UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM 8-K

CURRENT REPORT
Pursuant to Section 13 or 15(d)
of the Securities Exchange Act of 1934

Date of Report (Date of earliest event reported): October 1, 2020

KRYSTAL BIOTECH, INC.
(Exact name of registrant as specified in its charter)

Delaware	**001-38210**	**82-1080209**
(State or other jurisdiction of incorporation)	**(Commission File Number)**	**(IRS Employer Identification Number)**

2100 Wharton Street, Suite 701
Pittsburgh, Pennsylvania 15203
(Address of principal executive offices, including Zip Code)

Registrant's telephone number, including area code: (412) 586-5830

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions:

☐ Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)

☐ Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)

☐ Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))

☐ Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))

Securities registered pursuant to Section 12(b) of the Act:

Title of each class	Trading Symbol(s)	Name of each exchange on which registered
Common Stock	**KRYS**	**Nasdaq**

Indicate by check mark whether the registrant is an emerging growth company as defined in Rule 405 of the Securities Act of 1933 (§230.405 of this chapter) or Rule 12b-2 of the Securities Exchange Act of 1934 (§240.12b-2 of this chapter).

Emerging growth company ☒

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. ☒

Item 7.01 Regulation FD

On October 1, 2020, representatives of Krystal Biotech, Inc., a Delaware corporation (the "Company"), made a presentation to the 2020 Virtual debra Care Conference, which included an update on the Company's GEM-3 clinical trials for beremagene geperpavec ("B-VEC"). A copy of the Company's presentation is attached as Exhibit 99.1 hereto and incorporated by reference herein.

In accordance with General Instruction B.2 to Form 8-K, the information contained in this Current Report, including Exhibit 99.1 attached hereto, is being "furnished" and not "filed" with the Securities and Exchange Commission for purposes of Section 18 of the Securities Exchange Act of 1934, as amended, or otherwise subject to the liabilities under such section. Furthermore, such information shall not be deemed incorporated by reference in any filing under the Securities Act of 1933, as amended, unless specifically identified as being incorporated therein by reference.

Item 9.01 Financial Statements and Exhibits.

(d) Exhibits.

Exhibit No.	Description
99.1	Krystal Biotech, Inc. Presentation to the 2020 Virtual debra Care Conference, dated October 1, 2020
104	Cover Page Interactive Data File (embedded within the Inline XBRL document)

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, as amended, the registrant has duly caused this report to be signed on its behalf by the undersigned hereunto duly authorized.

Date: October 1, 2020

KRYSTAL BIOTECH, INC.

By: /s/ Krish S. Krishnan
Name: Krish S. Krishnan
Title: President and Chief Executive Officer

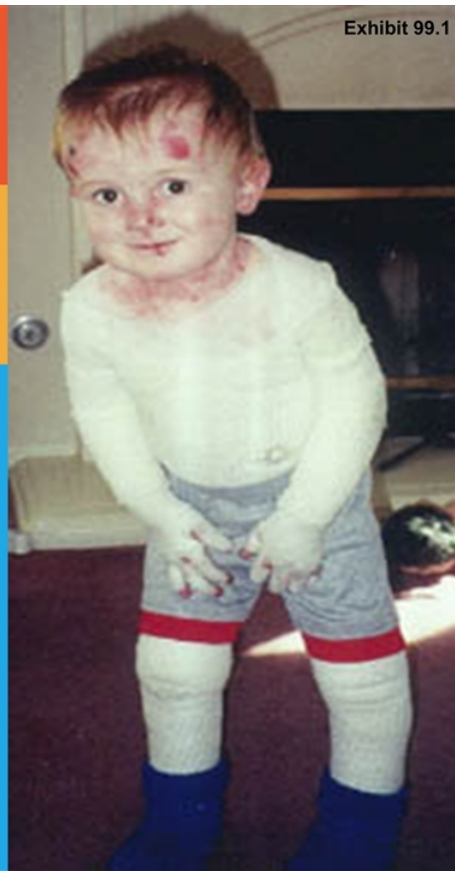
Exhibit 99.1

Topical gene therapy - A new direction in the management of dystrophic epidermolysis bullosa

Suma Krishnan – Chief Operating Officer, Krystal Biotech

Peter Marinkovich – Assoc Professor of Dermatology, Head of Bullous Disease Clinic, Stanford

