

## RiverVest invests in Mpx Pharmaceuticals Series D financing

Mpx Pharmaceuticals will soon complete patient enrollment for two Phase II clinical trials for its proprietary MP-376 inhaled antibiotic formulation aided by a \$27.5 million capital infusion led by Investor Growth Capital.

RiverVest Venture Partners and Investor Growth Capital were joined by existing investors in the Series D preferred stock financing. Together, the group has made commitments to additional tranches that could bring the total Series D proceeds to \$40 million.

"We believe that this financing positions us well to achieve all of our development objectives for MP-376," says Daniel Burgess, president and CEO of Mpx.

MP-376 is a novel formulation of the proven antibiotic levofloxacin. When coupled with a high-efficiency nebulizer, it

could provide a potent, fast and safe alternative to treating lung infections associated with cystic fibrosis (CF).

"Right now, there is one approved inhaled antibiotic for treating CF," says RiverVest Managing Director J. Gordon Foulkes, Ph.D. "This antibiotic has been very effective. The trouble is, it cannot be dosed month in and month out, and the current method of administration is really inconvenient—often taking patients 45 minutes or more a day."

MP-376 would offer a more concentrated and targeted antibiotic dose that requires just five minutes to administer using a silent, portable nebulizer. "The convenience and safety factors are significant—and should drive increased compliance. Increased compliance results

in longer, healthier lives for CF patients," says Dr. Foulkes.

A bigger commercial upside to MP-376 may be its potential to reduce lung exacerbations associated with chronic obstructive pulmonary disease (COPD). "While MP-376 is positioned to be best in class for treating CF exacerbations," says Burgess, "it is the first inhaled antibiotic to enter clinical trials for prophylactic use in COPD." (see accompanying story).

In addition to MP-376, Mpx has another promising technology platform in its pipeline: Efflux Pump Inhibitors (EPIs). "Efflux pumps are the major mechanisms for multi-drug resistance in bacterial organisms," explains Burgess. "Located within the walls of bacteria, these pumps push antibiotics out of the bacteria.



**Daniel Burgess**  
President and CEO of Mpx

Our EPIs are designed to fight back to restore the potency of antibiotics."

In June 2008, Mpx entered into a worldwide strategic alliance with GlaxoSmithKline to develop EPIs in combination with a variety of existing and development-stage antibiotics. This deal could be worth up to \$1.5 billion to Mpx.

## New therapy may help millions with chronic lung disease

Chronic obstructive pulmonary disease (COPD)—a group of lung diseases that inhibit breathing, including emphysema and chronic bronchitis—is the fourth leading cause of death in the United States. More than 12 million people are currently diag-

nosed. An estimated 12 million more are undiagnosed.

In patients with COPD, airway infections are frequent and accompanied by phlegm production, breathlessness, chest pain and fatigue. In severe cases they may also lead to death.

In the past, doctors have prescribed heavy doses of oral or intravenous antibiotics to fight airway infections, but not to prevent them. The reluctance toward preventive doses of antibiotics is due in part to concerns regarding antibiotic resistance.

An aerosol application, however, targets high concentrations of the antibiotic directly onto bacteria, thus reducing the opportunity for antibiotic resistance. This approach has proven highly effective as a preventive therapy in cystic fibrosis. Could it also apply to COPD?

"This could be a revolutionary approach to treating COPD," says Dr. Robert Wilson, director of respiratory medicine and

consultant physician at Royal Brompton Hospital in London.

One of the leading experts in the field of bacterial studies, Dr. Wilson has long been bothered by the fact that COPD patients who experience extreme lung flare ups known as exacerbations retain bacteria in the lungs even between episodes.

Dr. Wilson now believes such "chronic colonization" of bacteria may be a root cause of COPD's inflammatory response. If he is correct, as early studies indicate, then "periodic short courses of an inhaled antibiotic with an appropriate anti-bacterial spectrum may be the best approach for preventing exacerbations in high-risk COPD patients." It isn't a cure, but it could provide a life-saving maintenance therapy for millions of COPD sufferers.

A Phase II clinical trial currently underway by Mpx Pharmaceuticals is testing a formulation known as MP-376 (see accom-

panying story) that may serve this high-risk COPD population well.

"It's a critically important study," says Dr. Wilson, who awaits the results "with bated breath." He is hopeful that COPD patients with extreme exacerbations may soon enjoy a much better quality of life.



**Dr. Robert Wilson**  
Royal Brompton Hospital, London

*"This could be a revolutionary approach to treating COPD."*

Robert Wilson, M.D., F.R.C.P.

