



CRISPR Therapeutics, Intellia Therapeutics, and Caribou Biosciences Announce Grant of U.S. Patent for CRISPR/Cas9 Genome Editing

June 19, 2018

- **PATENT GRANTED FOR GROUNDBREAKING WORK BY JENNIFER DOUDNA'S AND EMMANUELLE CHARPENTIER'S RESEARCH TEAMS IN CRISPR/CAS9 GENOME EDITING TECHNOLOGY**
- **PATENT COVERS USE OF OPTIMIZED GUIDE RNA MOLECULES**

ZUG, Switzerland and CAMBRIDGE, Mass. and BERKELEY, Calif., June 19, 2018 (GLOBE NEWSWIRE) -- CRISPR Therapeutics (NASDAQ:CRSP), Intellia Therapeutics, Inc. (NASDAQ:NTLA), and Caribou Biosciences, Inc., announced that The Regents of the University of California, the University of Vienna and Emmanuelle Charpentier, Ph.D. (collectively, "UC"), co-owners of foundational intellectual property relating to CRISPR/Cas9 genome editing technology, were granted U.S. Patent No. 10,000,772 ("the '772 patent") today by the U.S. Patent and Trademark Office (USPTO). The patent covers methods of using optimized guide RNA formats (including single guide and dual guide formats) in certain environments, including eukaryotic cells (such as human, animal and plant cells). The optimized formats modify the part of a guide RNA that interacts with the CRISPR/Cas9 nuclease.

The '772 patent claims priority to a U.S. provisional application, filed by UC on May 25, 2012. This application broadly encompasses the CRISPR/Cas9 genome editing technology invented by Jennifer Doudna's and Charpentier's research teams.

CRISPR Therapeutics, Intellia Therapeutics and Caribou Biosciences issued the following joint statement on the grant of the '772 patent: "We believe that the U.S. patent '772 granted today covers the use of CRISPR/Cas9 genome editing with the RNA guide formats that are widely used throughout the industry. We anticipate this is the first of many patents that will be granted to UC on this foundational CRISPR/Cas9 intellectual property."

In addition to this granted U.S. patent, applications from this patent estate have been found allowable in the United States and also have issued in Europe, the United Kingdom, China, Japan and various other countries worldwide. These patents cover the dual- and single-guide RNA compositions of the widely adopted CRISPR/Cas9 genome editing technology and their uses in all environments, including plant, animal and human cells as well as for use in human therapeutics.

The '772 patent is not impacted by the USPTO's decision to terminate an interference between a separate UC patent application and a patent application owned by the Broad Institute, Harvard University and the Massachusetts Institute of Technology without reaching a decision on which inventors were the first to invent the use of CRISPR/Cas9 technology for genome editing. UC's appeal of that decision was heard on April 30, 2018 by the U.S. Court of Appeals for the Federal Circuit, which will issue a decision in the future.

For more information on the foundational CRISPR/Cas9 intellectual property, please visit www.crisprcollective.com.

About CRISPR Therapeutics

CRISPR Therapeutics is a leading gene editing company focused on developing transformative gene-based medicines for serious diseases using its proprietary CRISPR/Cas9 platform. CRISPR/Cas9 is a revolutionary gene editing technology that allows for precise, directed changes to genomic DNA. CRISPR Therapeutics has established a portfolio of therapeutic programs across a broad range of disease areas including hemoglobinopathies, oncology and rare diseases. To accelerate and expand its efforts, CRISPR Therapeutics has established strategic collaborations with leading companies including Bayer AG and Vertex Pharmaceuticals. CRISPR Therapeutics AG is headquartered in Zug, Switzerland, with its wholly-owned U.S. subsidiary, CRISPR Therapeutics, Inc., and R&D operations based in Cambridge, Massachusetts, and business offices in London, United Kingdom. For more information, please visit www.crisprtx.com.

About Intellia Therapeutics

Intellia Therapeutics is a leading genome editing company focused on developing proprietary, curative therapeutics using the CRISPR/Cas9 system. Intellia believes the CRISPR/Cas9 technology has the potential to transform medicine by permanently editing disease-associated genes in the human body with a single treatment course, and through improved cell therapies that can treat cancer and immunological diseases by replacing patients' diseased cells. The combination of deep scientific, technical and clinical development experience, along with its leading intellectual property portfolio, puts Intellia in a unique position to unlock broad therapeutic applications of the CRISPR/Cas9 technology and create a new class of therapeutic products. Learn more about Intellia Therapeutics and CRISPR/Cas9 at intelliata.com and follow us on Twitter @intelliatweets.

About Caribou Biosciences, Inc.

