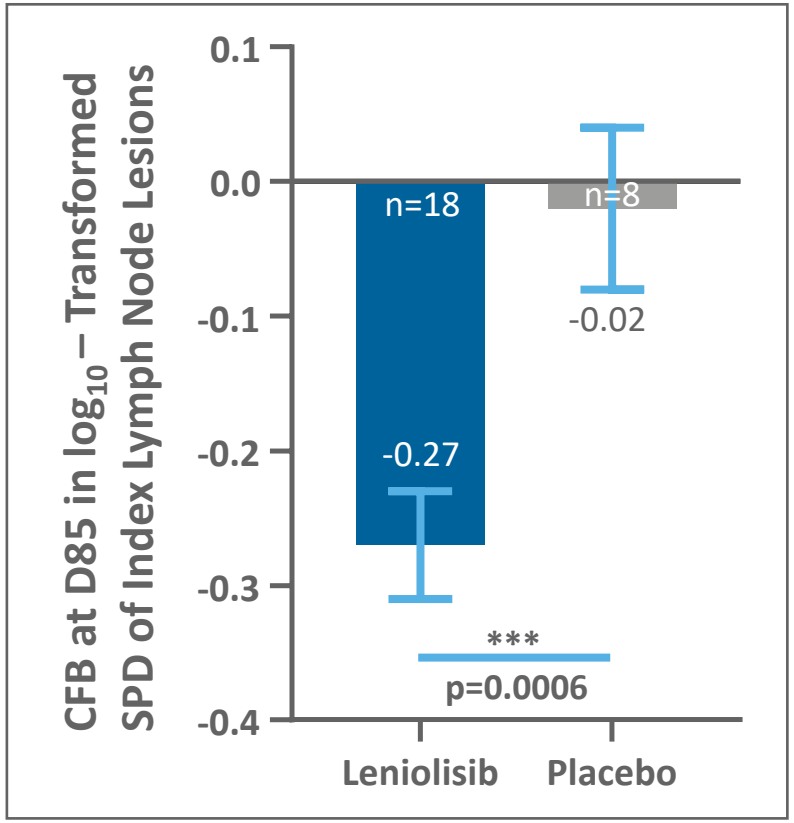
Appendix

Slides 22 – 27: leniolisib clinical trial data

Leniolisib reduced lymphadenopathy

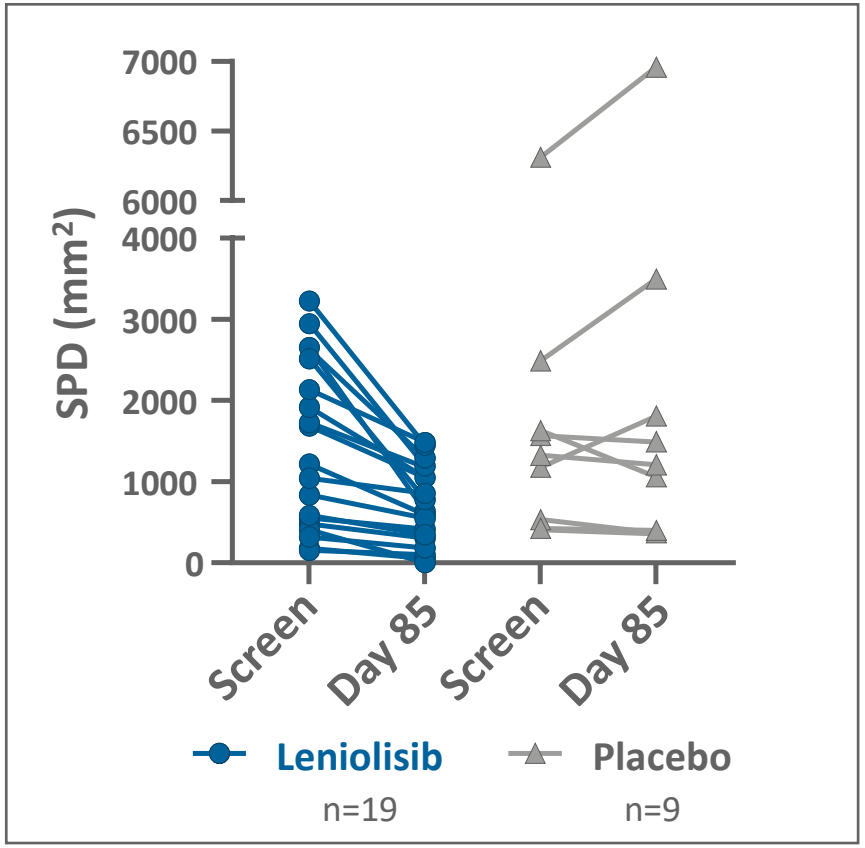
Primary Outcome Analysis*

Change from baseline in index lesions



Individual Index Lesion Sizes

Safety analysis set



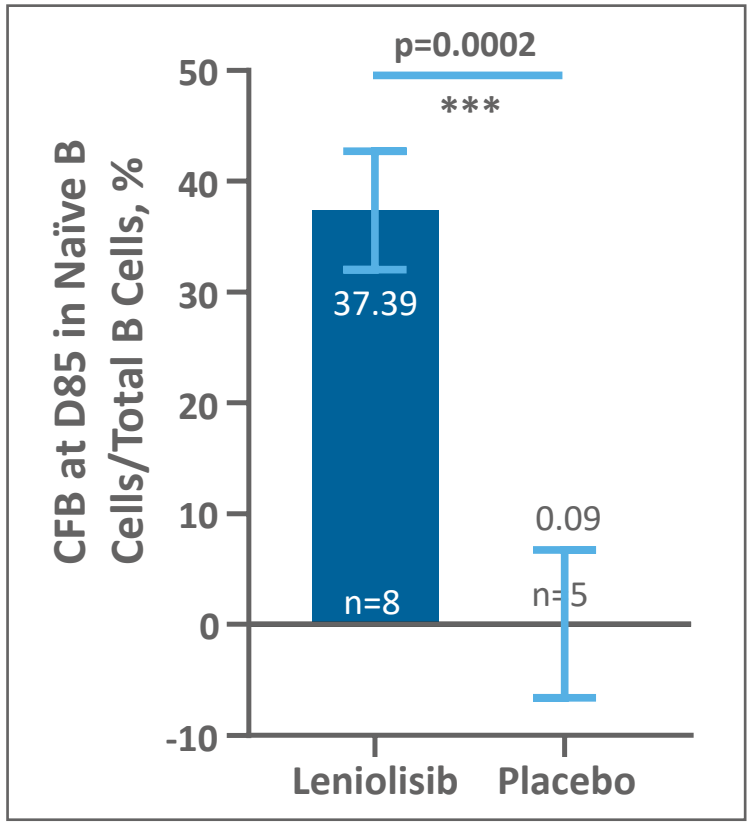
*Data were analyzed using ANCOVA model with treatment as a fixed effect and log_{10}-transformed baseline as a covariate. Use of glucocorticoids and IRT at baseline were both included as categorical (Yes/No) covariates. P-value is 2-sided. Least square means are graphed. Error bars are standard error of the mean. 4 patients from the 31 in the safety analysis were excluded from the PD analysis. An additional patient was excluded from the index lesion analysis because the baseline lung index had fully resolved (0 mm) by D85.

CFB, change from baseline; D, day; PD, pharmacodynamics; SPD, sum of product of diameters; 3D, 3-dimensional. Data on file. Pharming Healthcare Inc. 2022.

