Krystal®

First Quarter 2025
Financial and Operating Results

May 6, 2025

Forward Looking Statements and Disclosures

This presentation and the accompanying oral presentation contain forward-looking statements that involve substantial risks and uncertainties. Any statements about future expectations, plans, and prospects for Krystal Biotech, Inc. (together with its subsidiaries, the "Company"), including but not limited to statements about the Company's U.S. commercial launch of VYJUVEK®, including long-term growth prospects, the Company's commitment to, and support of, DEB patients, U.S. patients' success on VYJUVEK and pausing patterns driving long-term Company success, and reimbursement approvals and achievement of the Company's market share goal; the Company's EU commercial launch, including the EU market size and opportunity and the timing of launch in Germany and France; the timing of approval and commencement of treating patients in Japan; benefits of sustained, long-term VYJUVEK therapy; the total global market opportunity and long-term profitability of the VYJUVEK franchise; the potential of the Company's HSV-1 based gene delivery platform technology; unlocking the significant value in the Company's aesthetics pipeline; the timing of startup, patient dosing, disclosure of study designs and endpoints, and data readouts from certain of the Company's clinical studies; prevalence of neurotrophic keratitis and potential benefits and advantages of KB801; financial stability and estimated financial measures, including revenue from VYJUVEK far exceeding operating expenses, the Company's 2025 non-GAAP combined R&D and SG&A expense guidance; building a global, geographically diversified business and impacts thereof; and other statements containing the words "anticipate", "believe", "estimate", "expect", "intend", "may", "plan", "predict", "project", "target", "potential", "likely", "will", "would", "could", "should", "continue", and similar expressions, constitute forward-looking statements within the meaning of The Private Securities Litigation Reform Act of 1995. Actual results may differ materially from those indicated by such forward-looking statements as a result of various important factors, including: uncertainties associated with regulatory reviews and the content and timing of regulatory authorities' decisions; uncertainties in the initiation and conduct of clinical trials and availability and timing of data from clinical trials; whether results of early clinical trials will be indicative of the results of ongoing or future trials; the availability or commercial potential of product candidates; and such other important factors as are set forth in the Company's filings with the U.S. SEC. The forward-looking statements represent the Company's views as of the date of this presentation and should not be relied upon as representing the Company's views as of any subsequent date. The Company specifically disclaims any obligation to update forward-looking statements.

This presentation includes non-GAAP combined R&D and SG&A expense guidance, a supplemental measure of the Company's performance that is not required by, or presented in accordance with, U.S. GAAP and should not be considered as an alternative to R&D and SG&A expense or any other performance measure derived in accordance with GAAP. The Company defines non-GAAP combined R&D and SG&A expense as GAAP combined R&D and SG&A expense excluding stock-based compensation. The Company cautions investors that amounts presented in accordance with its definition of non-GAAP combined R&D and SG&A expense may not be comparable to similar measures disclosed by other companies because not all companies calculate this non-GAAP financial measure in the same manner. The Company has not provided a quantitative reconciliation of forecasted non-GAAP combined R&D and SG&A expense to forecasted GAAP combined R&D and SG&A expense because the Company is unable, without making unreasonable efforts, to calculate the reconciling item, stock-based compensation expenses, with confidence. This item, which could materially affect the computation of forward-looking GAAP combined R&D and SG&A expense, is inherently uncertain and depends on various factors, some of which are outside of the Company's control.

This presentation may contain estimates and statistical data. Estimates involve assumptions and limitations, and investors are cautioned not to give undue weight to estimates. Neither the Company nor any other person makes any representation as to the accuracy or completeness of such estimates or data or undertakes any obligation to update such estimates or data. Any projections, assumptions, and estimates of the Company's future performance and the future performance of the markets in which the Company operates are necessarily subject to a high degree of uncertainty and risk.

Other than VYJUVEK, all products described in this presentation are investigational therapies.

The Company is using the Aerogen Solo® Nebulizer System and Aerogen® Ultra in its clinical trials evaluating KB407, KB408, and inhaled KB707.

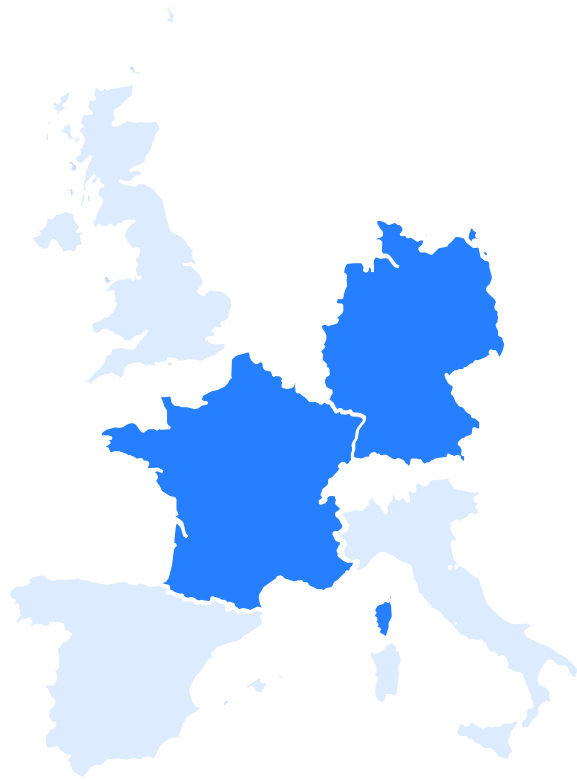
Exciting 2025 at Krystal with Global Launch and Upcoming Readouts

