



Chicago Tribune

Biotech funding down to last drops
Investments for medical breakthroughs in jeopardy

By Bruce Japsen | Tribune reporter

November 23, 2008

NEW YORK—At the University of Chicago
<<http://www.chicagotribune.com/topic/education/colleges-universities/university-of-chicago-ORED0000151.topic>> Medical Center, Dr. John Alverdy and colleagues have been working in their lab on a potentially life-saving coating that protects intestines from deadly bacteria, particularly for patients undergoing surgeries.

Through a start-up company known as Midway Pharmaceuticals Inc., the gastroenterological surgeon and researcher is trying to find funding for what would appear to be an important development: a promising product needed at a time when bacteria are developing resistance to traditional antibiotics. The company is looking to raise \$15 million.

"We are ready and teed up and, suddenly, the stock market plunges just as we are getting going here," Alverdy said. "Even if you make \$30,000 a year and want to buy a car, it's tough, let alone if you want to make an investment in biotech. It's going to take us longer."

Across the country, dozens of biotech companies are running out of cash to fund their business operations, leaving promising treatments for such disorders as heart disease, cancer, Alzheimer's and diabetes to sit longer in labs. Some biotech start-ups can't even get off the ground.

This slowing of money into the biotech industry has the potential to deal a major setback to medical innovation. Biotech companies are seen as pioneers in medicine, seeking to develop new drugs and devices that large pharmaceutical companies often view as financially too risky, leaving the investment in early research to smaller players.

In the U.S., where the bulk of biotech innovation occurs, 91 companies are operating with less than six months of cash remaining, and 140 of 370 public biotechs have less than one

year's cash on hand, including Evanston

<<http://www.chicagotribune.com/topic/us/illinois/cook-county/evanston-PLGEO100100501430000.topic>> -based Northfield Laboratories Inc.

<<http://www.chicagotribune.com/topic/economy-business-finance/northfield-laboratories-incorporated-ORCRP010991.topic>> , according to the Biotechnology Industry Organization.

To deal with the financial crisis and the credit crunch, many companies are putting research on hold, cutting jobs to save cash for operations and considering a sale of their businesses at low prices to bigger pharmaceutical companies. In October, 20 biotech companies announced layoffs, partly to conserve expenses for their research, a trend that has been growing since late last year.

Unlike big pharmaceutical companies that take in billions of dollars in sales that help fund research and development, biotechs are smaller and generally do not generate sales in their early years because their goal is to get a single product to market. Instead, they rely on investment banks to fund their operations until their products are approved for sale.

After more than two decades developing a blood substitute, the economic downturn may be the final blow to Northfield's effort to get PolyHeme to patients, as the company sees its funds dwindling and awaits word on a federal review of its application.

"For biotech companies like ours, it is very tough right now raising money," Dr. Steven Gould, Northfield's chief executive, said before making a presentation to about 30 potential investors at a recent conference in New York. "Any biotech company is at risk. If [the economy] doesn't turn around, it will be a great disadvantage for patients for all new therapies."

Northfield has about \$15 million in cash, enough to fund operations through May, executives have said. But Gould is not taking any chances and is seeking more funding.

"We would rather not wait until the last minute," Gould said.

The company last month requested a speedy, six-month review of PolyHeme. If the Food and Drug Administration deems PolyHeme as critical as cancer drugs and AIDS treatments that have won speedy reviews in the past, the agency could approve the drug before Northfield runs out of money.

Northfield also faces other hurdles. Since its inception in 1985, it has incurred \$220 million in losses, largely on developing PolyHeme. The company also lost a lot of its market value last year when its clinical trial showed the product increased the risk of heart attacks and deaths in trauma patients.

Northfield last year reported that more trauma patients died within 30 days of receiving PolyHeme than those who received standard care. Following that report, shares of

Northfield plummeted. Its shares closed Friday at \$0.69 after seeing a 52-week high of \$1.35 in December and trading at more than \$4 a share before the clinical trial report in May 2007.

Undaunted, Gould told investors that PolyHeme is not "to be used in place of blood." Rather, it can be used for patients such as those on the battlefield or following trauma scenes "for whom blood transfusion is not an option" and "blood is not available for prolonged periods of time."

James McCullough said his New York-based biotech company has been well-funded by individual investors, but he worries that a lack of money next year could slow commercialization of its product and, in turn, slow efforts to get it to doctors and hospitals.

"Everybody is finding that this is a difficult time to raise money," said the CEO of Exosome Diagnostics Inc., which is developing a test that captures genetic mutations in blood to detect a variety of cancers, including brain, colon and pancreatic.

McCullough said small biotech companies and their academic partners also are worried about so-called translational research that is on the verge of moving from academic hospitals and medical school research labs to the private sector. Exosome licensed the test technology from Massachusetts <http://www.chicagotribune.com/topic/us/massachusetts-PLGEO100102700000000.topic> General Hospital in Boston <http://www.chicagotribune.com/topic/us/massachusetts/suffolk-county-%28massachusetts%29/boston-PLGEO100100501131244.topic> .

"We are at a watershed moment. There's no question development could be slowed at the early stage where venture capital is needed," he said. "There will be less technology at the early stage."

Some Wall Street analysts and investment bankers see this as merely cyclical.

"I don't want to try to belittle the thesis because there are some companies out there that are hurting, but the long-term demand for promising therapies and innovations is there," said Ben Andrew, analyst with William Blair & Co. in Chicago. "For the promising company with a promising therapy or device, there is always the investor."