First Quarter 2024
Financial Results and Business Update

May 6, 2024

Forward Looking Statements and Disclosures

This presentation, which includes the accompanying oral presentation, contains forward-looking statements that involve substantial risks and uncertainties. Any statements in this presentation about future expectations, plans and prospects for Krystal Biotech, Inc. (together with its subsidiaries and affiliates, the "Company"), including but not limited to statements about the Company's U.S. commercial launch of VYJUVEK®; the Company's efforts to bring B-VEC to market in Europe and Japan, including expected timing of marketing approvals; the market opportunity for VYJUVEK; the Company's technology platform; the development and commercialization of the Company's pipeline product candidates, including conduct and timelines of clinical trials; timing of data readouts; estimated financial measures, including the Company's 2024 non-GAAP combined R&D and SG&A expense guidance; 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 review of manufacturing processes and clinical trials and the content and timing of decisions made by regulatory authorities; the uncertainties inherent in the initiation and conduct of clinical trials; 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 products; the sufficiency of cash resources; and such other important factors as are set forth in the Company's filings with the U.S. Securities and Exchange Commission. In addition, the forward-looking statements included in this presentation 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. While the Company may elect to update these forward-looking statements, it specifically disclaims any obligation to do so.

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This presentation may contain estimates and statistical data made by independent parties or the Company relating to, among other things, market size and growth. These estimates involve assumptions and limitations, and investors are cautioned not to give undue weight to such 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. In addition, 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.

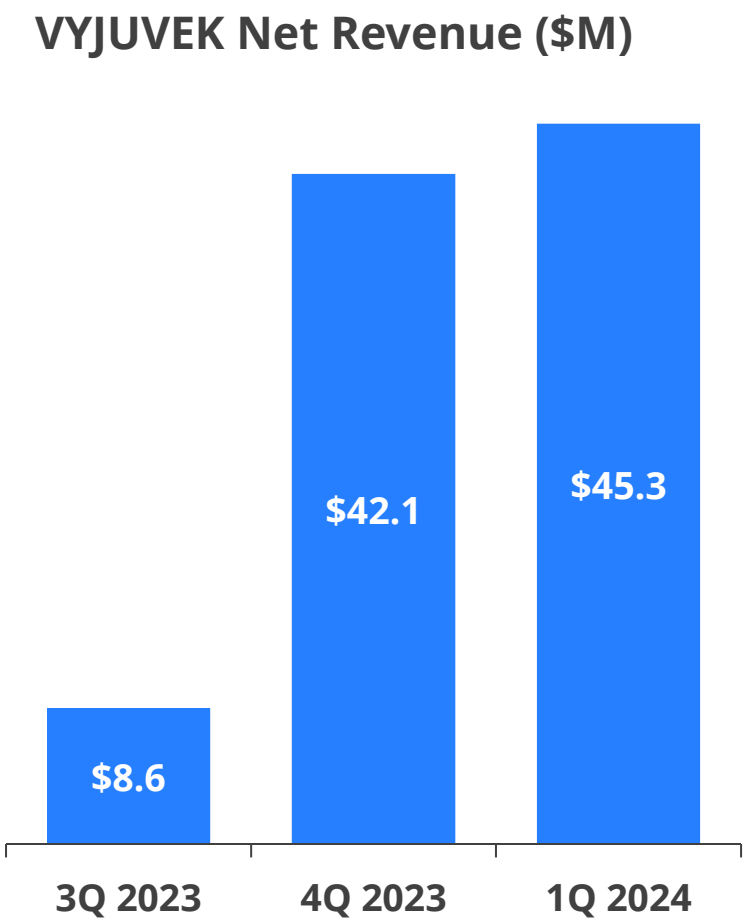
Other than VYJUVEK, all products described in this presentation are investigational therapies.

