Box 1 Drug companies play investor

Large drug companies have for years played VC in an attempt to benefit from early-stage technologies. New Brunswick, New Jersey–based Johnson & Johnson, Gaithersburg, Maryland–based MedImmune and Eli Lilly of Indianapolis all have established distinct venture arms. Other companies operate their corporate venture groups more like an extension of their business development department, with goals ranging from pure financial return to gaining rights to ideas or technologies. For example, the Novartis Option Fund, part of the venture arm of Basel-based Novartis, invests equity in seed and series A private rounds, then provides cash payment for the option to one specific therapeutic program. *EW*

confidential information. "If the people who work at Pfizer need to be exposed in order to help [the start-ups], then we can arrange it as a confidential consultant," says Alex Polinsky, who heads the Pfizer incubator. Biogen Idec has made it a rule that start-up employees can't just stroll through Biogen's halls, adds Fuchs, and "no sitting together in the cafeteria, shooting the breeze," which can lead to accidental disclosure of confidential information.

For this relationship to prosper, both sides must view acquisition as the mark of success, meaning start-ups must reach critical goals on just a few million dollars. Incubatees receive between $3 and $10 million from Biogen and about $4 million from Pfizer, depending on the agreement. Start-ups must then hit milestones and cover operating expenses such as salaries, legal council and liabilities.

For incubatees, the real trouble might start if the parent *doesn't* buy them, as it could diminish the start-up's chances of securing funding from another source, such as a venture capitalist (VC). "Then they have a problem," says Michael Steinmetz, a partner at MPM Capital in Boston and chairman of Seattle-based Accelerator, an incubator-type venture (*Nat. Biotechnol.* **24**, 1040, 2006). "It will be difficult because they have been tested by somebody and that somebody came to a negative conclusion."

There's also a financial risk, as founders might not get the best price for their company. "If the great discovery happens we wouldn't be able to go independent," says Vaughn Smider, founder of Fabrus in the Pfizer incubator. Executives at Wintherix, also a start-up in the Pfizer incubator, negotiated into their agreement that the value of Wintherix must be determined by an independent assessment, with Pfizer able to buy the firm only if it meets that price. If Pfizer chooses not to acquire Wintherix, it must continue to house and fund the company for up to six months with a guaranteed loan for another six months after that.

But perhaps the biggest downside to corporate incubators is missing out on long-term returns. Pfizer executives say they are prepared to offer royalties to founders if their technology is commercialized, but nothing is guaranteed in the first agreement. Biogen Idec's agreements include language on royalties, but the role that founders will play after their companies are acquired is not specified.

Plenty of big firms have venture capital arms (**Box 1**), and start-ups can also try accelerators, university and real estate incubators, contract research organizations and a number of other funding schemes (*Nat. Biotechnol.* **25**, 859–866, 2007). But the corporate incubators do offer another option for early-stage companies having trouble getting attention from VCs, and variations are already popping up: the venture arm of Cambridge, Massachusetts–based Genzyme is considering a virtual incubator in which the company would provide funding and hands-on expertise, but not lab space, in exchange for some access or rights. These extra options are healthy for biotech, but the risks of corporate incubators are enough to give anyone pause.

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"People in the venture capital world think I'm crazy," says Gerard Karsenty, founder of Escoublac, the first start-up to enter Biogen's incubator. "It's not the most lucrative deal and if that was my only criteria then it's not the best choice. But I want to do it because it will be the easiest way to have scientific success."

Emily Waltz *New York*

IN brief

Another inhaled insulin casualty

Novo Nordisk of Bagsvaerd, Denmark, has cancelled development of its phase 3 inhaled insulin program, a move influenced by Pfizer's recent dumping of Exubera (*Nat. Biotechnol.* **25**, 1331–1332, 2007). The Danish group acknowledged that there was no point spending on development to be the third-place product in a niche market. Their device, which uses Aradigm's AERx liquid aerosol system, offers no benefit over other pen devices, including Novo's own FlexPen. At best, Novo's product would have been third after MannKind's and Lilly's inhaled insulins. As with Pfizer's inhaler, Novo's AERx was deemed too bulky. The decision forces Novo to write off about $300 million, and leaves just Eli Lilly in Indianapolis and MannKind from Valencia, California, in the inhaled insulin space. "Both are very serious players," says Bill Kridel, a principal with Ferghana Partners Group. Lilly's *AIR* insulin, now in phase 3, is produced with Cambridge, Massachusetts biotech Alkermes; MannKind will need a partner to develop its Technosphere Insulin System. The inhaled powder insulin arena may have lost two main contenders, but the remaining companies still have to compete with other trends in the diabetes market. There are around 60 programs pursuing the 'Holy Grail' of an oral diabetes drug, and advanced injector devices will mean that insulin can be administered pain and needle-free. *SA*

Plant biotechs defect

Syngenta of Basel, Switzerland, and Monsanto of St. Louis, Missouri, are among a number of companies to withdraw from the International Assessment of Agricultural Science and Technology for Development (IAASTD) project, citing a draft report that failed to give due recognition to the benefits of biotech as their reason for pulling out. IAASTD, initiated by the World Bank in 2005, brings together 400 experts from government, nongovernmental organizations (NGOs), companies and academia to evaluate science and agriculture to address global poverty and hunger. "We feel the current draft of the report underestimates, and is weak on, the real role modern science and technology plays in agricultural development," explains Keith Jones, a spokesperson for Brussels, Belgium–based Croplife International, a global federation representing the plant science industry, which coordinated the companies' input. He says Croplife would still endorse the final report, due in April, if its concerns were addressed. Bob Watson, co-chair of IAASTD, says the companies did not make use of all their opportunities to contribute to the report, and points out that the World Bank and some governments had similar concerns over the report's lack of balance, but are still at the table. Watson hopes the companies will reconsider. "For the seed companies to walk is unfortunate," he says. "We all need to work together to feed the world with affordable, nutritious food in an environmentally and socially sustainable manner." *SA*