- VYJUVEK goes global in 2025
- Four clinical readouts in 2025
- Second ophthalmic program for treatment of neurotrophic keratitis enters the clinic
- Financial stability and insulated from current macro situation

VYJUVEK Receives Approval in Europe

Over 1000 diagnosed DEB patients in Germany and France alone

- ✓ Broad label approved by the European Commission
- ✓ Recommended approval for treatment of wounds in DEB patients from birth
- ✓ Included option for home administration by either a trained caregiver or a patient if deemed appropriate by the prescribing healthcare professional
- ✓ No post-approval efficacy study requirements



DEB, dystrophic epidermolysis bullosa

Progressing Towards PMDA Approval Decision in 2H 2025

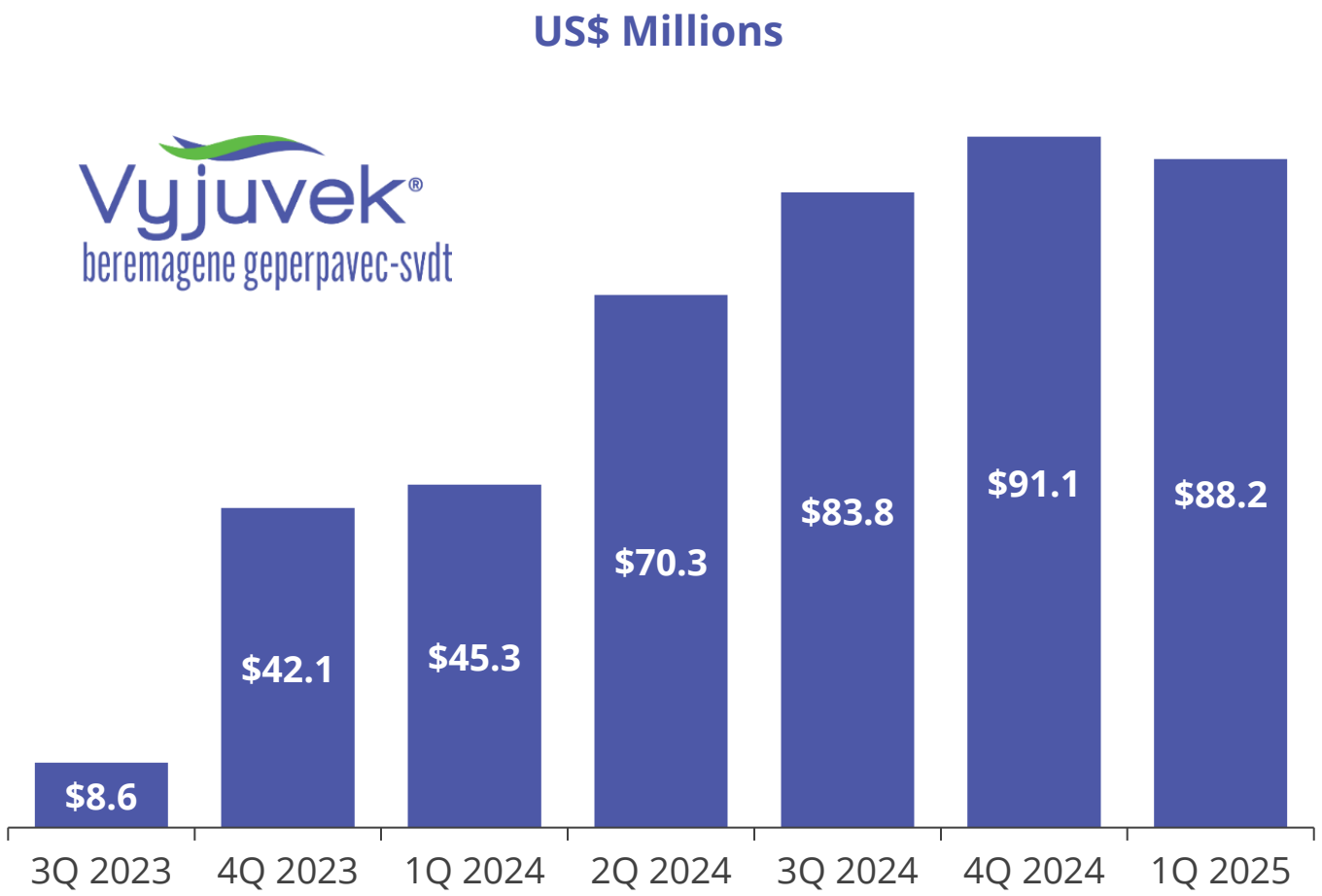
- ✓ ODD received in December 2023
- ✓ Efficacy portion of multicenter, open-label extension study in Japanese patients completed in April 2024
- ✓ JNDA submitted in October 2024
- ✓ Manufacturing facility inspection completed in April 2025
- ✓ Decision and pricing approval expected in 2H 2025