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

Breakthrough 2023 and Strong Start to 2024

- Fundamentals of VYVUVEK US launch continue to be strong
- Building approval and launch momentum in EU and Japan
- 6 active clinical trials with multiple readouts in 2H 2024
- Strong Cash Position
  - $622.3M in cash and investments
  - Non-GAAP R&D and SG&A 2024 expense guidance between $150 - $175M
- 2 CGMP facilities – ANCORIS and ASTRA

Delivering Quarter Over Quarter Growth Despite Onetime Headwinds



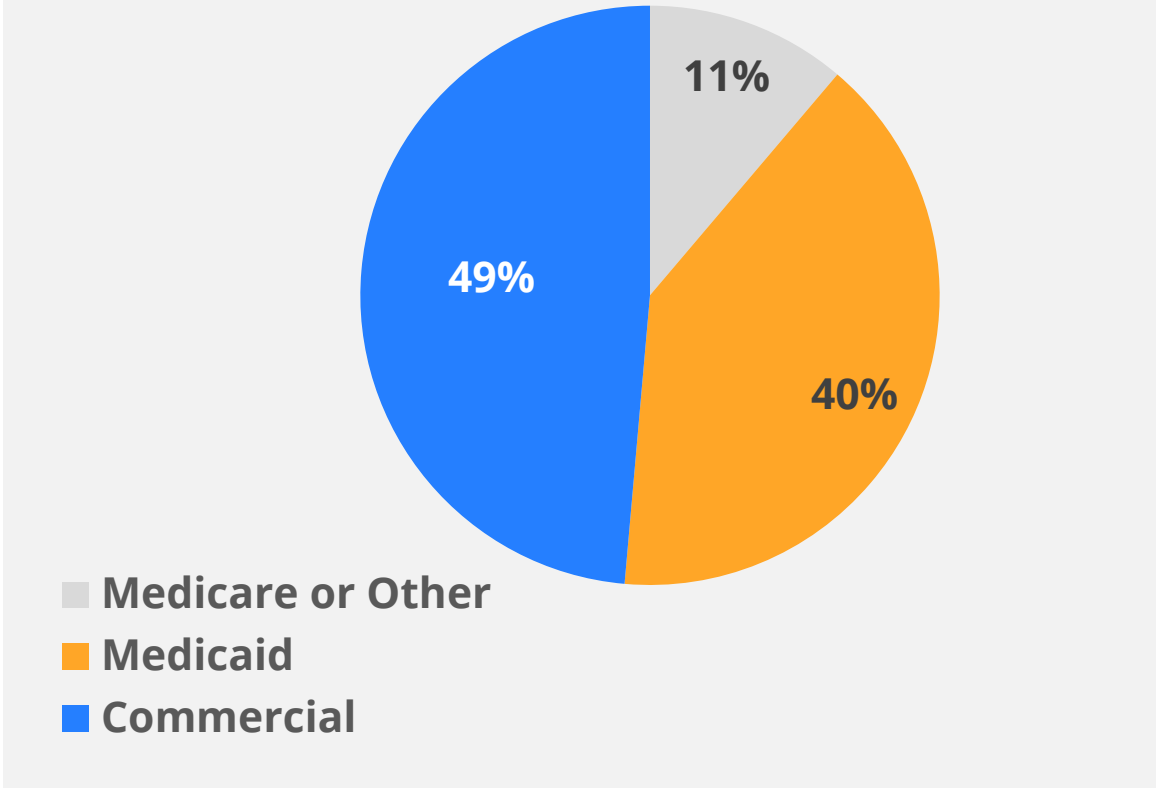
- Gross margins of 95% in 1Q
- Gross-to-net adjustments in 1Q were 14%
- Approximately 400 free vials dispensed in 1Q due to onetime events
- Revenue includes accrual for subset of patients on commercial insurance hitting payment caps in 2024

Steady Growth in Reimbursement Approvals Underpins Strong U.S. Launch

96%

Percentage of Covered Lives under Commercial and Medicaid Plans with Positive Access