October 1st, 2020



Krystal

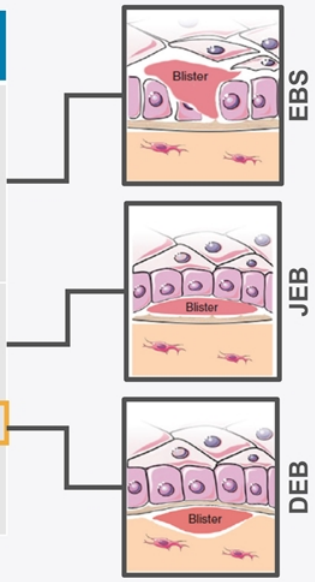
Forward-looking statements

This 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. (the “Company”), including but not limited to statements about the development of the Company’s product candidates, such as the future development or commercialization of beremagene geperpavec (“B-VEC”), KB105, KB104, KB301 and KB407 and the Company’s other product candidates; conduct and timelines of clinical trials, the clinical utility of B-VEC, KB105, KB104, KB301 and KB407 and the Company’s other product candidates; plans for and timing of the review of regulatory filings, efforts to bring B-VEC, KB105, KB104, KB301 and KB407 and the Company’s other product candidates to market; the market opportunity for and the potential market acceptance of B-VEC”, KB105, KB104, KB301 and KB407 and the Company’s other product candidates, the development of B-VEC, KB105, KB104, KB301 and KB407 and the Company’s other product candidates for additional indications; the development of additional formulations of B-VEC, KB105, KB104, KB301 and KB407 and the Company’s other product candidates; plans to pursue research and development of other product candidates, the sufficiency of the Company’s existing cash resources; 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: the content and timing of decisions made by the U.S. Food and Drug Administration, European Medicines Agency and other 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 or studies in different disease indications will be indicative of the results of ongoing or future trials; uncertainties associated with regulatory review of clinical trials and applications for marketing approvals; the availability or commercial potential of product candidates; the ability to retain and hire key personnel; the sufficiency of cash resources and need for additional financing; and such other important factors as are set forth in the Company’s annual and quarterly reports and other filings on file 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. The Company anticipates that subsequent events and developments will cause its views to change. However, while the Company may elect to update these forward-looking statements at some point in the future, it specifically disclaims any obligation to do so. These forward-looking statements should not be relied upon as representing the Company’s views as of any date subsequent to the date of this presentation.

This presentation also contains estimates and other statistical data made by independent parties and by us relating to market size and growth and other data about our industry. This data involves a number of assumptions and limitations, and you are cautioned not to give undue weight to such estimates. Neither we nor any other person makes any representation as to the accuracy or completeness of such data or undertakes any obligation to update such data after the date of this presentation. In addition, projections, assumptions and estimates of our future performance and the future performance of the markets in which we operate are necessarily subject to a high degree of uncertainty and risk.

There are four types of Epidermolysis Bullosa (EB)[1,2]

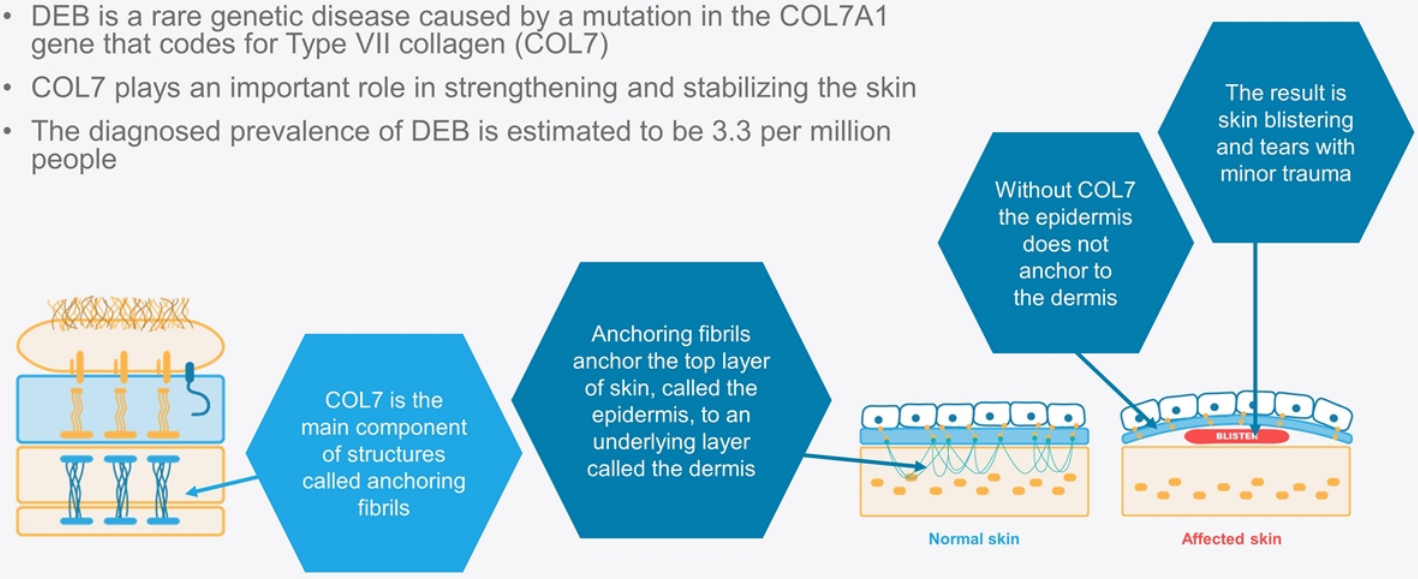
Type	Point of tissue separation	Gene mutations	Proteins involved in pathogenesis
EB simplex (EBS)	Epidermis	KRT5 KRT14	Desmoplakin Plakophilin 1 Plakoglobin Transglutaminase 5 Keratin 5/14 Plectin Exophilin 5
Junctional EB (JEB)	Lamina lucida	LAMA3, LAMB3, or LAMC2	Integrin α6ß4 Integrin α3 Collagen XVII Laminin 332
Dystrophic EB (DEB)	Sublamina densa	COL7A1	Collagen VII
Kindler syndrome	Mixed type, exhibits multiple cleavage planes	FERMT-1	Kindlin-1