Over 500

Estimated DEB Patients in Japan

DEB, dystrophic epidermolysis bullosa; JNDA, Japanese New Drug Application; ODD, orphan drug designation; PMDA, Pharmaceuticals and Medical Devices Agency

Over $429M in VYJUVEK Revenue Since Launch



- Net revenue increased 95% compared to 1Q 2024
- Gross margin of 94% in 1Q
- Gross to net in 1Q was 17%

Four Clinical Readouts in 2025

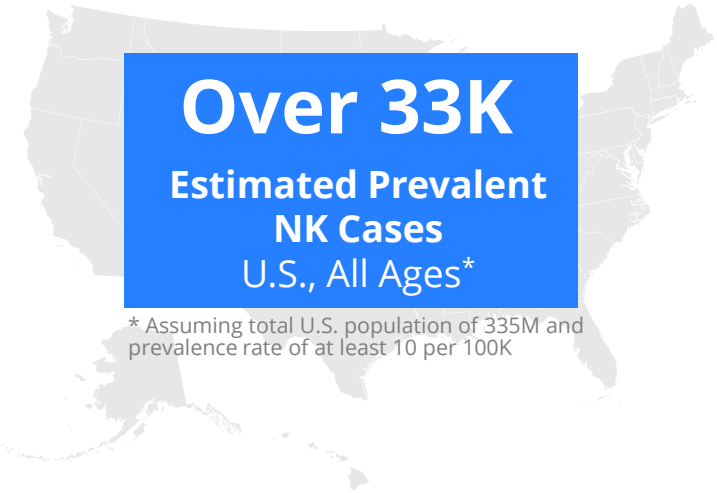
- KB407 for cystic fibrosis **– *mid summer***
- KB408 for AATD lung disease **– *2H 2025***
- KB304 for the delivery of elastin to treat aesthetic skin conditions **– *2H 2025***
- KB803 for the treatment of lesions in the eye of DEB patients **– *2H 2025***

AATD, alpha-1 antitrypsin deficiency; DEB, dystrophic epidermolysis bullosa

Neurotrophic Keratitis

KB801 designed to drive sustained, local nerve growth factor expression and maximize potential efficacy while minimizing dosing frequency

- Neurotrophic keratitis (NK) is a degenerative disease of cornea that occurs when corneal nerves are damaged and their roles in maintaining the corneal epithelium are compromised
- All NK is associated with some degree of vision loss, severe cases lead to blindness
- Only one specific therapy available, recombinant nerve growth factor Oxervate®
- Oxervate® targets underlying nerve defect and has been shown to improve healing
- **However,** must be dosed 6x daily for 8 weeks, burdensome, potentially suboptimal
- Eye pain also common, compounding the problem of 6x daily dosing