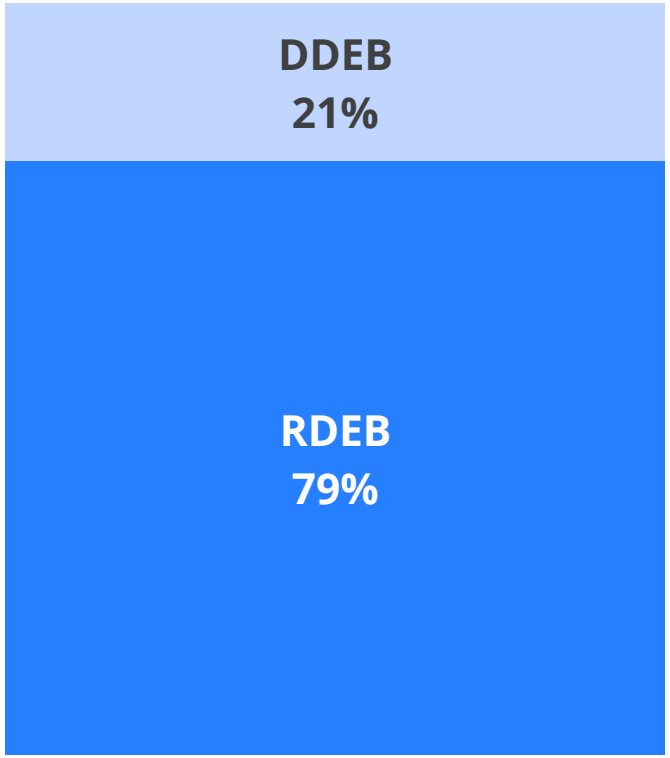
Over 330 Reimbursement Approvals To Date for VYJUVEK Patients



