

[Burnaby company gets money for drug trials; Immune system booster seen as way to help beat superbugs resistant to antibiotics](#)

The Vancouver Sun (British Columbia), June 10, 2008 - Imagine your own body mustering its defences to successfully fight off a superbug that is resistant to antibiotics.

That's the dream of Burnaby's Inimex Pharmaceuticals, one that has already been proven in animal studies and now has the backing of a major Hong Kong venture capital firm and two pharmaceutical giants that have joined with local venture capital firms to pump \$22 million US into the company to see it into human clinical trials.

The money is to fund the company through early safety data, expected in 18 months with the first data from patient testing a year after that, according to John North, president and chief executive officer of Inimex. The company was co-founded by Robert Hancock, a professor of microbiology and immunology at the University of B.C., and Brett Finlay, a professor in the Michael Smith Laboratories and the departments of biochemistry and molecular biology, and microbiology and immunology at UBC.

"This money allows us to get there and to demonstrate that this whole new approach really works," said North.

It's not simply another drug but an entire class of new drugs, innate defence regulators, that Gerald Chan, co-founder of Hong Kong's Morningside Ventures Investments that led the Series B venture financing, lauded as a class "that will change the way we treat and control infectious disease."

At stake are the lives of the more than 90,000 people who die every year in North America as a result of antibiotic-resistant infections that have become commonplace in hospitals.

"We can treat animals with either MRSA methicillin-resistant Staphylococcus aureus infections or VRE (vancomycin-resistant enterococci) infections with the same drug and they get better," said North.

The innate defence regulators mimic naturally occurring compounds in the body, boosting the innate defences and controlling inflammation, allowing the body to fight off infections when antibiotics fail.

"What's happening increasingly is that a lot of the infection-related deaths are now caused by antibiotic-resistant organisms," said North. While other researchers are seeking out new antibiotics to kill the infection itself, North said Inimex's drug targets the patient, stimulating the immune defences so the patient can fight off the infection.

"One of the most exciting features of these new drugs is that they control the inflammation at the same time as controlling the infection," North said. That is an important factor since it is often inflammation that kills people when an infection runs rampant.

"When we get sick from infections, very commonly it is the inflammation that makes us feel sick," said North, who was first recruited by QLT Inc. co-founder Julia Levy to come to Vancouver to work as QLT's chief scientific officer in 1998, leaving that company at the end of 2002. "If we die of an infection, it is because the inflammation gets completely out of hand. Controlling inflammation is a really important part of controlling infection. We have done a lot of animal studies to show it works in animals."

Despite the promise of the innate defence regulators class of drugs, Inimex, which was founded in 2001, has suffered through the difficulties currently facing life sciences companies searching for scarce investment dollars.

It's a dilemma highlighted in a report on Canada's biotechnology sector released by Ernst & Young last month, pointing to a funding crisis that threatens the sustainability of the industry and noting that the IPO market in Canada has been virtually closed since 2005.

"It has taken a while to pull this deal together, but it gives us the opportunity to go forward and show this new type of drug can help people," said North who said the company now has a staff of nine, up from the four or five it cut back to in order "to survive a rather thin financial period." He expects the number will grow to about 15 in the coming year.

In the latest financing round, which brings to \$31 million the amount the company has raised so far, Morningside was joined by the Roche Venture Fund that advises the Swiss-based Roche pharmaceutical company and Astellas Venture Management, the investment arm of the Japanese pharmaceutical company Astellas Pharma. Also in the round were local venture capital firms that have backed the company in its earlier stages.

The investment will allow Inimex to conduct the first clinical trials of its lead drug in patients and to evaluate innate defence regulator drugs with a range of diseases and infections.

North said the applications could include infections associated with cystic fibrosis, inflammation and in cancer patients undergoing chemotherapy.

North said the drugs could also have an application for arthritis patients, dealing with inflammation without suppressing immunity, a problem associated with powerful anti-inflammatories. The cost will also be lower than arthritis drugs that can be very expensive to make.

"We believe we will have two major advantages," said North. "We believe we will protect against infection rather than increase the risk by lowering immunity and we will be able to make the drugs available at a much more attractive price."