NK, neurotrophic keratitis; U.S., United States

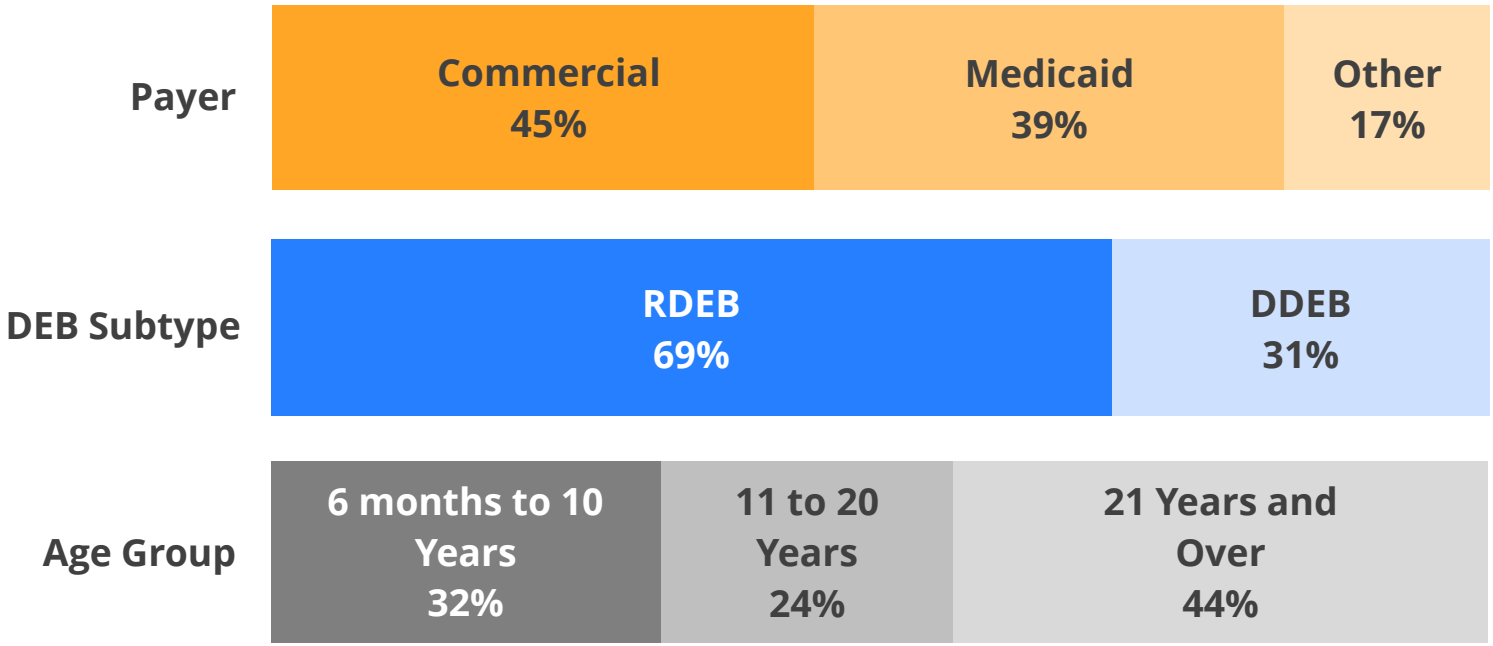
Financial Stability and Insulated From Current Macro Situation

- Revenue vs Operating Expense
- All manufacturing in U.S.
- All IP held in the U.S.
- 7 quarters of profitable EPS since launch
- Global diversification

EPS, earnings per share; U.S., United States

Over 540 Reimbursement Approvals as of April 2025

Reimbursement Approval Splits



Percentages may not total 100% due to rounding

83%

Compliance to Weekly Therapy While on Drug
As of 1Q 2025

97%

Dosing in Home Setting
As of April 2025

All reauthorization requests either approved or in process
97% of covered lives under commercial and Medicaid plans with positive access

All access and reimbursement approval metrics as of April 2025

(R/D)DEB, (recessive / dominant) dystrophic epidermolysis bullosa

Building on Initial Patient Successes to Drive Penetration in the U.S.

VYJUVEK Patient Brochure Excerpt

- Evolving field tactics as launch penetrates deeper into community
- Amplifying patient success stories to drive penetration of identified DEB patient pool
- Patient-centric approach is earning trust and building relationships for the long-term

DEB, dystrophic epidermolysis bullosa; U.S., United States

Recent Publications Add to Clinical Evidence Supporting Regular VYJUVEK Use

Long-Term Safety and Tolerability of Beremagene Geperpavec-svdt (B-VEC) in an Open-Label Extension Study of Patients with Dystrophic Epidermolysis Bullosa

M Peter Marinkovich, Amy S Paller, Shireen V Guide, Mercedes E Gonzalez, Anne W Lucky, Işın Sinem Bağcı, Brittani Agostini, Kolleen Fitzgerald, Shijie Chen, Hubert Chen, Meghan M Conner, Suma M Krishnan

Am J Clin Dermatol. 2025 Apr 12. doi: 10.1007/s40257-025-00942-y

The Utility of Collagen VII Topical Gene Therapy in Treatment of Surgical Defect after Excision of Recessive Dystrophic Epidermolysis Bullosa associated Squamous Cell Carcinoma

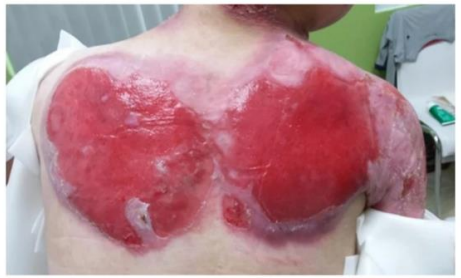
Molly Wallace, Rishob Dasgupta, Karen Cravero, Henry Yang, Andrew P South, Neda Nikbakht