1. Shinkuma S. *Clin Cosmet Investig Dermatol* 2015; 8:275–284. 2. De Rosa L *et al. Cold Spring Harb Perspect Biol* 2020; 12:a035667

Mutations in the COL7A1 gene cause DEB[1,2]

- DEB is a rare genetic disease caused by a mutation in the COL7A1 gene that codes for Type VII collagen (COL7)
- COL7 plays an important role in strengthening and stabilizing the skin
- The diagnosed prevalence of DEB is estimated to be 3.3 per million people

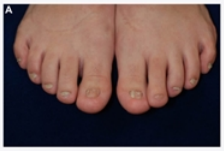


1. US National Library of Medicine. Your guide to understanding genetic conditions. Dystrophic epidermolysis bullosa. Available at: https://ghr.nlm.nih.gov/condition/dystrophic-epidermolysis-bullosa#genes (Accessed September 2020). 2. Fine JD. *JAMA Dermatol* 2016; 152:1231–1238.

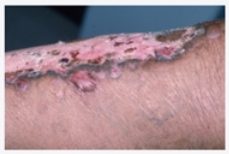
There are two forms of DEB with overlapping severity[1,2]

Autosomal Dominant DEB – DDEB

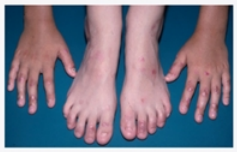
- Reduced COL7
- Symptoms begin at birth
- Severe cases of DDEB can be as debilitating as RDEB



Nail dystrophy of the toenails in DDEB



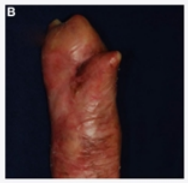
Scarring and post-inflammatory hypopigmentation in a patient with DDEB



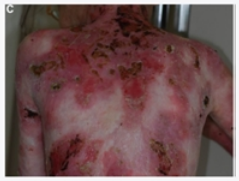
Dystrophy of all twenty nails in a patient with DDEB

Autosomal Recessive DEB – RDEB

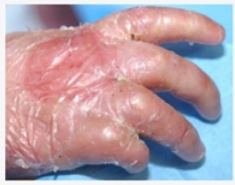
- A severe form of DEB
- Caused by an absence or marked reduction in COL7
- Symptoms begin at birth
- Increased risk of developing early aggressive skin cancer
- Poor prognosis



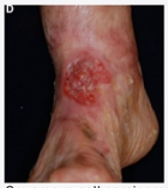
Mitten deformity in a patient with RDEB



Erosions and scarring on the back of a patient with RDEB



Partial mitten deformity in a child with severe generalized RDEB



Squamous cell carcinoma in a patient with RDEB

Images taken from: Shinkuma S 2015[1] and Fine JD 2010[2]

1. Shinkuma S. *Clin Cosmet Investig Dermatol* 2015; 8:275–284. 2. Fine JD. *Orphanet J. Rare Dis.*2010; 5:12.

There is currently no treatment to address the underlying cause of DEB[1]

There are currently no approved treatments to address skin manifestations of patients with DEB and care is currently restricted to:

- **Wound care** – by meticulous bandaging of the skin
- **Pain management**
- **Management of infections**
- **Preventing new injuries** – prevention of secondary infection by careful wound care, facilitated by the use of sterile synthetic non-adhesive hydrocolloid dressings
- Watching for and treating complications

Several experimental approaches are now being explored for possible therapeutic use in patients with DEB including *in vivo* and *ex vivo* **gene therapies**

Krystal

1. Eichstadt *et al*. *JCI Insight*. 2019; 4(19): e130554.

About Krystal Biotech, Inc.

Founded in 2016 to find an innovative way to treat patients with Dystrophic Epidermolysis Bullosa

Investigational treatment (presently known as B-VEC) is designed to be:

- "Off-the-shelf" topical gel to deliver the missing or mutated COL7A1 gene to the skin wounds
- Modified HSV-1 vector carries two copies of the COL7A1 gene to both fibroblasts and keratinocytes
- Treatment does not require hospitalization or anesthesia
- Administration is out-patient (at-home administration anticipated when approved)

Development Status: Principal Investigator – Dr. Peter Marinkovich

- Completed Phase 1 and Phase 2 clinical studies in 2019 at Stanford University
- In these studies a total of 9 RDEB subjects (adult and pediatric) were enrolled in the study; 3 subjects enrolled early and completed the study were subsequently re-enrolled (for a total of 12 participants) and new wounds were randomized
- Promising results were seen which will be further evaluated in a Phase 3 trial
- Currently enrolling patients in a Phase 3 study across 6 sites in the US
- Details of the sites and how to enroll provided in last slide of this presentation