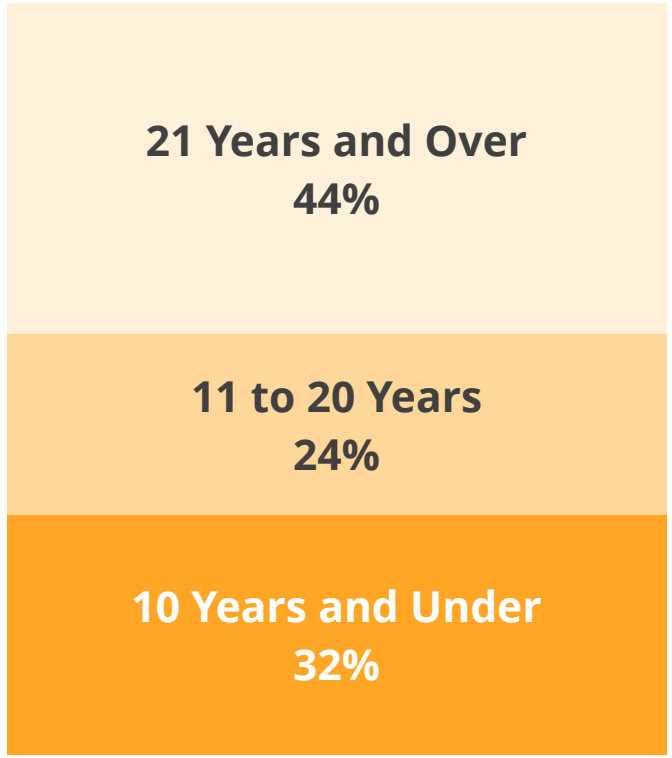
Metrics as of April 2024

Reimbursement Approvals Across All Ages and for DDEB and RDEB Alike

Approvals Split By DEB Subtype



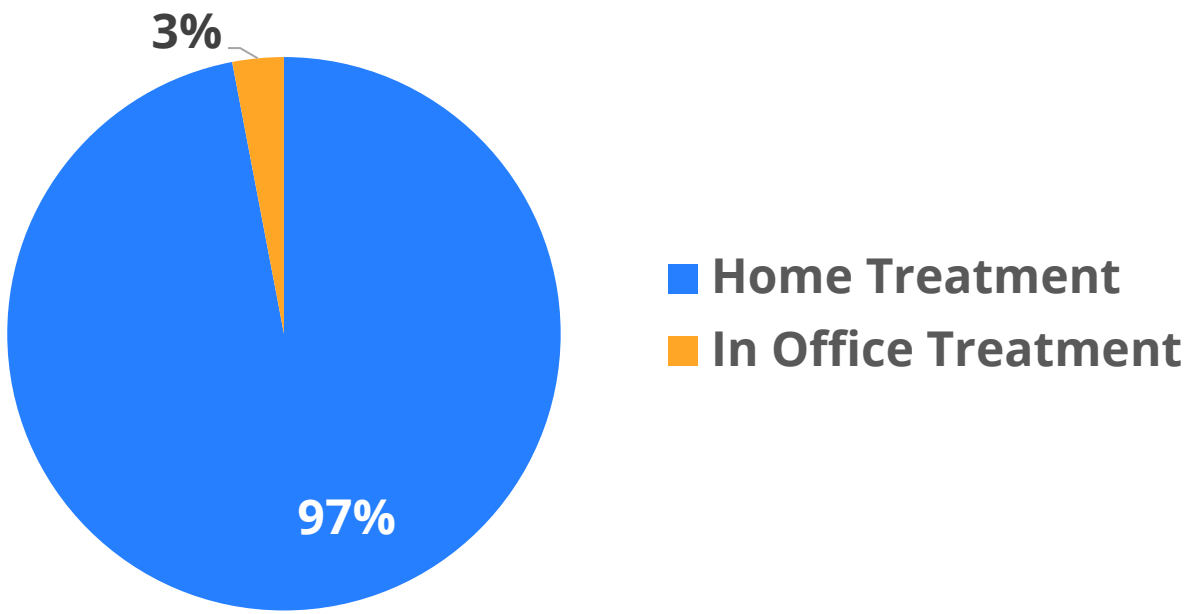
Approvals Split By Age Group



Metrics as of April 2024

Strong Home Dosing Demand Continues and Supports High Compliance

VYJUVEK Site of Care (April 2024)



Patient Compliance (Through Q1 2024)

91%

Deploying Proven Strategies to Drive Long-Term Growth

Claims Monitoring and Alerts

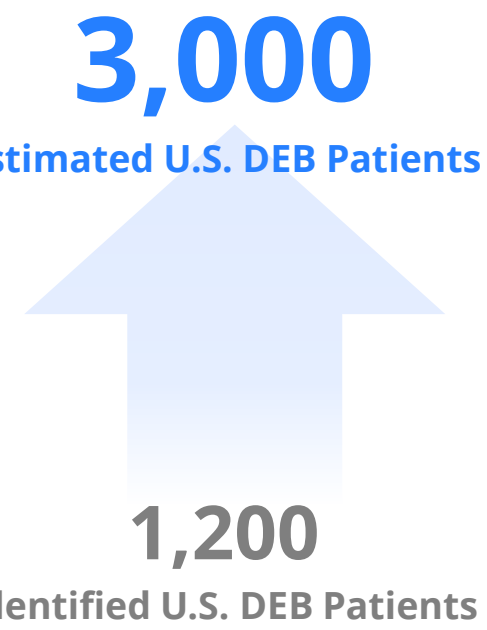
- Weekly alerts to find new patients and enable targeted field deployments
- Future opportunities to expand to DEB adjacent claims codes

Healthcare Professional Education

- Peer-to-peer education from key opinion leaders and early adopters
- Open label extension data will be published in 2H 2024

Patient Outreach and Activation

- In-person and digital programs highlight real-world experience with VYJUVEK
- Expanding to multiple social media channels



Amplifying initial patient and physician experiences with VYJUVEK to drive adoption and build on a prescriber base already in the hundreds

