



Bio-Path Holdings Presents Results Showing Potential of BP1002 as Treatment for Aggressive Non-Hodgkin's Lymphoma

- In Vivo and Preclinical Data Presented at AACR Annual Meeting -

HOUSTON—April 5, 2017 – 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 results of preclinical *in vitro* and *in vivo* studies supporting the potential of BP1002 in the treatment of aggressive non-Hodgkin's lymphoma (NHL). These results are being presented at the annual meeting of the American Association for Cancer Research (AACR) taking place in Washington, DC.

The poster titled, "Activity of Bcl-2 antisense therapeutic in aggressive non-Hodgkin's lymphoma," summarizes results from two studies: an *in vitro* study in which 15 cell lines of aggressive NHL subtypes were incubated with BP1002; and two *in vivo* studies in which mice with follicular lymphoma xenografts were treated with BP1002. BP1002 was shown to have strong anti-NHL activity in each of these studies.

"Survival for patients with aggressive NHL has improved with the use of certain chemotherapy regimens, but the prognosis remains poor for the 30% of patients who relapse after treatment," said Peter Nielsen, chief executive officer of Bio-Path Holdings. "Aggressive NHL is associated with high levels of Bcl-2 expression, making it an ideal candidate for treatment with BP1002, a potent and targeted inhibitor of Bcl-2. While these results are early, we believe they indicate a potential for BP1002 to provide a survival benefit to patients with aggressive NHL. We look forward to initiating a clinical study later this year to assess this candidate in patients with NHL."

In the *in vitro* study, cell lines of germinal center B-cell lymphoma diffuse large B-cell lymphoma (DLBCL), activated B-cell DLBCL, mantle cell lymphoma and Burkitt's lymphoma were incubated with BP1002. After four days, it was determined that BP1002 induced greater than 50% inhibition in 11 of the 15 cell lines tested. In the two animal studies, none of the untreated or control (empty liposome) mice survived beyond 39 days. In the BP1002 arms, a combined 87% of treated mice survived until the end of the 5-week studies.

About BP1002

BP1002 (Liposomal Bcl-2 antisense), Bio-Path's second product candidate, is a neutral-charge, liposome-incorporated antisense drug designed to inhibit protein synthesis of Bcl-2, a protein that promotes cellular survival and inhibits apoptosis. Bcl-2 is overexpressed in a majority of non-Hodgkin's lymphoma subtypes, including follicular lymphoma and diffuse large B cell lymphoma, as well as in a wide variety of solid tumors.

Bio-Path is preparing to submit an investigational new drug (IND) application for BP1002, and is planning to initiate a Phase 1 clinical trial for lymphoma in 2017.

About Bio-Path Holdings, Inc.

Bio-Path is a biotechnology company focused on developing therapeutic products utilizing DNabilize™, its proprietary liposomal delivery and antisense technology, to systemically distribute nucleic acid drugs throughout the human body with a simple intravenous transfusion. Bio-Path's lead product candidate, prexigebersen (Liposomal Grb2 antisense), is in a Phase 2 study for blood cancers and in preclinical studies for solid tumors. BP1002 is Bio-Path's second liposomal antisense drug candidate, and is ready for the clinic where it will be evaluated in lymphoma and solid tumors.

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

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