

## Generous German funding helps Ribozyme

**IMAGE** 

**UNAVAILABLE** 

REASONS

deal

Ribozyme with cash flow

and access to scientists.

Christoffersen:

provides

Ralph

A massive cash injection from German government funds looks set to reivigorate Ribozyme Pharmaceuticals (Boulder, CO), the company founded around the Nobel lau-

reate, Tom Cech. The company's cash position had been tenuous, with about six months of cash left at its current burn rate of approximately \$4 million per quarter. But Ribozyme has now started a new company, Atugen FOR COPYRIGHT Biotechnology (Berlin), that will take over Ribozyme's target discovery and validation business. The deal allows Ribozyme access to generous German government funds, while the eastern part of Germany secures muchneeded foreign experience.

Atugen, which should be fully operational on the campus of the Max Delbrück Center for

Molecular Medicine (MDC) in the former East Berlin by the beginning of September, will license Ribozyme's technologies for target validation and should assume responsibilities for Ribozyme's four current target validation partnerships, pending partner approvals. In return, Ribozyme will own approximately 67% of the new venture and will benefit from service contracts with Atugen for performing assays and oligonucleotide synthesis. Atugen's mission is to partner with companies seeking to validate targets identified through genomics efforts.

Atugen begins life well capitalized, with nearly \$30 million in the bank and another \$10 million to follow from the German and Berlin governments in each of 2001 and 2002. MPM Capital (Boston, MA), through its BB Bioventures venture fund, has put nearly \$8 million into the pot and will own nearly a third of the company. An unidentified Germany bank also invested a small amount. Ribozyme has committed \$10 million in funding over 10 years, money that will be generated as Schering (Berlin) increases the scope of its current target validation deal with Ribozyme. The remaining money comes from a combination of local and federal German funding in the form of as grants and a \$3 million low-interest rate loan.

Although there are some underlying political aspects to the developments, Michael Steinmetz, managing director at MPM Asset Management, believes the investment is a sound one for MPM. "Forget the politics and look at the finances here. Atugen starts off well-capitalized, with a good technology base, revenues from contracts, and good potential for growth in a new area of

> science. This was something that was easy for us to invest in." In many respects, he says, Atugen, which is expected to be in the black within three years, "is in better shape financially than its parent, Ribozyme,"

> The deal was put together by the Industrial Investment Council (IIC, Berlin, Germany), a business development group funded by the German, Berlin, and Länder governments to attract foreign investment in eastern Germany. "We believe this is a real triumph for all the parties involved-Ribozyme,

Atugen, the German and Berlin governments, the MDC, and the German scientific community," says Isabelle Canu, life sciences project manager for the IIC.

This is seconded by Ralph Christoffersen, Ribozyme's president and chief executive officer; "For Ribozyme, this gives us access to some tremendous scientific talent in Germany, [...] and provides us with cash flow today and large potential rewards downstream. In addition, Ribozyme retains the rights to any therapeutic applications of any targets or ribozymes identified by Atugen." Christoffersen will chair Atugen's board, but the company is in the process of hiring both a chief executive and scientific director.

Atugen will also acquire Transgenics Berlin-Buch, a nine-person start-up with technical know-how to create rodent knockout models that will be useful in ribozymebased target validation efforts. "Ribozyme is in need of our transgenic technique," says Jorg Pötzsch, head of Transgenics, "In addition, we have a functioning infrastructure and the necessary experience in Germany to get permissions, for example." Pötzsch says that Transgenics benefits by becoming part of a joint German-American company that "has a lot more customers, contacts, and is well known on the international scene."

Over the long term, Christoffersen hopes that Atugen's focus on target validation will allow this new entity to bring more partners into the fold without draining Ribozyme's management resources. "With our technologies, target validation was a natural area for us to expand our business into, but it is a diversion from our therapeutic efforts here," he explains.

In addition, Atugen will shortly sign a contract with a Berlin-based biochip company Cloan-Diag to produce ribozyme chips for differential gene expression assays.

IIC first sought out Ribozyme last October as a result of discussion with Volker Erdmann, biochemistry professor at the Free University of Berlin and director of the RNA Network (Berlin), a huge association of publicly funded research institutes, universities, and private companies. The nonprofit organization will receive a 10-year, 120 million DM (\$66 million) funding from the Berlin government to commercialize RNA technologies in the Berlin-Brandenburg area. "An integral part of our mission is to find existing companies with an interest in developing RNA-based technologies, and we identified Ribozyme, as well as a couple of other US companies, as potential partners for some of the small companies we have funded."

There are some sensitivities to the apparent efflux of German government money to a US corporation. Carola Schropp at the European Business Development Group, which is currently working on similar deals for two unnamed US companies (expected to close mid-October) says the German government expects the companies applying for grants to be self-sustaining entities. "They want to make very sure that this is not a ploy to siphon money out of a so-called subsidiary to a US company," she insists.

Erdmann says that while some of the money being spent by the German government will flow to Ribozyme, there is still a net positive remaining in Germany. "Some of the contract money that will go to Ribozyme to provide services, such as RNA synthesis, will benefit the entire RNA Network and eliminate our need to spend money building those facilities here," says Erdmann. "In addition, Atugen gets access to Ribozyme's patents, which is something that we were probably going to have to license in some way down the road if we had set up our own company to do target validation in this manner. No, this is definitely a winner for us, too."

IIC's Canu says that Germany is also a winner. "This brings needed management talent and technical expertise that allows us to leverage the scientific excellence that we've developed," says Canu. "We have over 700 biotech companies, and most are tiny. What they most want are partnerships with larger foreign biotech companies that can provide the management skills that they lack. One of the reasons we targeted Ribozyme was because Christoffersen and his team bring that expertise."

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