Br J Dermatol. 2025 Apr 17:ljaf128. doi: 10.1093/bjd/ljaf128

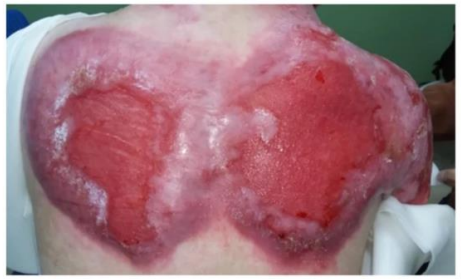
B-VEC, beremagene geperpavec

Compelling Outcomes Across Wounds of All Sizes in OLE

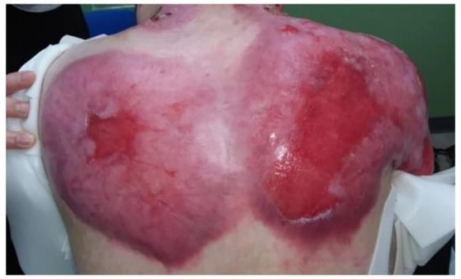
Previously Untreated OLE Patient



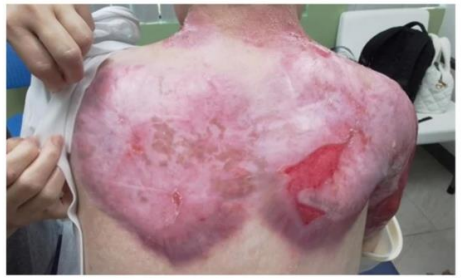
Baseline (OLE Week 1)



6 Months



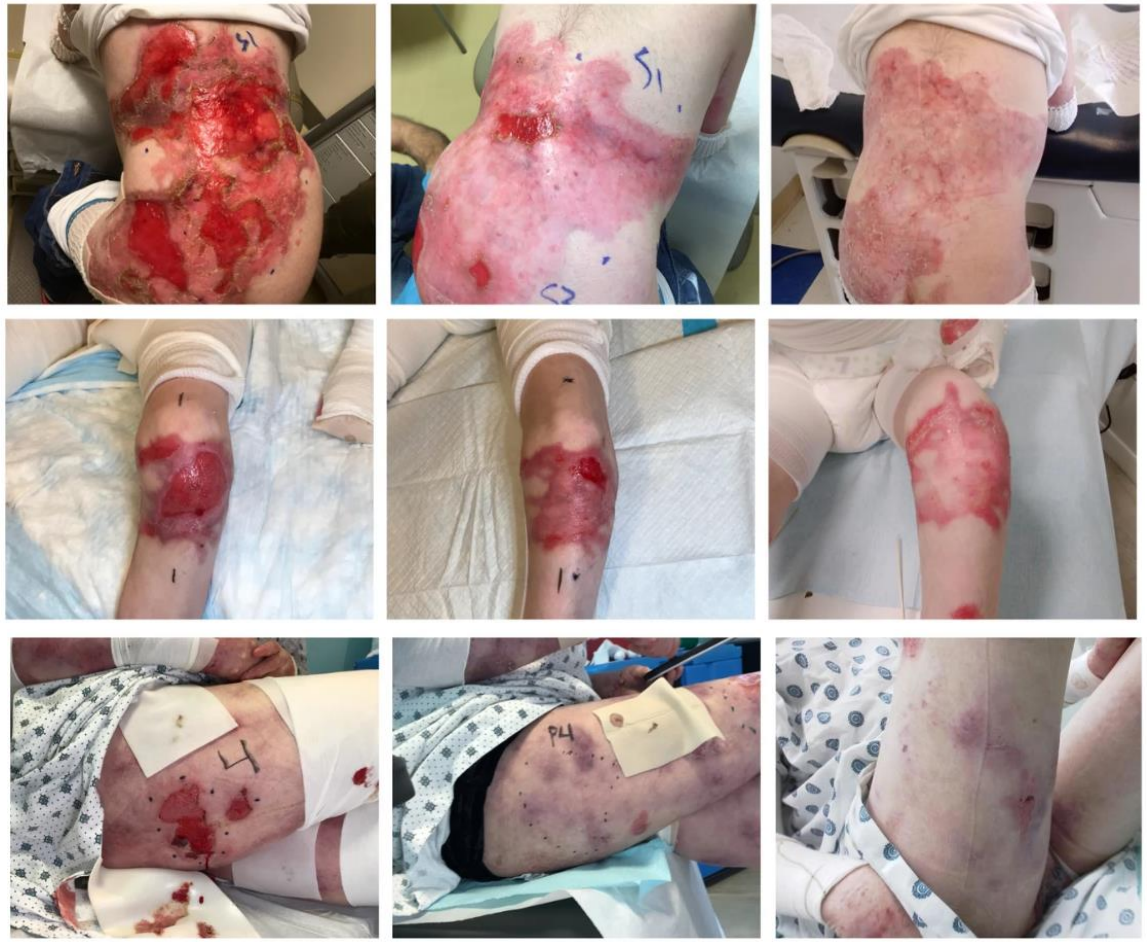
9 Months



12 Months

Phase 3 Rollover Patients

Phase 3 Baseline | End of Phase 3 | End of OLE



Marinkovich MP, et al. *Am J Clin Dermatol*. 2025; doi: 10.1007/s40257-025-00942-y