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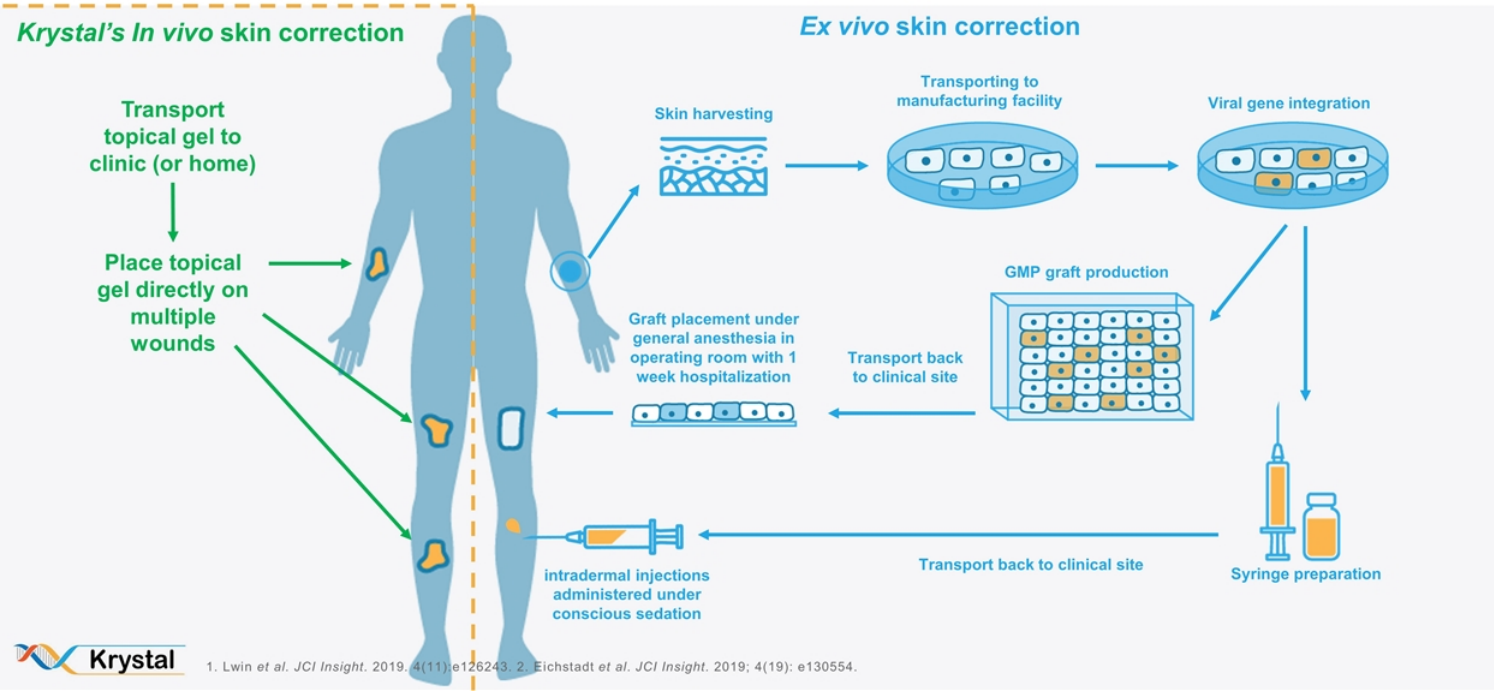
Krystal's *in vivo* approach vs. other *ex vivo* approaches[1,2]

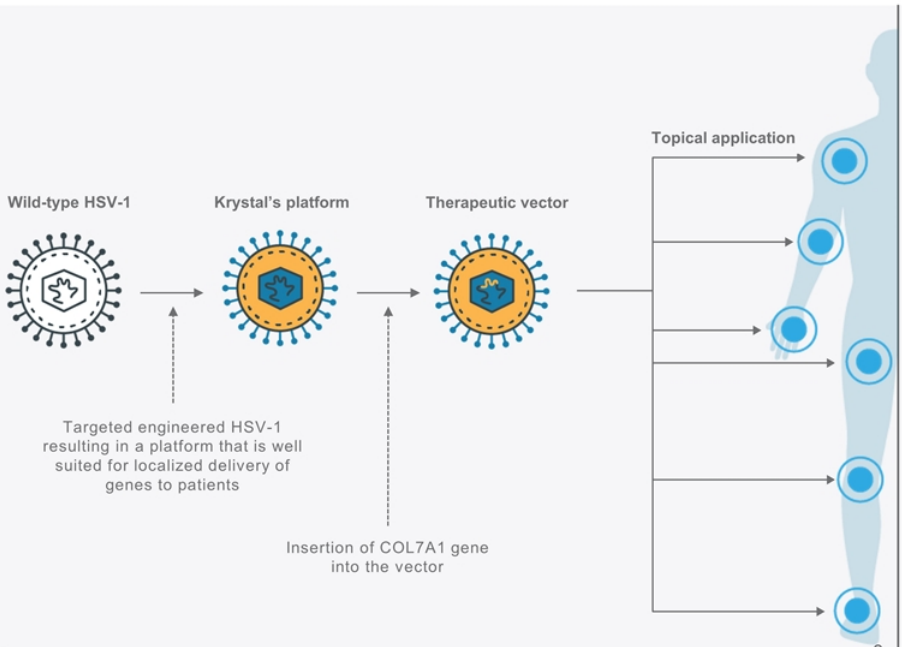


Krystal

1. Lwin *et al. JCI Insight*. 2019. 4(11):e126243. 2. Eichstadt *et al. JCI Insight*. 2019; 4(19): e130554.

Krystal: Topical gel gene therapy

In vivo gene therapy	
Vector	Modified herpes simplex virus 1 (HSV-1)
Skin cells targeted	Fibroblast and keratinocytes
Time taken	**Immediate use**
Administration method	Topical
Need for hospitalization?	**No – out-patient or home application**
Need for anaesthesia?	**No**