### RIVERVEST

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## Tryton prepares to introduce Side Branch Stent System™ in Europe

Interventional cardiologists may soon have cause to celebrate as Tryton Medical, Inc., a RiverVest Fund II company, prepares to introduce its Side Branch Stent System™ in several countries across Europe.

"2009 is going to be our big year to show adoption and success," says J. Greg Davis, president and CEO of Tryton. "Results from the initial introduction in the Netherlands have been very positive. Doctors in other countries are eager to use our device."

Tryton's Side Branch Stent is designed very specifically to treat atherosclerotic lesions at the site of a bifurcation, where one artery branches off another. "These lesions have presented a challenge for cardiologists since the earliest days of angioplasty," says Davis.

The challenge is that bifurcations are difficult to reach with conventional stenting alone. As a result, the side branch is often left unstented, which makes it vulnerable to restenosis, or the re-narrowing of the stented vessel following implantation.

"The Side Branch Stent offers a very simple and elegant way to deal with this problem," says Davis. Tryton's highly deliverable cobalt chromium stent is deployed in the side branch artery using a standard single-wire, balloon-expandable stent delivery system without regard for rotational orientation. A conventional drug-eluting stent is then placed in the main vessel.

RiverVest Managing Director Jay Schmelter is enthusiastic about the Side Branch Stent. "This is a product uniquely geared to address an important unmet

medical need," says Schmelter, who joined Tryton's board of directors after RiverVest co-lead a \$14 million financing in 2008.

In addition to introducing its Side Branch Stent in Europe, Tryton has initiated pre-IDE testing in preparation for clinical trials to begin in the United States in 2010.

The worldwide market for coronary stents is estimated at \$5.3 billion, according to Schmelter. Approximately 20 percent of all angioplasty procedures involve a bifurcation.

### MILESTONES

- **Centerre Healthcare Corporation** opened its fourth free-standing inpatient rehabilitation hospital in partnership with Waukesha Memorial Hospital.
- **Excaliard Pharmaceuticals, Inc.** hired a new president and CEO, Lincoln Krochmal, M.D., who takes over the role from interim CEO J. Gordon Foulkes, Ph.D., a RiverVest managing director and co-founder of the company.
- **Lutonix, Inc.** closed a \$20 million Series B financing that will be used to complete pre-clinical development of its drug-eluting balloon product and advance it into human clinical trials.
- **MacroGenics, Inc.** acquired Raven Biotechnologies, Inc., a privately-held biotechnology company focused on the discovery and development of monoclonal antibody therapeutics for oncology through its cancer stem cell program. In connection with the acquisition, MacroGenics raised a \$25 million Series D financing to fund new and existing programs.
- **Salient Surgical Technologies, Inc.** secured \$17.9 million in proceeds that will finance new product development and sales growth.
- **Xoft, Inc.** closed a \$25 million round that will be used to fuel sales growth and market expansion.

## Salient prepares for series of 2009 product launches

Salient Surgical Technologies, Inc. has recently unveiled the first in a series of new products on tap for 2009. The Epidural Vein Sealer (EVS) was launched on Feb. 24 at the American Academy of Orthopaedic Surgeons (AAOS) Annual Meeting in Las Vegas.

This surgical device helps significantly reduce bleeding in hard-to-reach places during minimally invasive spine surgery. Surgeons also benefit from improved visualization of the operative field and shortened procedure time, which may result in improved clinical outcomes for the patient and lower costs to the hospital.

"We are delighted to offer this expansion to our Aquamantys™ platform," says Joe Army, CEO of Salient. "Our substantially increased investment in research and development is beginning to yield results."

As Salient experienced significant growth last year, the company expanded its research and development capabilities and strengthened its field marketing organization.

"We are now seeing results of the investments made in 2008," says RiverVest Managing Director Jay Schmelter, who is chairman of Salient's board of directors. "The pieces are in place for Salient's products to become the standard of care."

"To maximize the value of our company in today's economic climate, we strive for a more balanced approach by driving revenue growth, profitability and a robust product pipeline, all supported by a healthy balance sheet," says Army.

To that end, the company is focused on its 2009 lineup of new products, the first of which is the EVS. Additional Aquamantys™ products will follow later this year.

Salient's Aquamantys™ System uses advanced energy Transcollation™ technology to help surgeons improve patient outcomes for orthopedic reconstruction, spinal fusion and solid organ resection procedures. To date, Transcollation™ technology has been used in more than 250,000 surgical procedures.



**Joe Army**  
CEO, Salient Surgical Technologies, Inc.

**RIVERVEST**

RiverVest Venture Partners  
7733 Forsyth Boulevard  
Suite 1650  
St. Louis, MO 63105

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