OLE, open label extension

Rapidly Approaching Molecular Readouts for Krystal's Lung Programs

Initial KB408 molecular data demonstrated ability to safely deliver functional genetic cargo to airways of the lung

Patient 06*

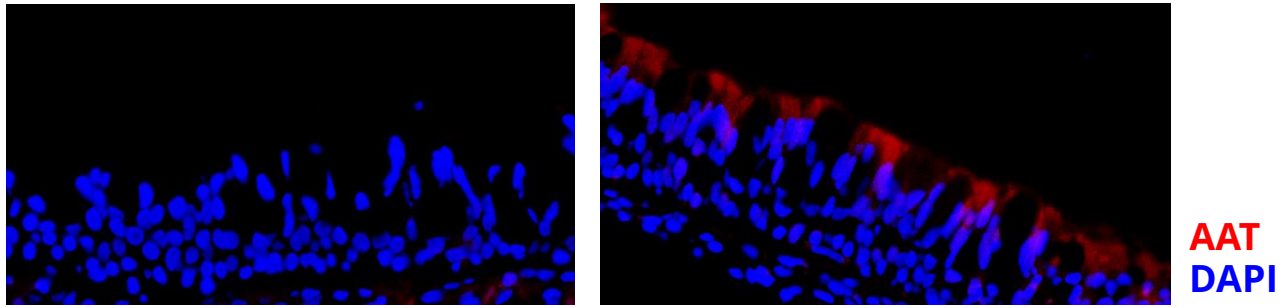
3% AAT Positive Cells At Baseline → **35%** **AAT Positive Cells After KB408****

Patient 07

0% AAT Positive Cells At Baseline → **39%** **AAT Positive Cells After KB408****

+ over 725 nM AAT detected in ELF with corresponding decrease in % free elastase

Representative Patient 07 Images



Baseline **After KB408**

Additional molecular data from cystic fibrosis and AATD patients starting this summer

- Top-line readout from KB407 Phase 1 mid 2025
- Additional molecular data from Cohorts 2 and 3 of KB408 Phase 1 in 2H 2025

Krystal Biotech. Data on File.

* On background augmentation; **Based on quantification of DAPI positive and DAPI + AAT co-positive cells lining the conducting airways of the lung by immunofluorescence; 3-4 biopsies assessed for post-dose DAPI + AAT co-positive cell quantification, total cell counts > 300 per patient. All imaging conducted at 40× magnification, post-dose biopsies harvested 24-48 hours after nebulization

AAT, alpha-1 antitrypsin; AATD, alpha-1 antitrypsin deficiency; DAPI, 4',6-diamidino-2-phenylindole; ELF, epithelial lining fluid

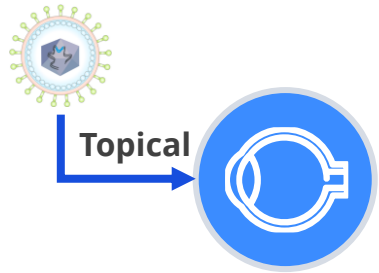
Ophthalmology Expansion Underway Starting with B-VEC Eye Drops KB803

KB803 for Ocular Complications of DEB

- ✓ Repeat administration of B-VEC eye drops under compassionate use previously shown to be well tolerated and associated with full corneal healing as well as significant visual acuity improvement
- ✓ Natural history study initiated last year and ongoing with approximately 50 DEB patients enrolled
- ✓ IND cleared to enable initiation of registrational Phase 3 IOLITE study
- ❑ **On track to dose first patient later this month**
- ❑ **Top-line data readout expected before end of year**

KB801 for Neurotrophic Keratitis

- ✓ Safety of repeat vector administration clinically demonstrated with B-VEC eye drops
- ✓ KB801 shown to efficiently transduce corneal epithelial cells *in vitro* and *in vivo* leading sustained NGF production in front of the eye
- ✓ IND cleared to enable Phase 1/2 study in patients with neurotrophic keratitis
- ❑ **Also on track to dose first patient this month**



