Krystal Biotech, Inc. Announces Granting of U.S. Composition of Matter Patent Covering Herpes Simplex Virus (HSV) Vectors and Methods of Using the Same to Treat Skin Diseases

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PITTSBURGH, Jan. 16, 2018 (GLOBE NEWSWIRE) -- Krystal Biotech, Inc. (NASDAQ:KRYS), a gene therapy company advancing “off-the-shelf,” treatments for dermatological diseases, today announced that the United States Patent Office (USPTO) has granted U.S. Patent No. 9,877,990 which covers compositions comprising herpes simplex viral (HSV) vectors and methods of using the same for providing prophylactic, palliative or therapeutic relief of a wound, disorder or disease of the skin in a subject. The patent should appear in the Official Gazette, the official journal of the USPTO on January 30, 2018.

“The granting of the composition of matter patent and methods of using the same for skin diseases is an important milestone for KB-103, our lead product candidate with orphan-drug designation designed to treat patients with dystrophic epidermolysis bullosa,” said Suma Krishnan, Founder and Chief Operating Officer of Krystal Biotech, Inc. “This patent has fundamental claims that we believe strengthen our robust intellectual property portfolio and is an important step in the advancement and clinical development of our pipeline using our STAR-D (“Skin Targeted Delivery”) platform.”

“The granting of this patent that is 100% owned by Krystal Biotech provides further recognition of the quality of the innovation being carried out by the Krystal team,” said Krish S Krishnan, Chairman and Chief Executive Officer. “We believe this issuance puts Krystal Biotech in an IP leadership position in the application of gene therapy to treat dermatological diseases.”

About KB103
KB103 is Krystal’s lead product candidate, currently in preclinical development and seeks to use gene therapy to treat dystrophic epidermolysis bullosa, or DEB, an incurable skin blistering condition caused by a lack of collagen in the skin. KB103 is a replication-defective, non-integrating viral vector that has been engineered employing Krystal’s STAR-D platform to deliver functional human COL7A1 genes directly to the patients’ dividing and non-dividing skin cells. HSV-1 is Krystal’s replication-deficient, non-integrating viral vector that can penetrate skin cells more efficiently than other viral vectors. Its high payload capacity allows it to accommodate large or multiple genes and its low immunogenicity makes it a suitable choice for direct and repeat delivery to the skin.

About the STAR-D Gene Therapy Platform
Krystal has developed a proprietary gene therapy platform, the Skin TARgeted Delivery platform, or STAR-D platform, that consists of an engineered viral vector and skin-optimized gene transfer technology, to develop off-the-shelf treatments for dermatological diseases for which there are no known effective treatments. The company believes that the STAR-D platform provides an optimal approach for treating dermatological conditions due to the nature of the HSV-1 viral vector it has created. Certain inherent features of the HSV-1 virus, combined with the ability to strategically modify the virus in the form employed as a gene delivery backbone, provide the STAR-D platform with several advantages over other viral vector platforms for use in dermatological applications.

About Dystrophic Epidermolysis Bullosa, or DEB
Dystrophic epidermolysis bullosa, or DEB, is an incurable, often fatal skin blistering condition caused by a lack of collagen protein in the skin. It is caused by mutations in the gene coding for type VII collagen, or COL7, a major component of the anchoring fibrils, which anchor the epidermis to the underlying dermis, and provide structural adhesion in a normal individual. The lack of COL7 in DEB patients causes blisters to occur in the dermis as a result of separation from the epidermis. This makes the skin incredibly fragile, leading to blistering or skin loss at the slightest friction or knock. It is progressive and incredibly painful.

The most severe form of DEB is recessive DEB, or RDEB, which is caused by null mutations in the COL7A1 gene. DEB also occurs in the form of dominant DEB, or DDEB, which is considered to be a milder form of DEB. There are no known treatments, which affect the outcome of either form of the disease, and the current standard of care for DEB patients is limited to palliative treatments. Krystal is developing KB-103 for the treatment of the broad DEB population, including both recessive and dominant forms of the disease.

About Krystal Biotech
Krystal Biotech, Inc. (NASDAQ:KRYS) is a gene therapy company dedicated to developing and commercializing novel treatments for patients suffering from dermatological diseases. For more information, please visit http://www.krystalbio.com.

Forward-Looking Statements
This press release includes certain disclosures that contain “forward-looking statements,” including, without limitation, statements regarding the development of KB103, including statements regarding the significance of the issuance of the patent to the company’s leadership in the application of gene therapy to treat dermatological diseases and its importance in advancing the clinical development of the company’s pipeline. You can identify forward-looking statements because they contain words such as “believes” and “expects.” Forward-looking statements are based on Krystal’s current expectations and assumptions. Because forward-looking statements relate to the future, they are subject to inherent uncertainties, risks and changes in circumstances that may differ materially from those contemplated by the forward-looking statements, which are neither statements of historical fact nor guarantees or assurances of future performance. Important factors that could cause actual results to differ materially from those in the forward-looking statements are set forth in Krystal’s filings with the Securities and Exchange Commission, including its registration statement on Form S-1, as amended from time to time, under the caption “Risk Factors.”

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