Caribou is a leading company in CRISPR genome engineering founded by pioneers of CRISPR/Cas9 biology based on research carried out in the Doudna Laboratory at the University of California, Berkeley. Caribou's tools and technologies provide transformative capabilities to therapeutic development, agricultural biotechnology, industrial biotechnology, and basic and applied biological research. For more information, including information about obtaining research and commercial licenses as well as collaborations, visit www.cariboubio.com and follow the Company @CaribouBio. "Caribou Biosciences" and the Caribou logo are registered trademarks of Caribou Biosciences, Inc.

CRISPR Forward-Looking Statements

Certain statements set forth in this press release constitute "forward-looking statements" within the meaning of the Private Securities Litigation Reform Act of 1995, as amended, including, but not limited to, statements concerning: the timing of filing of clinical trial applications and INDs, any approvals

thereof and timing of commencement of clinical trials, the intellectual property coverage and positions of CRISPR Therapeutics, its licensors and third parties, the sufficiency of CRISPR Therapeutics' cash resources and the therapeutic value, development, and commercial potential of CRISPR/Cas9 gene editing technologies and therapies. You are cautioned that forward-looking statements are inherently uncertain. Although CRISPR Therapeutics believes that such statements are based on reasonable assumptions within the bounds of its knowledge of its business and operations, the forward-looking statements are neither promises nor guarantees and they are necessarily subject to a high degree of uncertainty and risk. Actual performance and results may differ materially from those projected or suggested in the forward-looking statements due to various risks and uncertainties. These risks and uncertainties include, among others: uncertainties regarding the intellectual property protection for our technology and intellectual property belonging to third parties; uncertainties inherent in the initiation and completion of preclinical studies for CRISPR Therapeutics' product candidates; availability and timing of results from preclinical studies; whether results from a preclinical trial will be predictive of future results of the future trials; expectations for regulatory approvals to conduct trials or to market products; and those risks and uncertainties described under the heading "Risk Factors" in CRISPR Therapeutics' most recent annual report on Form 10-K, and in any other subsequent filings made by CRISPR Therapeutics with the U.S. Securities and Exchange Commission (SEC), which are available on the SEC's website at www.sec.gov. Existing and prospective investors are cautioned not to place undue reliance on these forward-looking statements, which speak only as of the date they are made, and CRISPR Therapeutics undertakes no duty to update this information unless required by law.

Intellia Forward-Looking Statements

This press release contains "forward-looking statements" of Intellia within the meaning of the Private Securities Litigation Reform Act of 1995. These forward-looking statements include, but are not limited to, express or implied statements regarding the intellectual property position and strategy of Intellia, its licensors or other parties from which it derives rights, including with respect to intellectual property regarding the CRISPR/Cas9 genome editing technology, or that of unrelated third parties; Intellia's ability to develop and commercialize CRISPR/Cas9-based therapeutic products to address severe and life-threatening diseases; and Intellia's scientific, business and financial plans and prospects. Any forward-looking statements in this press release are based on management's current expectations of future events and are subject to a number of risks and uncertainties that could cause actual results to differ materially and adversely from those set forth in or implied by such forward-looking statements. These risks and uncertainties include, but are not limited to, risks related to Intellia's ability to protect and maintain its position and rights regarding its intellectual property portfolio, risks related to the ability of Intellia's licensors and other parties from which it derives rights to protect and maintain their intellectual property position and rights, the risk that third parties own or control intellectual property necessary for Intellia to develop or commercialize its product candidates, and the risk that any one or more of Intellia's product candidates will not be successfully developed and commercialized. For a discussion of other risks and uncertainties, and other important factors, any of which could cause Intellia's actual results to differ from those contained in the forward-looking statements, see the section entitled "Risk Factors" in Intellia's most recent annual report on Form 10-K filed with the Securities and Exchange Commission, as well as discussions of potential risks, uncertainties, and other important factors in Intellia's subsequent filings with the Securities and Exchange Commission. All information in this press release is as of the date of the release, and Intellia Therapeutics undertakes no duty to update this information unless required by law.

CRISPR THERAPEUTICS CONTACTS

Media:

Jennifer Paganelli
WCG for CRISPR Therapeutics
+ 1 347-658-8290
jpaganelli@wcgworld.com

Investors:

Chris Erdman
+1 617-686-1718
christopher.erdman@crisprtx.com

INTELLIA THERAPEUTICS CONTACTS

Media:

Jennifer Mound Smoter
+1 857-706-1071
jenn.smoter@intelliatx.com

Investors:

Lindsey Trickett
+1 857-285-6211
lindsey.trickett@intelliatx.com

CARIBOU BIOSCIENCES CONTACT

Greg Kelley
Feinstein Kean Healthcare
+1 404-836-2302
Gregory.kelley@fkhealth.com

Source: Intellia Therapeutics, Inc.
Source: Caribou Biosciences, Inc.
Source: CRISPR Therapeutics