Sharing the Patient Experience on VYJUVEK

Key Trends Expected to Reinforce VYJUVEK Leadership in DEB

Vyjuvek®

beremagene geperpavec-svdt

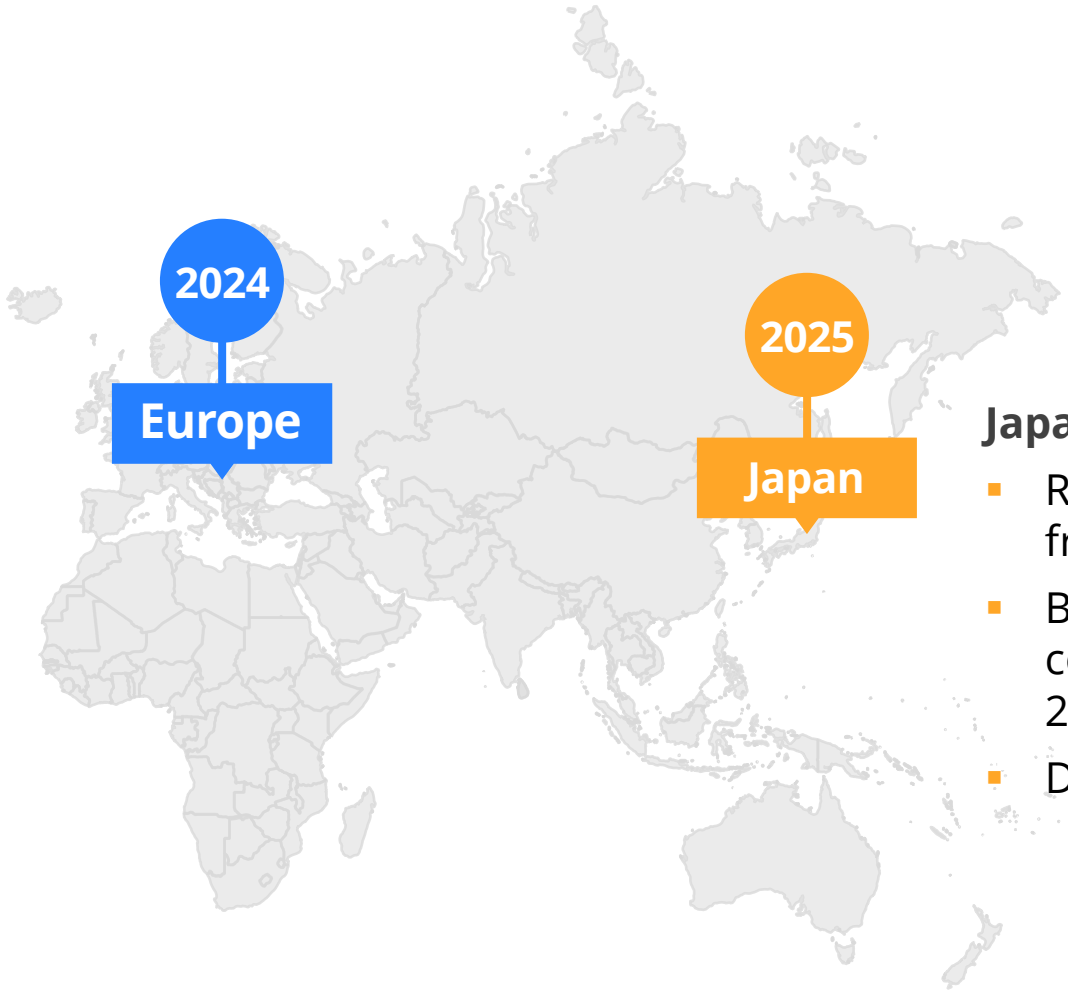
5x10⁹ PFU/mL single-use vial

- ✓ **Patients seeing compounding benefits of corrective therapy as they treat more wounds**
- ✓ **Establishing home administration as the standard of care for patients with DEB**
- ✓ **Growing familiarity with VYJUVEK enabling broader utilization including dominant DEB**