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B-VEC is an investigational therapy being studied in clinical trials.

As new genetic based therapies emerge, early genetic diagnosis will become important[1]

A large published study has shown that almost **50% of EBS patients have not had confirmatory testing** to characterize their EB type[2]

IFM and EM (microscopy)[1,3]

Genetic testing (DNA)[1,3]

1. Has C *et al. Br J Dermatol* 2020; 182:574–592. 2. Feinstein JA. *JAMA Dermatol* 2019; 155:196–203. 3. DEBRA International. Laboratory diagnosis for people living with epidermolysis bullosa (EB). Available at: https://www.debra-international.org/eb-health-care-patient-guides (Accessed September 2020).

B-VEC Ph 1/2 Data (previously KB103)*

USAN & INN: *beremagene geperpavec*

For treatment of dystrophic epidermolysis bullosa (DEB)

* RMAT designation

PRIME eligibility

Fast track designation granted

Orphan Drug Designation in US and EU

Rare Pediatric Disease Designation in US

Eligible for Priority Review Voucher

Krystal

B-VEC is an investigational therapy being studied in clinical trials.

Topical B-VEC was evaluated in a Phase 1/2 study at Stanford[1]

Design

- GEM1/2 (NCT03536143) was an intra-patient comparison of wounds randomized to receive either topical B-VEC or placebo
- Each patient on-study for ~6 months; 3 months of on-site visits followed by 3-month at-home imaging period
- *Study PI: Dr. Peter Marinkovich*

Enrollment

- A total of 9 RDEB subjects (adult and pediatric) were enrolled in the study; 3 subjects enrolled early and completed the study were subsequently re-enrolled (for a total of 12 participants) and new wounds were randomized

Key Endpoints

Safety measures

- AEs, including clinically significant changes in laboratory results, vitals, and physical exam findings
- Viral shedding was analyzed through the collection of blood, urine and skin swabs, and antibodies to HSV and COL7 were analyzed through collection of serum

Efficacy measures

- Level of collagen VII (COL7) in B-VEC-administered skin as measured by immunofluorescence; presence of anchoring fibrils as measured by immunoelectron microscopy
- Wound closure (change in wound surface area relative to baseline), time to wound closure, and duration of wound closure, all relative to placebo

1. ClinicalTrials.gov. Topical Beremagene Geperpavec (KB103) Gene Therapy to Restore Functional Collagen VII for the Treatment of Dystrophic Epidermolysis Bullosa (GEM-1). Available at: https://clinicaltrials.gov/ct2/show/NCT03536143 (Accessed September 2020).

Krystal

B-VEC is an investigational therapy being studied in clinical trials

STANFORD SCHOOL OF MEDICINE
Stanford University Medical Center

In Phase 1/2, Topical B-VEC was safe; COL7 expression and molecular correction observed

B-VEC was well tolerated following first and repeat dosing

- **No treatment-related serious AEs were reported; AEs deemed possibly related were mild (n=7) or moderate (n=1) and self limiting**
- No immune response or blistering observed around the sites of administration following first and repeat doses
- Blood and urine samples collected throughout the study revealed:
  - No systemic viral shedding
  - No adverse events associated with routine labs (chemistry and hematology)
- **Some patients had baseline COL7 and HSV-1 antibodies which did not impair efficacy or tolerance of therapy**

STANFORD SCHOOL OF MEDICINE
Stanford University Medical Center

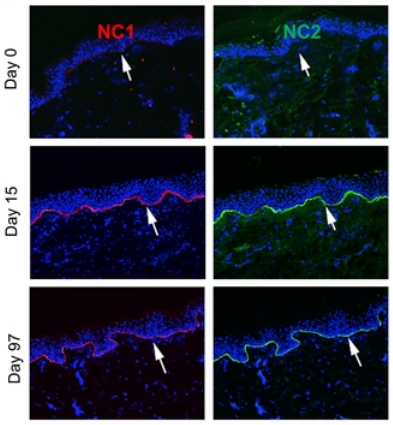
Krystal

B-VEC is an investigational therapy being studied in clinical trials

Molecular correction observed and correlated with wound healing

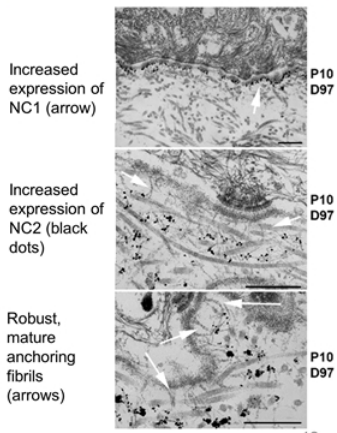
- Expression and correct localization of full-length COL7 following B-VEC therapy, which *promoted the formation of mature anchoring fibrils in all biopsy samples*

