



Pre-Clinical Data Demonstrating Promising Potential of Prexigebersen as Treatment for Solid Tumors in Gynecologic Malignancies Presented at American Association for Cancer Research Annual Meeting

HOUSTON—April 18, 2018 – Bio-Path Holdings, Inc., (NASDAQ: BPTH), a biotechnology company leveraging its proprietary DNAbilize® antisense RNAi nanoparticle technology to develop a portfolio of targeted nucleic acid cancer drugs, today announced that data from pre-clinical studies supporting the potential of prexigebersen (BP1001, liposomal Grb2 antisense), in the treatment of solid tumors in gynecologic malignancies were presented in a poster at the annual meeting of the American Association for Cancer Research (AACR), which took place in Chicago, IL.

The poster titled, “Grabbing GRB2: The use of Liposome-incorporated Grb2 antisense oligonucleotides as a novel therapy in gynecologic malignancies,” was presented by Olivia D. Lara, M.D., University of Texas MD Anderson Cancer Center, Department of Gynecologic Oncology during the Experimental and Molecular Therapeutics Poster Session. The data summarize results from studies investigating the expression of GRB2 in a series of in vitro experiments in high-grade serous (HGSC) and uterine (UC) carcinoma models. The study also examined the biological effects of prexigebersen in HGSC mice models (OVCAR 5), first in a dose-defining experiment then in combination with standard dose paclitaxel.

The data showed there was an eighty-six percent (86%) decrease in tumor burden ($p < 0.05$), and multinodular burden ($p < 0.01$) in the combination prexigebersen/paclitaxel group compared to control. In addition, there was no apparent toxicity with mice on combination therapy losing less weight than the paclitaxel-only group ($P = 0.005$).

“We are delighted to present these very encouraging findings at this year’s AACR before an audience of the world’s leading cancer researchers and clinicians,” stated Peter H. Nielsen, chief executive officer of Bio-Path Holdings. “Our research continues to suggest that prexigebersen-based combination therapy may offer an attractive method for targeting solid tumors and these findings establish the GRB2/GAB2 complex as an important target for prexigebersen. We look forward to advancing this promising therapy in gynecologic and other solid tumor cancers and plan to initiate first-in-human studies as early as the end of this year.”

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 transfusion. Bio-Path’s lead product candidate, prexigebersen (BP1001, targeting the Grb2 protein), is in a Phase 2 study for blood cancers and in preclinical

studies for solid tumors. This is followed by BP1002, targeting the Bcl-2 protein, which the company anticipates entering into clinical studies where it will be evaluated in lymphoma and solid tumors.

For more information, please visit the Company's website at <http://www.biopathholdings.com>.

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