Leniolisib increased the percentage of naïve B cells out of total B cells

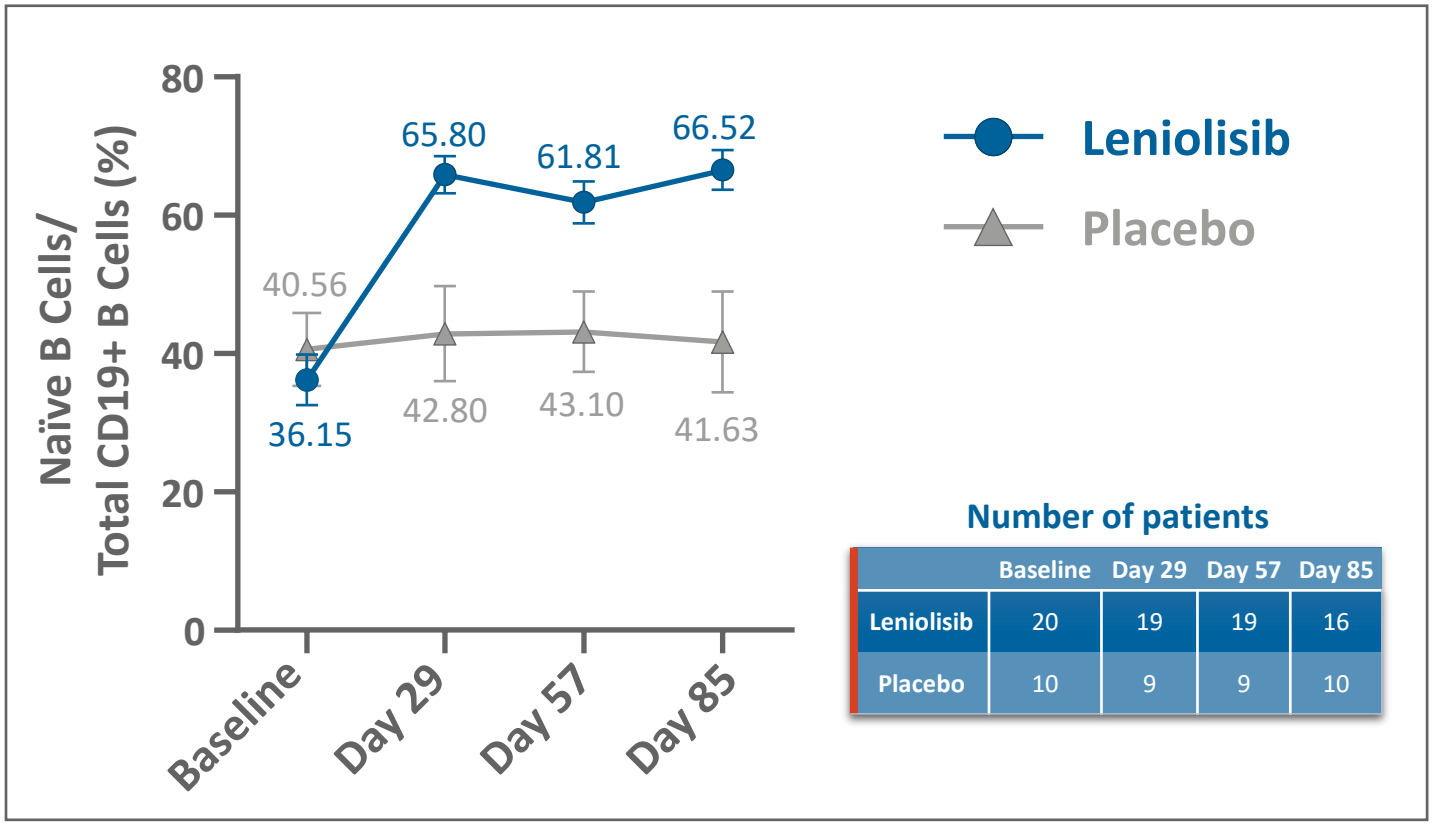
Primary Outcome Analysis*

Change from baseline in naïve B cells



Mean Percentage of Naïve B Cells Over Time

Safety analysis set



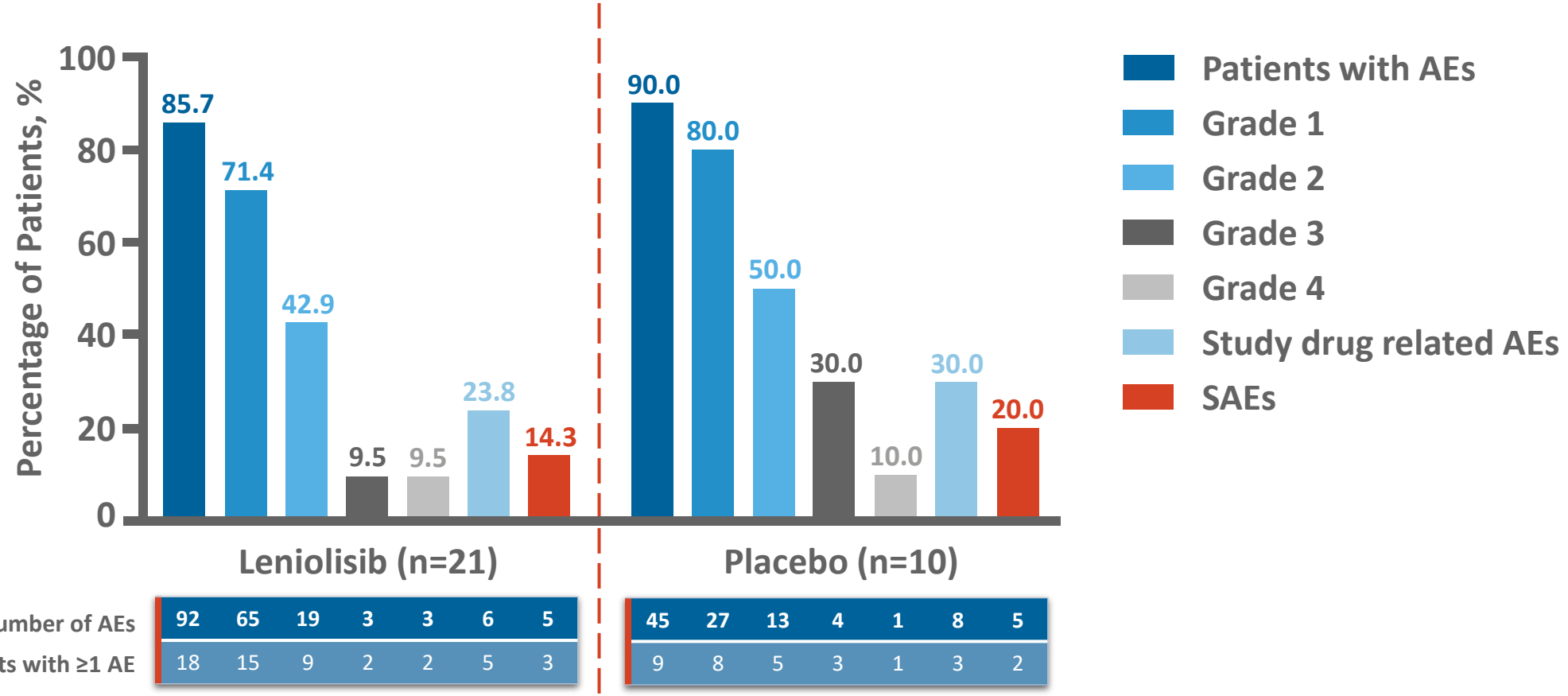
Number of patients

	Baseline	Day 29	Day 57	Day 85
Leniolisib	20	19	19	16
Placebo	10	9	9	10

*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 Day 1 values when both are available, and if either baseline or the Day 1 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. 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.

Data on file. Pharming Healthcare Inc. 2022.