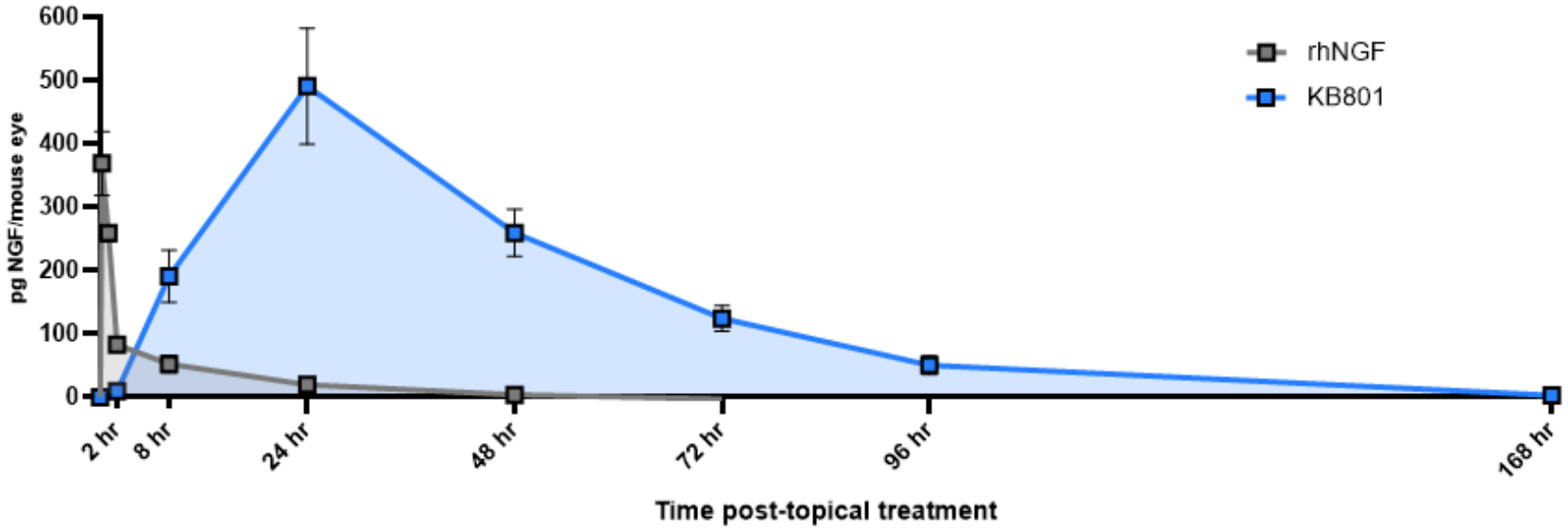
B-VEC, beremagene geperpavec; DEB, dystrophic epidermolysis bullosa; NGF, nerve growth factor

KB801 Enables Sustained, Localized NGF Expression in Corneal Epithelium

Head to Head PK Study #1

- Study conducted in BALB/c mice, 6-10 weeks of age, with eyes wounded using crosshatch technique
- Test conditions, each administered as 3 µL eyedrop
  - KB801: 4.6 x 10^7 PFU
  - Dilution factor matched rhNGF: 20 ng*
  - Saline vehicle control
- Eyes collected at specified time points for ELISA (n = 3)

NGF Protein Levels



Cartwright HN, et al. Poster #2467 at the 2025 Association for Research in Vision and Ophthalmology (ARVO) Annual Meeting

* Based on 1/30 dilution of intended human dose of KB801

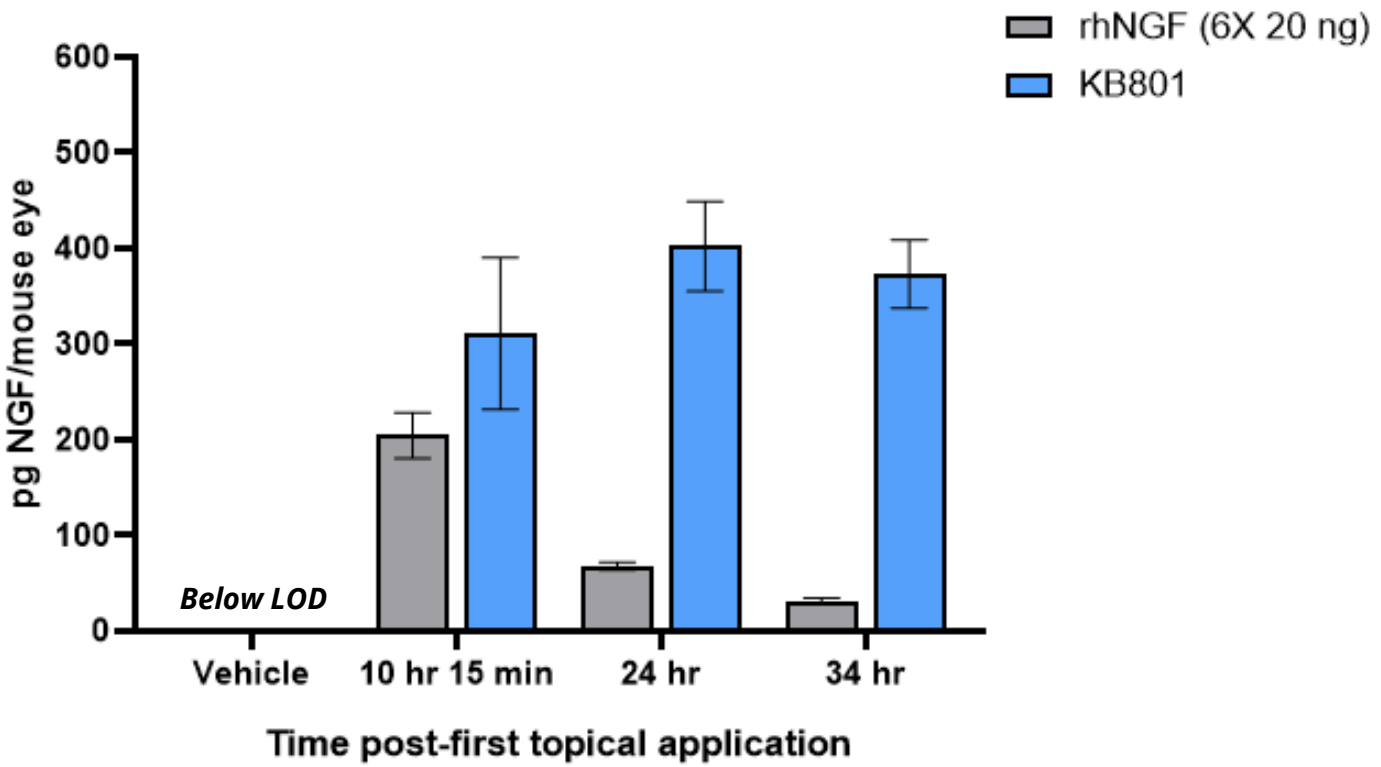
NGF; nerve growth factor; ELISA, enzyme-linked immunosorbent assay; PFU, plaque forming unit; rhNGF, recombinant human nerve growth factor

