

Dmitry Morosov

Forget everything you know about biotech venture creation—this is Russia! And Dmitry Morosov is one of a new breed of entrepreneurs ready to create a new type of Russian biotech.

Biotech venture creation in Russia can sometimes seem like roulette. Traditional models don't apply. Entrepreneurs must battle endemic bureaucracy, cronyism and corruption. And they must overcome a hostile business environment where government incentives are scarce, intellectual property (IP) protection is lax and licensing practices are often Byzantine and complex.

But one thing Russia is not short on is ideas. And Dmitry Morosov, a biotech entrepreneur from Moscow, wants to capitalize on these ideas: transforming untapped Russian scientific excellence into innovative biotech products.

Five years ago, Morosov, a former director of the Centro Credit bank in Moscow, was on the lookout for business opportunities in entertainment, information technology and biotech. Subsequently, he fell under the spell of biotech, inspired by its potential to advance healthcare and save lives. Before specializing in biotech, Morosov had previously acquired his taste for venture creation from his business studies both in Russia and in Japan. "I learned a lot from my education in Japan" he explains. At Keio University in Tokyo he studied US and Japanese startup business models.

In 2000, Morosov founded Biocad, a biotech startup company based on the outskirts of Moscow. The company's business strategy is to undercut imported medicines, which currently dominate Russia's estimated \$5-billion drug market. This imbalance between imports and exports is particularly striking for specialty drugs and biopharmaceuticals; Moscow's Abercade Consulting estimates that in 2004, for example, Russia imported \$495 million worth of biopharmaceuticals but produced only \$67 million.

By manufacturing generic versions of biologics on his home turf, Morosov's plan is to market them at lower prices, first in Russia and in the former Soviet Union satellite countries, and then later in international markets. Biocad's first product, a generic form of granulocyte-colony stimulating factor (GCSF), is expected to reach the market in 2006. The company is also working on generic versions of interferons $\beta 2$ and $\alpha 2$.

But Morosov sees biogenerics as only the beginning. His plan is to initiate internal R&D programs that develop innovative biotech products based on Russian science. And according to Anton Titov, vice president of the high-tech venture capital firm Delta Private Equity Partner in Moscow, Russian universities and research institutions represent "untapped, virgin territory, with plenty of excellent innovation waiting to be commercialized." Morosov has already taken options on three innovative drugs in laboratories from the country's most dynamic research hubs, namely Moscow, St. Petersburg and Novosibirsk.

To finance his company Morosov tapped into the network he had built as a banker and convinced private investors in traditional industries, such as oil or aluminum and the pharmaceutical sector, to diversify their investments and make \$5–10 million contributions to his company. It was only later, in 2003, that he benefited from \$1.7 million of funding from the BioIndustry Initiative—a US government program to channel biological weapons research capacities towards positive use—to develop a follow-on version of interferon $\beta 2$.

Today, the situation for biotech ventures is improving. For example, the Russian government's new biotech program for 2006–2010 sets aside Rbl 150 (\$5.25) billion to foster biotech. Part of that program is the creation

of a public-private venture capital fund, backed by Rosprom, the Russian Federal Agency for Industry. The fund, worth between Rbl 2 billion (\$70 million) and Rbl 4 billion (\$140 million), aims to invest in biotech. What's more, Russian biotech ventures are increasingly on the radar screen of foreign investors, such as Versant Ventures of Menlo Park, California, and Columbus Nova and Lehman Brothers, New York. "Every day, we meet with international VCs [venture capitalists] who are interested in syndication for financing projects in Russia," Delta's Titov says.

Yet the potential to create more biotech startups is there. "It [is] important to have a vision," Morosov explains, "If you don't have such vision you'll be similar to 80% of Russian research institutions," which do not exploit their research commercially. That's partly because the pharma conglomerates are not keen to collaborate and finance R&D. Titov comments that the underexploitation of some Russian scientific projects can be an advantage, though. Products are often much more mature than Western counterparts, he says. Indeed, scientists tend to develop their products to an advanced stage, as far as getting animal or human volunteer data. There is growing evidence that foreign biotech companies are scouring Russian laboratories for this sort of IP (*Nat. Biotechnol.* 22, 1060, 2004). According to a recent report from the US National Academies¹, fields of particular interest include diagnostics, vaccines and areas neglected by Western companies, such as antibiotics.

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There are signs that companies other than Biocad are also making progress on the commercial front. For example, vaccine adjuvant company Petrovax Pharm struck a partnering deal with Solvay Pharmaceuticals in November 2004, and diagnostics company Vector Best, a spin off from The State Research Center of Virology and Biotechnology VECTOR, in the Novosibirsk region, has numerous diagnostic products on the market. But Soviet-era attitudes are slow to change and "the privatization of initiatives from state research institutes takes a lot of effort," according to Jason Rao, director of the BioIndustry Initiative.

Russia still faces an uphill struggle to be competitive with other emerging biotech regions, like China and India; today, China reportedly allocates 45-fold more public funds to biotech than Russia. More government effort to foster a startup-friendly business environment and greater investment are needed. But the overall impression is positive. As Titov puts it: "The perception of the Russian, maverick style of business lags well behind the reality of business in today's Russia, which is not that different from traditional Western models."

Sabine Louët, Moscow

1. National Research Council of the National Academies. *Biological Science and Biotechnology in Russia: Enhancing Public Health and Security* (National Research Council of the National Academies, the National Academies Press, Washington, DC, 2005).