Leniolisib over three months was well tolerated

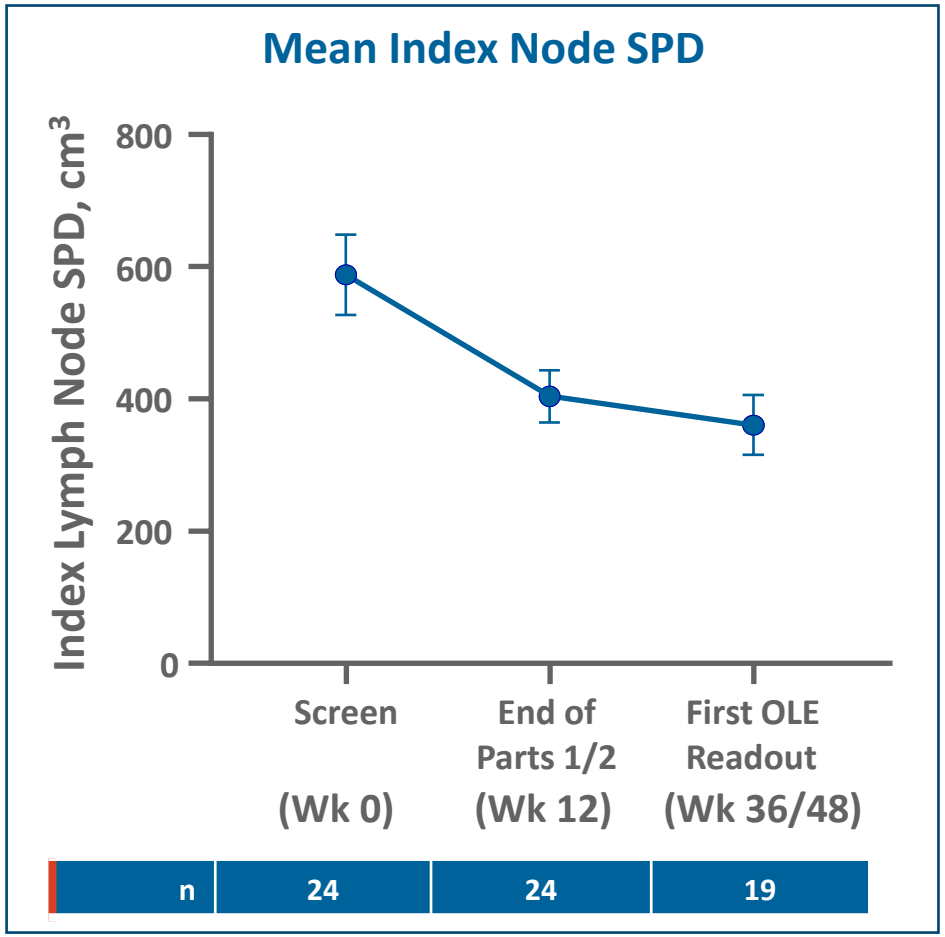


	Leniolisib (n=21)							Placebo (n=10)						
Number of AEs	92	65	19	3	3	6	5	45	27	13	4	1	8	5
Number of patients with ≥1 AE	18	15	9	2	2	5	3	9	8	5	3	1	3	2

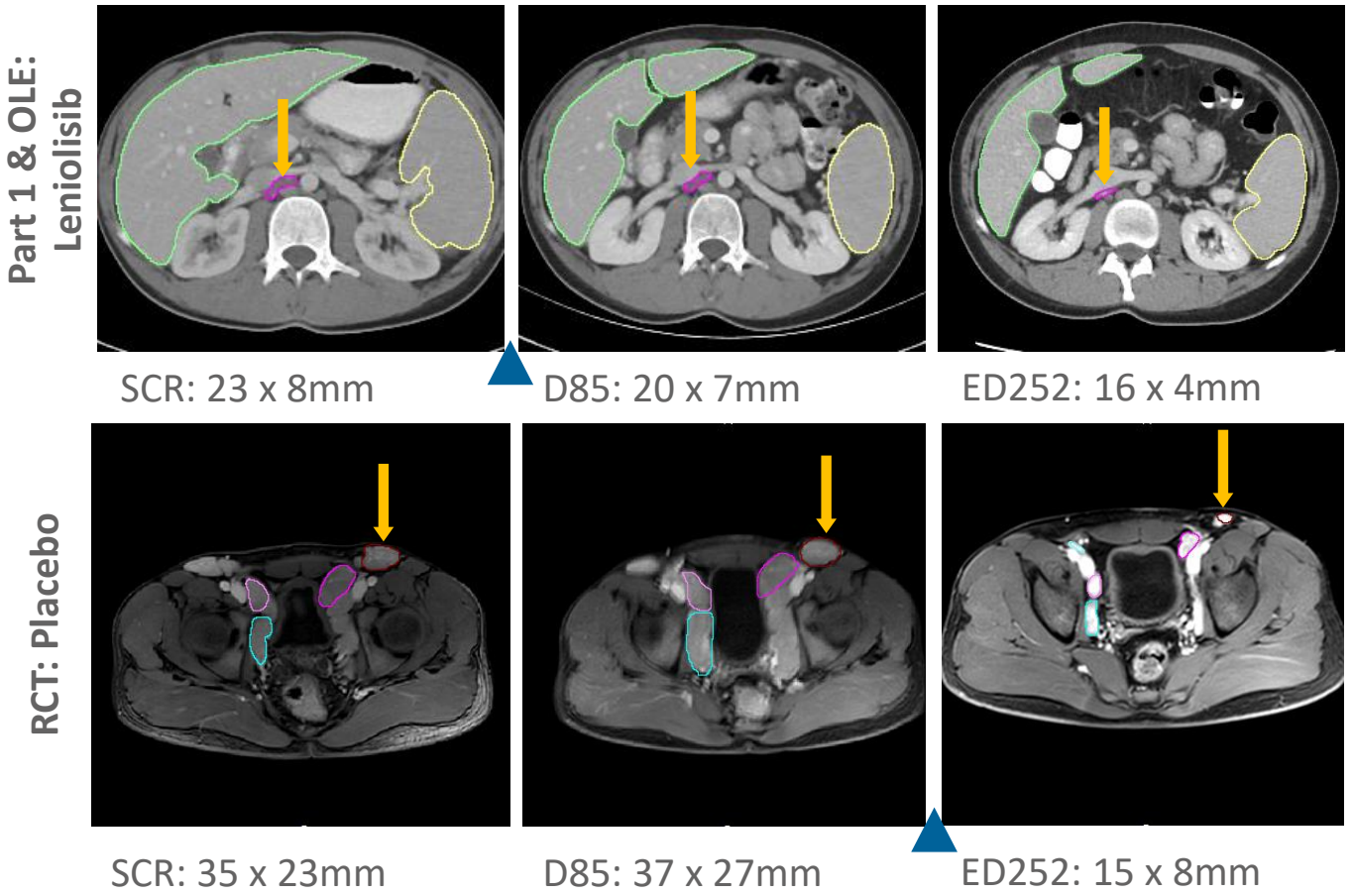
- No deaths (grade 5 AEs) were reported
- No AEs led to discontinuation of study treatment
- No SAEs were related to study treatment, and the incidence of SAEs was lower in the leniolisib group than the placebo group