Baseline, Days 15 and 97 collagen VII expression using NC1 and NC2 specific antibodies (patient 10)



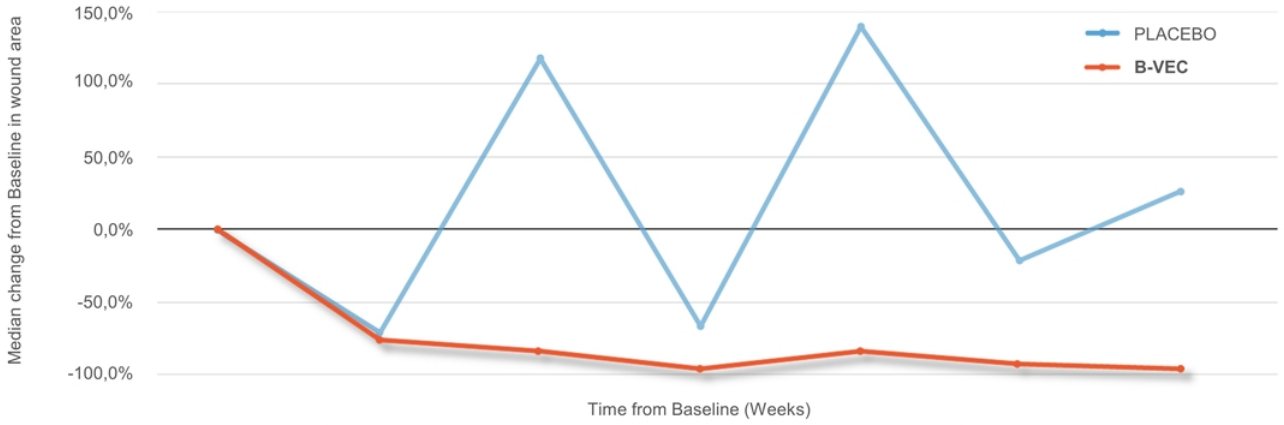
Arrows indicate basement membrane zone

Immunoelectron microscopy shows mature anchoring fibrils at day 97 (patient 10)



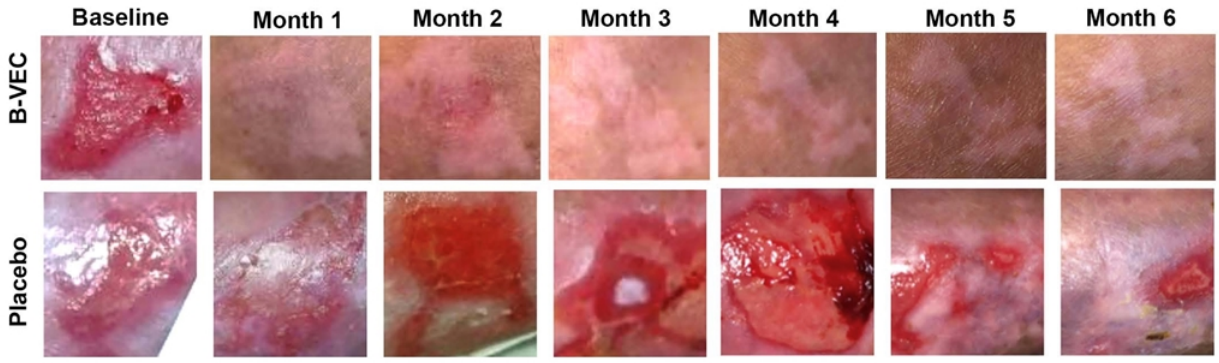
Statistically significant reduction in wound area achieved in Weeks 8,10 and 12

Median change in wound area across Phase 1/2 study (efficacy observed in both recurring and chronic wounds)



