Bio-Path Holdings, Inc.

Bio-Path Holdings, Inc. Announces Plans To Develop Liposome Tumor Targeting Technology Licensed from The University of Texas M. D. Anderson Cancer Center

Liposome Targeting Technology and Planned Sponsored Research Program May Produce Sustainable Advantages In The Treatment Of Cancer And Other Diseases

FOR IMMEDIATE RELEASE

September 22, 2009 HOUSTON, TX – Bio-Path Holdings, Inc., (OTC BB: BPTH), a publicly traded biotechnology company with drug development operations in Houston, Texas, announced today the Company has executed an exclusive license with The University of Texas M. D. Anderson Cancer Center to develop liposome tumor targeting technology. Bio-Path is currently developing a neutral-lipid based liposome delivery technology for nucleic acid cancer drugs (including antisense and siRNA molecules). The new technology, being licensed in the field of neutral lipid-based liposome delivery of antisense technologies and FAK siRNA, will enhance the Company's liposome delivery technology by adding vectors to the liposomes targeted to a receptor that is specifically over-expressed on a majority of solid and hematological tumors and on eighty percent (80%) of metastatic epithelial tumors. The Company believes this liposome tumor-targeting technology for antisense and FAK siRNA delivery is a highly promising strategy for treating primary and metastatic cancers.

The historical perspective of cancer treatments has been drugs that affect the entire body. Advances in the past decade have shifted to treating the tumor tissue itself. One of the main strategies in these developments has been targeted therapy, involving drugs that are targeted to block the expression of specific disease causing proteins while having little or no effect on other healthy tissue. Nucleic acid drugs, specifically antisense and siRNA, are two of the most promising fields of targeted therapy. Development of antisense and siRNA, however, has been limited by the lack of a suitable method to deliver these drugs to the diseased cells with high uptake into the cell and without causing toxicity. Bio-Path's currently licensed neutral-lipid based liposome technology is designed to accomplish this. Studies have shown a 10-fold to 30-fold increase in tumor cell uptake with this technology compared to other delivery methods. The Company's first drug with this delivery technology is scheduled to commence a Phase I clinical trial in the fourth quarter 2009.

The new liposome tumor targeting technology being licensed will be developed as an extension of the Company's current delivery technology, with a goal towards more powerfully focusing delivery of the antisense and FAK siRNA cancer treatments to the tumor tissue. Adding a vector to the liposome that targets a receptor that is highly expressed on the surface of tumor cells is expected to drive uptake of the liposomes into the tumor tissue, enhancing relative deposition in the target tumor tissue. In animal studies conducted at M. D. Anderson Cancer Center, researchers demonstrated an ability for vector targeted neutral lipid-based liposomes to increase transfection efficiency and siRNA molecule uptake 5 to 8-fold into cancer cells compared to those of untargeted liposomes and controls. These efficiencies are in addition to the delivery efficiencies noted above from the core neutral lipid-based liposome delivery technology.

Peter Nielsen, President and Chief Executive Officer of Bio-Path Holdings, Inc. commented, "Liposome tumor targeting represents a next generation approach to development of our core neutral lipid-based delivery technology for antisense and FAK siRNA. Focusing our drugs more toward diseased tissue and away from healthy tissue is expected to increase the efficacy of our drugs while reducing further any potential for toxic side-effects. The combination of these benefits potentially represents sustainable treatment advantages for future Bio-Path's drugs. An additional strategic benefit of this technology for Bio-Path is that tumor targeting applied to our core delivery technology provides an opportunity to reinvent our intellectual property portfolio, affording new patent protection well into the future."

As part of the licensing transaction, the Company has committed to enter into a sponsored research agreement with the M. D. Anderson Cancer Center for further development of the liposome tumor targeting application and targeted therapy contingent on funding. The level of research commitment is dependent on the amount of new funding raised.

About Bio-Path Holdings, Inc.

Bio-Path is developing leading edge, patented, liposomal drug delivery systems developed at The University of Texas M. D. Anderson Cancer Center with two clinical cancer drug candidates ready for the clinic and a third siRNA cancer drug undergoing final pre-clinical development. Bio-Path's drug delivery technology distributes nucleic acid drugs systemically, 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.

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