CTC were used to determine AE grade. If CTC-AE grading did not exist for an AE, the following definitions were used: 1, mild; 2, moderate; 3, severe; 4, life-threatening; 5, death.
AEs, adverse events; CTC, Common Toxicity Criteria; SAEs, serious adverse events. Data on file. Pharming Healthcare Inc. 2022.

Leniolisib reduced lymphadenopathy

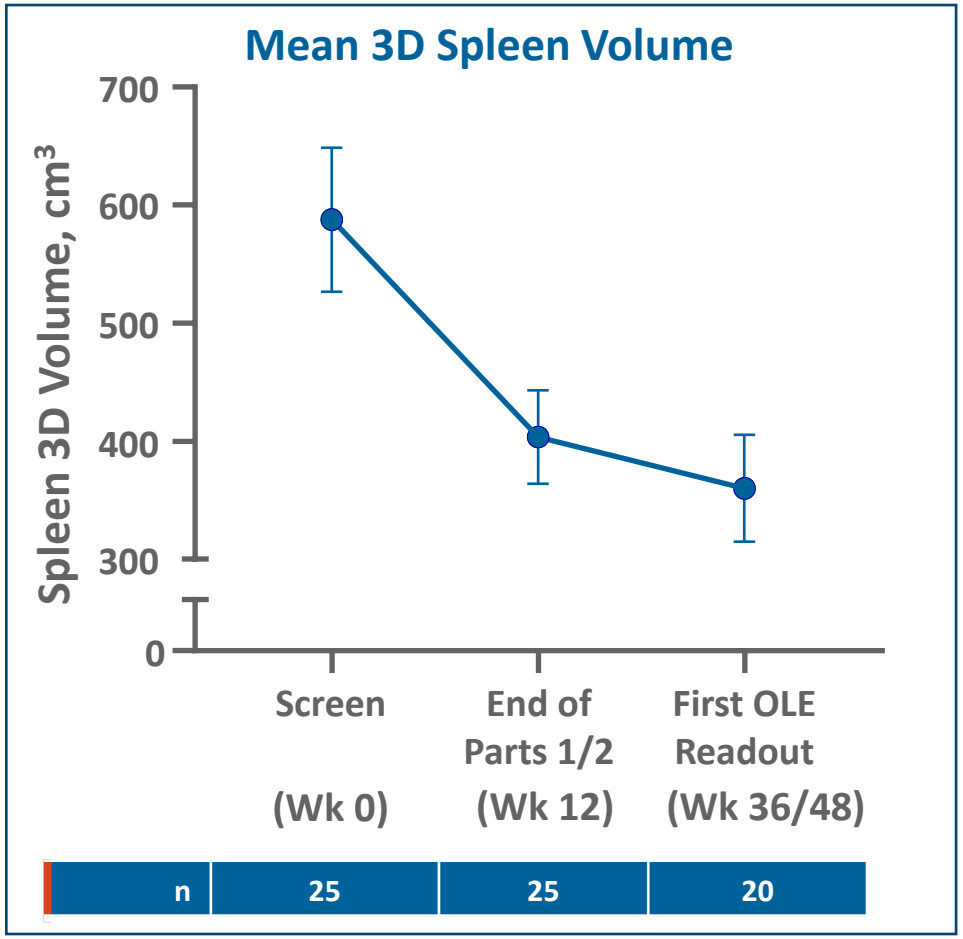


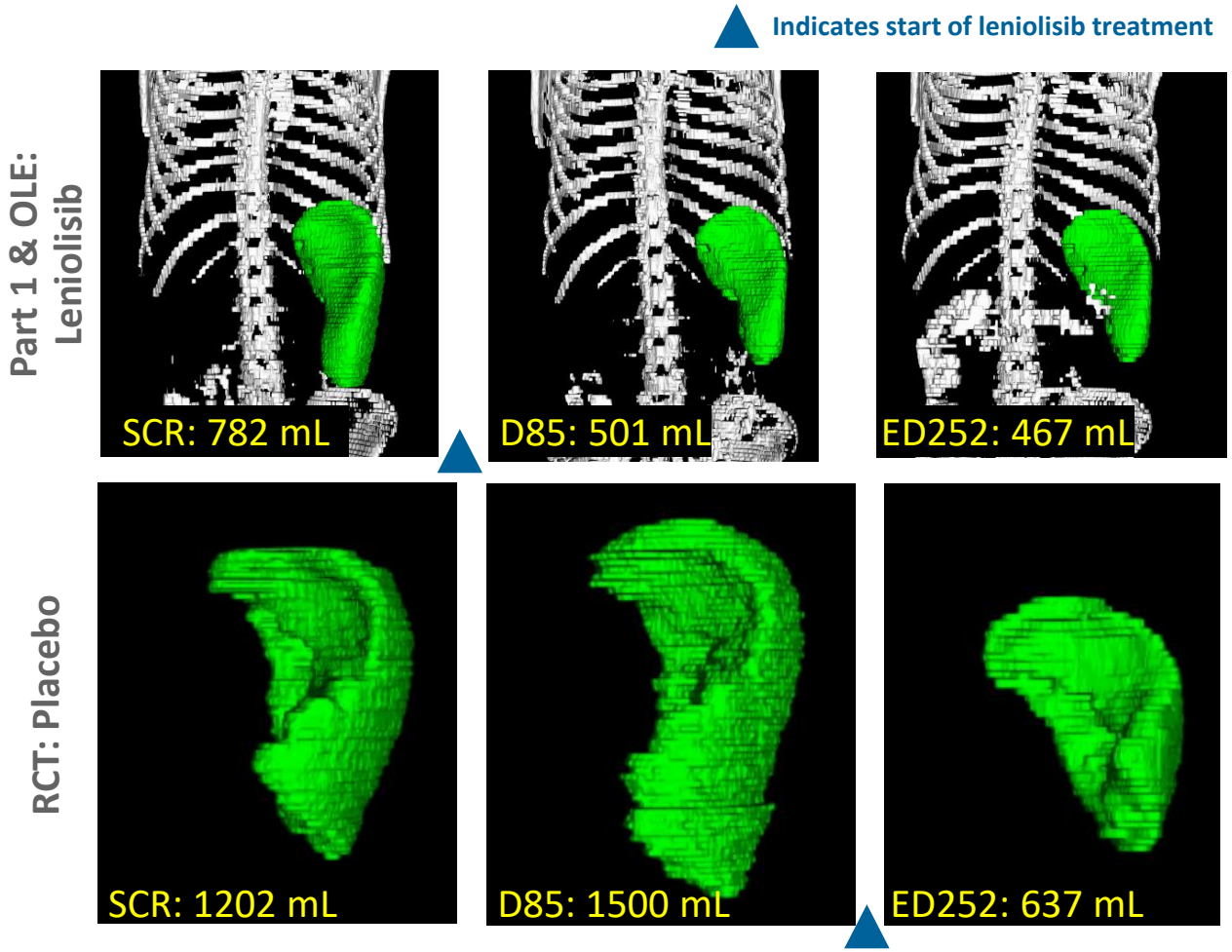
Indicates start of leniolisib treatment



Error bars are standard error of the mean. All patients from parts 1 and 2 of the phase II/III trials with leniolisib exposure and with measurements are included. End of parts 1 and 2 occurred at days 84 and 85, respectively. First OLE readout occurred after an additional 168 or 252. days. D, day; OLE, open-label extension; RCT, randomized controlled trial; SCR, screen; SPD, sum of product diameters; Wk, week.
Data on file. Pharming Healthcare Inc. 2022.