Another Quarter of Steady Progress Towards Ex-U.S. Registrations and Launch

Europe

- Marketing authorization application validated in November 2023
- EMA manufacturing facility inspections completed in February 2024 and GMP certification expected 2H 2024
- On track for 2H 2024 decision



Japan

- Received Orphan Drug Designation from PMDA in December 2023
- Bridging trial efficacy portion now complete and filing expected in 2H 2024
- Decision expected in 2025

Five Active Trials Progressing Well With Readouts Starting Later This Year

Intratumoral KB707 for Injectable Solid Tumors

Cleared first two dose levels in Phase 1 OPAL-1 and fully enrolled third, no DLTs or Grade 3+ related AEs

Inhaled KB707 for Solid Tumors of the Lung

Dosed first patient in Phase 1 KYANITE-1

B-VEC Eyedrops for Ocular Complications of DEB

Aligned with FDA on single arm trial and in preparation for 2H 2024 study start

KB407 for Cystic Fibrosis

Completed dosing in Phase 1 CORAL-1 Cohort 2, expecting to start third and final cohort in 1H 2024

KB408 for AATD

Dosed first patient in Phase 1 SERPENTINE-1

JEUNE

KB301 for Aesthetic Indications

Enrollment ongoing in KB301 Phase 1 Cohorts 3 and 4 with readouts expected in mid-2024

AE, adverse event; DLT, dose limiting toxicity

First Quarter 2024 Financial Highlights

Cash and investments: $622.3 million as of March 31, 2024

($ in millions)	Three months ended March 31, 2024	Three months ended March 31, 2023
Product revenue, net	$45.3M	-
Cost of goods sold	$2.4M	-
R&D expenses	$11.0M	$12.3M
SG&A expenses	$26.1M	$24.0M
Stock-based compensation expense	$9.3M	$10.4M

Non-GAAP R&D and SG&A Expense Guidance for Full Year 2024:*

- **$150M to $175M***
- Excluding stock-based compensation

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

*Non-GAAP combined R&D and SG&A Expense guidance does not include stock-based compensation as we are currently unable to confidently estimate Full Year 2024 stock-based compensation expense. As such, we have not provided a reconciliation from forecasted non-GAAP to forecasted GAAP combined R&D and SG&A Expense in the above. This could materially affect the calculation of forward-looking GAAP combined R&D and SG&A Expenses, as it is inherently uncertain.

Validating the Breadth of Krystal's Redosable Gene Therapy Platform

		Indication	Payload	Preclinical	Phase 1/2	Phase 3	Commercial
Vyjuvek® beremagene geperpavec-svdt 5x10⁹ PFU/mL single-use vial		Dystrophic epidermolysis bullosa (DEB)	*COL7A1*	**FDA Approved May 2023**			Marketed in the U.S.
Dermatology	**KB105**	Autosomal recessive congenital ichthyosis (ARCI)	*TGM1*				
	KB104	Netherton syndrome	*SPINK5*				
	Additional program(s) targeting dermatology indications						
Respiratory	**KB407**	Cystic fibrosis	*CFTR*				
	KB408	Alpha-1 antitrypsin deficiency (AATD)	*SERPINA1*				
	Additional program(s) targeting respiratory indications						
Oncology	**Injectable KB707**	Solid tumors including cutaneous	*IL2 + IL12*				
	Inhaled KB707	Solid tumors of the lung	*IL2 + IL12*				
Ophthalmology	**Ophthalmic B-VEC**	Ocular complications of DEB	*COL7A1*				
	Program(s) targeting ophthalmology indications						

CFTR, cystic fibrosis transmembrane conductance regulator; COL7A1, collagen type VII alpha 1 chain; SERPINA1, serpin family A member 1; SPINK5, serine protease inhibitor Kazal-type 5; TGM1, transglutaminase-1

Krystal®

Developing Genetic Medicines to Treat Diseases with High Unmet Medical Needs