KB801 Enables Sustained, Localized NGF Expression in Corneal Epithelium

Head to Head PK Study #2

- Study conducted in BALB/c mice, 6-10 weeks of age, with eyes wounded using crosshatch technique
- Test conditions, each administered as 3 µL eyedrop
  - KB801: 4.6 x 10^7 PFU
  - Dilution factor matched rhNGF: **6 x 20 ng***
  - Saline vehicle control
- Eyes collected at specified time points for ELISA (n = 3)

NGF Protein Levels



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* Based on 1/30 dilution of intended human dose of KB801

ELISA, enzyme-linked immunosorbent assay; LOD, limit of detection; NGF; nerve growth factor; PFU, plaque forming unit; rhNGF, recombinant human nerve growth factor

Keeping Pace with Ambitious 2025 Plans Plus Adding New KB801 Program

Next readout: Molecular data for KB407

- Top-line readout from KB407 Phase 1 for cystic fibrosis including molecular data from Cohort 3 patients

Mid 2025

May 2025

- First patient dosed in Phase 3 study evaluating KB803 (ophthalmic B-VEC) for ocular DEB complications
- First patient dosed in Phase 1/2 study evaluating KB801 for neurotrophic keratitis

2H 2025

Multiple additional milestones expected before year end

- Top-line data from KB803 Phase 3 for ocular DEB complications
- Interim readout from KB304 Phase 1 for aesthetic indications
- Additional molecular data from Cohorts 2 and 3 from KB408 Phase 1
- First patient dosed in KB301 Phase 2 for dynamic wrinkles of the décolleté

+ KB707 and KB801 readouts to follow

DEB, dystrophic epidermolysis bullosa

First Quarter 2025 Financial Highlights

Cash and investments: $765.3 million as of March 31, 2025

	Three Months Ended March 31	
	2025	2024
Product revenue, net	$88.2M	$45.3M
Cost of goods sold	$5.0M	$2.4M
Gross margin	94%	95%
R&D expenses	$14.3M	$11.0M
SG&A expenses	$32.7M	$26.1M
Stock-based compensation expense[1]	$13.5M	$9.3M
Net income	$35.7M	$0.9M
Net income per share (basic)	$1.24	$0.03
Net income per share (diluted)	$1.20	$0.03

Non-GAAP R&D and SG&A Expense Guidance for Full Year 2025 of **$150M to 175M[2]**

GAAP, generally accepted accounting principles; R&D, research and development; SG&A, selling, general, and administrative expenses

1. Represents the amount of stock-based compensation expense included in R&D and SG&A expenses
2. Non-GAAP combined R&D and SG&A expense guidance does not include stock-based compensation, for more information refer to Forward Looking Statements and Disclosures on slide 2

Continued Execution to Deliver Shareholder Value in 2025

- EU launch bolsters VYJUVEK franchise
- Four clinical readouts in 2025
- Financial stability gives optionality to maximize shareholder value

EU, European Union

Krystal®

Developing Genetic Medicines to Treat Diseases with High Unmet Medical Needs