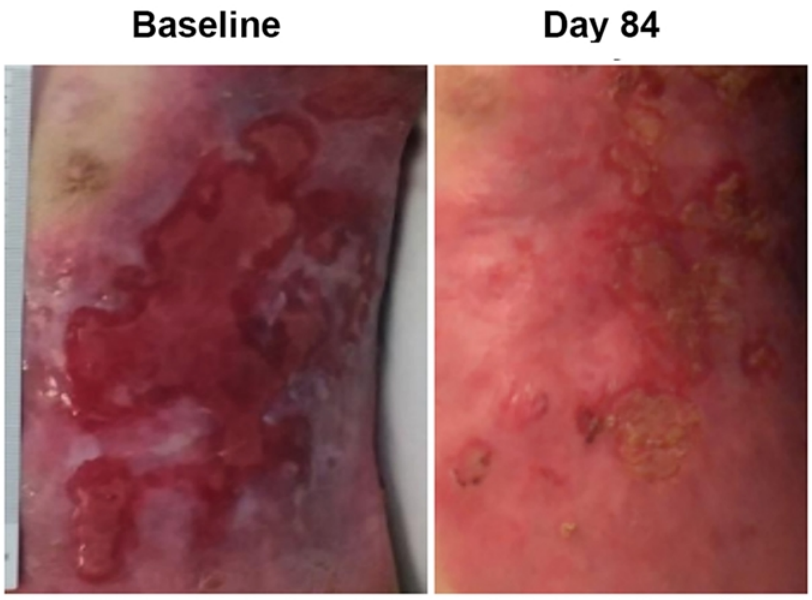
	0	2	4	6	8	10	12
PLACEBO	0,0%	-69,7%	118.3%	-64,7%	140,7%	-19,9%	27.8%
B-VEC	**0.0%**	**-74.9%**	**-82.3%**	**-94.4%**	**-82.8%**	**-91.8%**	**-94.1%**
p-value **		0,298	0,004	0,071	0,002	0,015	0,020

B-VEC: Sustained closure in a recurring wound in Ph 1/2



B-VEC: wound healing observed in a large chronic wound treated in Ph 1/2

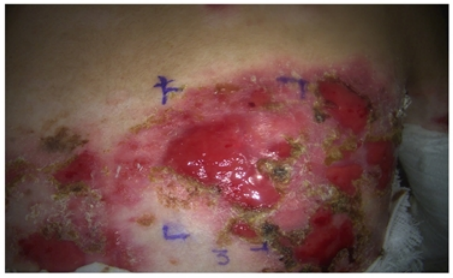
Large chronic wound (>60 cm^2) present for >5 years covering the left side of patient's torso

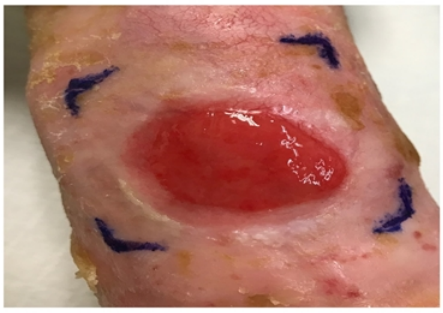


B-VEC: Long term durability of healing observed in chronic wounds

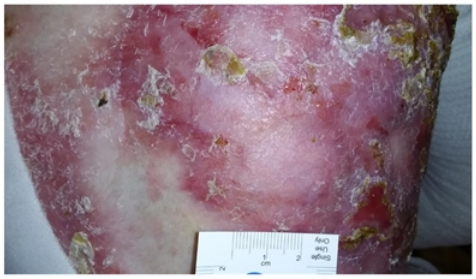
Long term durability observed anecdotally on a majority of chronic wounds treated in Phase 1/2 clinical study

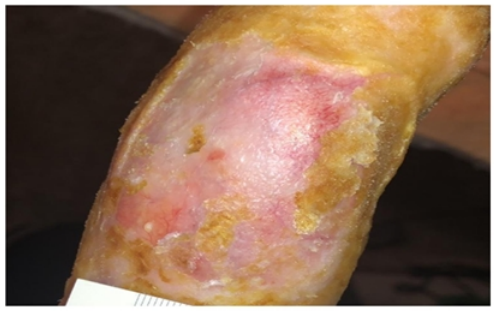
Before





Following B-VEC treatment





Illustrative

Durability:
~ 18 months (chronic wounds)

GEM-3: B-VEC PHASE III TRIAL INFORMATION

Krystal

B-VEC is an investigational therapy being studied in clinical trials

The Pivotal GEM-3 study is currently enrolling[1]

Design

- GEM-3 (NCT04491604) is a randomized, double-blind, intra-patient comparison of wounds randomized to receive either topical B-VEC or placebo
- Each patient on-study for approximately 7 months: the 6-month dosing period followed by a 30-day safety follow up

Enrollment

- Approximately 30 DEB subjects (adult and pediatric) will be enrolled across 6 trial sites in the US
- Each subject provides at least 1 pair (up to 3) of primary target wounds, 1 randomized to B-VEC and the other to placebo
- In addition to the primary target wound pair(s), additional wounds (secondary wounds) may be selected to be treated with B-VEC in an open-label manner

Key Efficacy Endpoints

Primary

- Complete wound healing, determined by the investigator, as compared to baseline in B-VEC treated wounds vs. placebo treated at weeks 20, 22 and 24

Secondary

- Complete wound healing, determined by the investigator, as compared to baseline in B-VEC treated wounds versus placebo at weeks 8, 10 and 12
- Mean change in pain severity (using either a VAS or FLACC-R Scale) per primary wound site associated with wound dressing changes
- The proportion of primary wound sites with ≥75% would healing as compared to baseline at Week 24 using Canfield photography quantitation

1. ClinicalTrials.gov. The Objective of This Study is to Compare the Efficacy and Safety of Beremagene Geperpavec (B-VEC) Topical Gel With That of Placebo for the Treatment of Dystrophic Epidermolysis Bullosa (DEB). Available at https://clinicaltrials.gov/ct2/show/NCT04491604 (Accessed September 2020).