Leniolisib reduced spleen size

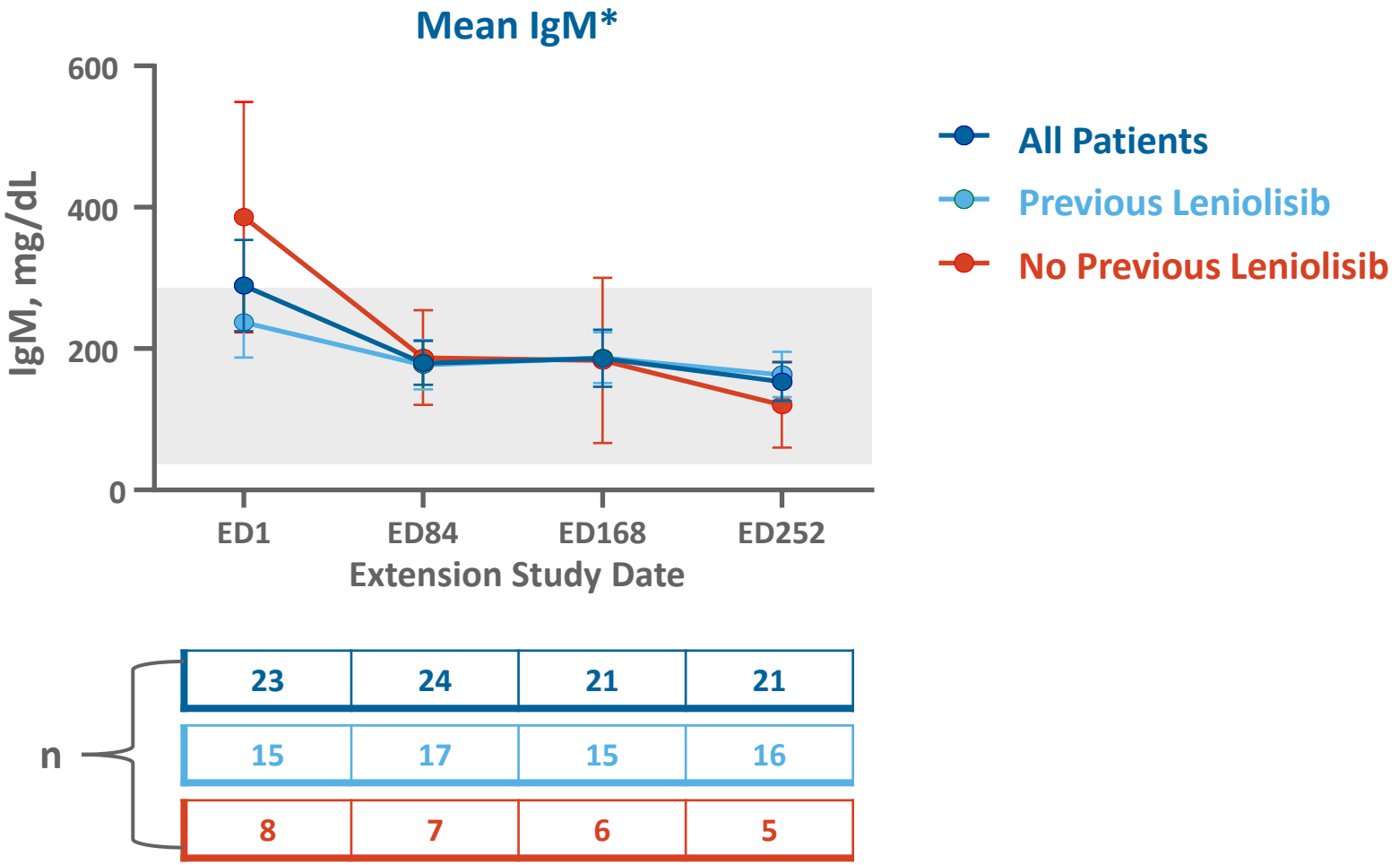




Error bars are standard error of the mean. All patients from parts 1 and 2 of the phase II/III trials with leniolisib exposure and with measurements are included. End of parts 1 and 2 occurred at days 84 and 85, respectively. First OLE readout occurred after an additional 168 or 252 days.

Data on file. Pharming Healthcare Inc. 2022.

Leniolisib decreased elevated IgM



*Excluded 1 patient due to extremely low B-cell count.
Previous Leniolisib includes patients who received leniolisib during the dose-finding trial and RCT. No Previous Leniolisib includes patients who received placebo during the RCT and patients who were enrolled in other PI3Kδ inhibitor trials.
Error bars are standard error of the mean. The gray box indicates the normal range.

Data on file. Pharming Healthcare Inc. 2022.