Bio-Path Receives Third U.S. Patent Grant Related to Manufacture of Platform Technology

Provides Expanded Protection to Seminal Patents Related to DNAbilize

HOUSTON— February 10, 2021 – Bio-Path Holdings, Inc., (NASDAQ:BPTH), a biotechnology company leveraging its proprietary DNAbilize® liposomal delivery and antisense technology to develop a portfolio of targeted nucleic acid cancer drugs, today announced that the United States Patent and Trademark Office has granted U.S. Patent No. 10,898,506 titled, "P-ethoxy nucleic acids for liposomal formulation." The new patent builds on earlier patents granted that protect the platform technology for DNAbilize®, the Company's novel RNAi nanoparticle drugs.

In addition, the United States Patent and Trademark Office has mailed an Issue Notification for a patent related to the Company's lead product candidate, prexigebersen, in combination with either a cytidine analogue, such as decitabine, or the Bcr-Abl tyrosine kinase inhibitors dasatinib and nilotinib. Prexigebersen is a liposomal formulation containing the antisense oligodeoxynucleotide targeting growth factor receptor-bound protein 2 (Grb2). The new patent is scheduled to issue as U.S. Patent No. 10,927,379 on February 23, 2021.

"Our innovative DNAbilize platform improves upon the drawbacks of traditional approaches, which are limited by the toxicity induced by either the DNA backbone or the lipid delivery," said Peter Nielsen, President and Chief Executive Officer of Bio-Path Holdings. "DNAbilize overcomes these challenges by combining a neutral charge P-ethoxy DNA backbone with a neutral charge liposome. The result is a high payload liposome with DNA safely delivered inside non-toxic cell membrane-like molecules, allowing us to deliver antisense DNA in high doses to target cells through the blood and lymphatic system with no evidence of toxicity in patients in clinical trials to date, in contrast to other lipid delivery technologies with dose limiting toxicities."

"The '506 patent is the third patent in our family of platform intellectual property and offers expanded defense of our DNAbilize platform technology. The '379 patent will offer target-specific protection for on-going clinical trials using prexigebersen in combination with decitabine as a treatment for acute myeloid leukemia (AML). We continue our efforts to build a fortress of protection around our technology as it safeguards our platform technology and target-specific technology, is a deterrent to would-be competitors and creates value around our core competencies," continued Mr. Nielsen.

About Bio-Path Holdings, Inc.

Bio-Path is a biotechnology company developing DNAbilize®, a novel technology that has yielded a pipeline of RNAi nanoparticle drugs that can be administered with a simple intravenous infusion. Bio-Path's lead product candidate, prexigebersen (BP1001, targeting the Grb2 protein), is in a Phase 2 study for blood cancers and prexigebersen-A, a drug product modification of prexigebersen, is under consideration by the FDA to commence Phase 1 studies in solid tumors. This is followed by BP1002, targeting the Bcl-2 protein, where it is being evaluated in lymphoma clinical studies.

For more information, please visit the Company's website at www.biopathholdings.com.

Forward-Looking Statements

This press release contains forward-looking statements that are made pursuant to the safe harbor provisions of the federal securities laws. These statements are based on management's current expectations and accordingly are subject to uncertainty and changes in circumstances. Any express or implied statements contained in this press release that are not statements of historical fact may be deemed to be forward-looking statements. Any statements that are not historical facts contained in this release are forward-looking statements that involve risks and uncertainties, including the impact, risks and uncertainties related to COVID-19 and actions taken by governmental authorities or others in connection therewith, Bio-Path's ability to raise needed additional capital on a timely basis in order for it to continue its operations, Bio-Path's ability to have success in the clinical development of its technologies, the timing of enrollment and release of data in such clinical studies and the accuracy of such data, limited patient populations of early stage clinical studies and the possibility that results from later stage clinical trials with much larger patient populations may not be consistent with earlier stage clinical trials, the maintenance of intellectual property rights, that patents relating to existing or future patent applications will be issued or that any issued patents will provide meaningful protection of our drug candidates, risks relating to maintaining Bio-Path's listing on the Nasdaq Capital Market and such other risks which are identified in Bio-Path's most recent Annual Report on Form 10-K, in any subsequent quarterly reports on Form 10-Q and in other reports that Bio-Path files with the Securities and Exchange Commission from time to time. These documents are available on request from Bio-Path Holdings or at www.sec.gov. Bio-Path disclaims any intention or obligation to update or revise any forward-looking statements, whether as a result of new information, future events or otherwise.

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