Key inclusion/exclusion criteria[1]

INCLUSION

- ✓ Clinical diagnosis of DEB
- ✓ Confirmation of DEB diagnosis (DDEB or RDEB) by genetic testing including COL7A1
- ✓ Age ≥6 months and older
- ✓ At least two cutaneous wounds (recurrent or chronic) that are:
  - Location: similar in size, located in similar anatomical regions, and have similar appearance
  - Appearance: clean with adequate granulation tissue, excellent vascularization and do not appear infected

EXCLUSION

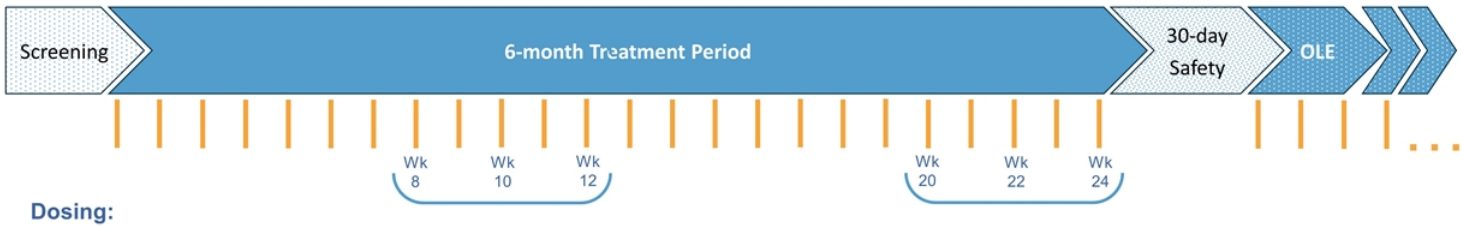
- X Participation in an interventional clinical trial within the past 3 months
- X Current evidence or a history of squamous cell carcinoma in the area that will undergo treatment
- X Actively receiving chemotherapy or immunotherapy at Visit 1
- X Receipt of a skin graft in the past three months
- X Unable to travel to the study site

Full inclusion/exclusion criteria listed on ClinicalTrials.gov

1. ClinicalTrials.gov. The Objective of This Study is to Compare the Efficacy and Safety of Beremagene Geperpavec (B-VEC) Topical Gel With That of Placebo for the Treatment of Dystrophic Epidermolysis Bullosa (DEB). Available at https://clinicaltrials.gov/ct2/show/NCT04491604 (Accessed September 2020).

Phase 3 design

*The trial design is inclusive of **chronic and recurring** wounds of **any size** in **RDEB or DDEB** patients*



Dosing:

- Primary wounds will be treated once weekly with a fixed dose until wound closure; should a wound re-open, weekly dosing will resume at the assigned dose until wound closure
- The fixed dose per wound is dependent on the size of the wound at baseline
- Each patient is allowed a maximum weekly dose of B-VEC; if that maximum is not reached in dosing primary wounds, additional secondary wounds may be chosen and treated with B-VEC in an open label manner
- The maximum weekly dose, administered once weekly per patient, is defined by patient age

Key design elements:

- ✓ No restriction on chronic or recurring wounds
- ✓ Maximum weekly dose allows for flexibility to treat multiple and/or larger wounds
- ✓ Inclusive of RDEB *and* DDEB patients

Enroll in our Phase III multicenter B-VEC clinical trial[1]

Phase 3 Clinical Trial Site Locations	
United states, California	
Stanford University Stanford, California, United States, 94305 Principal investigator: Peter Marinkovich, MD Contact: Sinem Bagci, MD 650-484-6878, isbagci@Stanford.edu	Recruiting
Mission Dermatology Rancho Santa Margarita, California, United states, 92688 Principal investigator: Shireen Guide, MD	Recruiting
United states, Florida	
Pediatric Skin Research, LLC Coral Gables, Florida, United States, 33146 Principal investigator: Mercedes Gonzalez, MD	Recruiting
United States, Illinois	
Northwestern University Chicago, Illinois, United States, 60611 Principal investigator: Amy Paller, MD	Recruiting
United States, Ohio	
Cincinnati Children's Hospital Medical Centre Cincinnati, Ohio, United States, 45229	Not yet recruiting
United States, Texas	
Ascension Seton Austin, Texas, United States, 7823	Not yet recruiting

For more information about enrollment in our Phase III trial contact:

Peter Marinkovich, MD
Principal Investigator

Contact Sinem Bagci MD:
isbagci@Stanford.edu
650-484-6878

Suma Krishnan
Founder and Chief Operations Officer

skrishnan@krystalbio.com
415-310-7747

Brittani Agostini
Clinical Operations Manager

bagostini@krystalbio.com
412-586-5830

Or go to:

https://clinicaltrials.gov/ct2/show/NCT04491604

1. ClinicalTrials.gov. The Objective of This Study is to Compare the Efficacy and Safety of Beremagene Geperpavec (B-VEC) Topical Gel With That of Placebo for the Treatment of Dystrophic Epidermolysis Bullosa (DEB). Available at https://clinicaltrials.gov/ct2/show/NCT04491604 (Accessed September 2020).