

Panacos Attracts \$18.3M Round To Fund HIV Drug Development

By Aaron Lorenzo
Senior Staff Writer

Panacos Pharmaceuticals Inc. raised \$18.3 million in its Series C round of financing.

Founded in November 2000 as a spinout of a diagnostics company, the Gaithersburg, Md.-based business has raised about \$26.5 million in private equity to date. It was formed to further the drug and vaccine development programs of Boston Biomedica Inc., which remains focused on diagnostics.

Panacos plans to use a portion of the funds to develop its lead HIV drug candidate, PA-457, which is in clinical trials. The compound, the first in a new class of antiretrovirals called maturation inhibitors, has demonstrated activity against HIV, including drug-resistant strains of the virus.

"I think the investors were attracted to the progress we have made in developing our lead compound," Graham Allaway, Panacos' co-founder and chief operating officer, told *BioWorld Today*. "It works at the end of the virus life cycle by a completely novel mechanism that was elucidated at Panacos, and around which we're building an intellectual property position. So we own not only the drug, the first in this new class of drugs, but the target, as well."

PA-457's mechanism of action is different than already approved drugs to which HIV strains have grown resistant. Also, the compound's orally bioavailable profile allows for tablet or capsule delivery, unlike other injectable HIV therapeutics.

The company plans to complete its Phase I trials of PA-457 later this year, and then advance the compound into Phase II studies to determine its antiviral efficacy in HIV patients. Allaway said the financing provides Panacos about 18 months of capital to move the program through proof-of-concept studies, at which point the company would explore options for further development, including potential partnerships or extended internal development, given additional financing.

"The key for HIV drug development," Allaway said, "is new targets and the ability to hit the virus at different points in the life cycle so that the new drug is effective against isolates of the virus that are resistant to currently

approved drugs, which primarily target the viral enzymes reverse transcriptase and protease."

PA-457 was discovered through an ongoing drug discovery collaboration with the University of North Carolina at Chapel Hill. That agreement dates to Panacos' origins within Boston Biomedica, of West Bridgewater, Mass.

In parallel to PA-457's development, Panacos plans to apply its newfound capital to build its pipeline with the optimization of small-molecule HIV fusion inhibitors being developed under the direction of Carl Wild, the company's other co-founder and chief science officer. He invented the fusion inhibitor Fuzeon (enfuvirtide, Trimeris Inc. and F. Hoffmann-La Roche Ltd.), Allaway said, but Panacos' program will target the same approach through oral, small-molecule drugs. (Fuzeon is injected.)

"We have an issued U.S. patent on the drug-screening technology we have been using for the past year," Allaway said. "That has resulted in the discovery of several families of novel fusion inhibitors that we're now optimizing, with a goal of finding a clinical candidate that would enter the clinic sometime next year."

Panacos' HIV fusion program also is part of a Cooperative Research and Development Agreement with the National Cancer Institute in Bethesda, Md., and the 18-employee company is evaluating its fusion platform to set up a high-throughput screening assay to identify small-molecule inhibitors of respiratory syncytial virus. Panacos also continues to work on the discovery of second-generation maturation inhibitors.

"Our focus is on small-molecule therapeutics only and novel targets, with one in the clinic and a pipeline of fusion inhibitors coming along behind that," Allaway said. "I think we're poised for considerable growth over the next 12 months."

The financing was led by prior investors Ampersand Ventures, of Wellesley, Mass., and A.M. Pappas & Associates, of Research Triangle Park, N.C. New investors included Mitsui & Co. Venture Partners Inc., of New York; Novo A/S, of Bagsvaerd, Denmark; New England Partners Capital LP, of Boston; William Harris Investors, of Chicago; and Lakeview Capital Management, also of Chicago. The Maryland Department of Business and Economic Development, a prior investor, also joined the round. ■