

Bio-Path Holdings Reports First Quarter 2011 Financial Results

FOR IMMEDIATE RELEASE

May 17, 2011 HOUSTON, TX – Bio-Path Holdings, Inc., (OTC BB: BPTH) ("Bio-Path"), a biotechnology company developing a liposomal delivery technology for nucleic acid cancer drugs, today announced financial and operational results for its first quarter ended March 31, 2011.

FIRST QUARTER 2011 FINANCIAL AND OPERATIONAL HIGHLIGHTS

- Operational Highlights
 - Bio-Path continued to enroll patients into the Phase I clinical trial of its lead product candidate, Liposomal Grb-2, which is a systemic treatment for blood cancers including acute myeloid leukemia (AML), chronic myelogenous leukemia (CML), acute lymphoblastic leukemia (ALL) and myelodysplastic syndrome (MDS). The trial is being conducted at the MD Anderson Cancer Center.
 - During the first quarter 2011, the Company continued the sale of shares of its common stock through a previously announced Private Placement Memorandum. At the end of April, 2011, the Company closed this Private Placement, raising approximately \$1.8 million in total. As a result, the Company had in excess of \$1.3 million in cash as of mid-May of 2011 and approximately \$50,000 of additional funds in escrow. These cash resources are expected to fund Bio-Path's operations into 2012.
- Financial Highlights
 - Net loss for the first quarter 2011 was \$(592,726), compared to a Net Loss of \$(490,941) in the first quarter 2010. The increase was primarily attributed to increased research and development expense from our expanding clinical trial, as well as increased expenses for accounting, legal, insurance, personnel and expenses related to being a public company. These expenses included non-cash stock option expense of \$104,776 and \$107,770 for the quarters ending March 31, 2011 and 2010, respectively. For the quarter, the Company reported a net loss per share of \$(0.01) based on 49,400,605 weighted average shares outstanding, compared to \$(0.01) per share for the same period last year.

- Operating expenses in the first quarter of 2011 increased by approximately 21 percent to \$592,737 versus the first quarter 2010 primarily due to increased research and development expenses for the clinical trial and increased general and administrative expenses.
- As of March 31, 2011, the Company had cash of \$765,768, compared to \$238,565 at December 31, 2010. Net cash used in operating activities for the first quarter of 2011 was \$(124,971) compared to \$(286,502) for the first quarter of 2010, an improvement of 56 percent compared to the first quarter of 2010. As previously noted, the Company completed a private placement after the close of the quarter.

"We continue to make progress with our clinical trial and look forward to announcing preliminary data, potentially at the American Society of Hematology (ASH) Annual Meeting in December," said Peter Nielsen, President and Chief Executive Officer of Bio-Path. "Last month, we welcomed Dr. Ana Tari to our team. Ana is a leading researcher in the area of liposomal delivery technology and her experience will be extremely beneficial as we continue to move our proprietary delivery technology forward in the clinic."

Bio-Path is developing a neutral lipid-based liposome delivery technology for nucleic acid cancer drugs (including antisense and siRNA molecules), a delivery technology that forms microscopic-sized vehicles to safely deliver these drugs to their intended target cancer cells.

Bio-Path's drug delivery technology involves microscopic-sized liposome particles that distribute nucleic acid drugs systemically and safely throughout the human body, via simple intravenous infusion. The delivery technology can be applied both to double stranded (siRNA) and single stranded (antisense) nucleic acid compounds with the potential to revolutionize the treatment of cancer and other diseases where drugable targets of disease are well characterized. Bio-Path also anticipates developing liposome tumor targeting technology, representing next-generation enhancements to the Company's core liposome delivery technology.

About Bio-Path Holdings, Inc.

Bio-Path is a biotechnology company focused on developing therapeutic products utilizing its proprietary liposomal delivery technology designed to systemically distribute nucleic acid drugs throughout the human body with a simple intravenous transfusion. Bio-Path's lead product candidate, Liposomal Grb-2, is in a Phase I study for blood cancers. Bio-Path's second drug candidate, also a liposomal antisense drug, is ready for the clinic where it will be evaluated in lymphoma and solid tumors, and its third candidate is a liposomal siRNA cancer drug that is in the final pre-clinical development stage. These product candidates and the delivery technology have been licensed from The University of Texas MD Anderson Cancer Center.

Any statements that are not historical facts contained in this release are forward-looking statements that involve risks and uncertainties, including Bio-Path's ability to raise needed additional capital on a timely basis in order for it to continue its operations, 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, and such other risks which are identified in the Company's most recent Annual Report on Form 10-K and in any subsequent quarterly reports on Form 10-Q. 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.

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

Contact Information:

Peter Nielsen President & Chief Executive Officer Tel 832.971.6616

Rhonda Chiger (investors) Rx Communications Group, LLC 917-322-2569 rchiger@rxir.com