IN brief Merck joins the biotech game

Merck's CEO Richard

Clark has unveiled

plans to enter the biotech drug market

by creating Merck

BioVentures (MBV), a global division focused on developing biotech drugs, in particular copycat

versions of existing

represents Merck's

shot at replenishing

biologics. The initiative



Merck's CEO Richard Clark introduces a new strategy for biogenerics.

a dwindling pipeline and an attempt to position itself as a major competitor in the biotech field. The unit is expected to burn \$1.5 billion over the next seven years, with a manufacturing capacity fully operational by 2012. The news comes at a time when the Whitehouse Station, New Jersey-based pharma faces dwindling sales of cholesterol-lowering blockbusters Zetia (ezetimibe) and Vytorin (ezetimibe and simvastatin) and the expiration of some key patents. Merck's new biotech division will take advantage of its GlycoFi technology, purchased in 2006. This glyco-engineering platform-a faster, less expensive production method than mammalian-based culture-will enable the company to circumvent generic manufacturing restrictions and be competitive in its pricing approach. MBV already has a candidate drug in phase 1, MK2578 (pegylated erythropoietin), designed to compete with Thousand Oaks, California-based Amgen's Aranesp (darbepoetin alfa), and at least five other products projected to be in late-stage development by 2012. "It was important to make a decision around manufacturing and leverage our internal capabilities," says Frank Clyburn, MBV general manager. Biogenerics represent an important market opportunity as \$10 billion worth of biologic drugs are expected to come off patent by 2010, with an additional \$10 billion by 2015. Given that the new Democratic administration is expected to push biogenerics legislation through Congress, the timing is propitious, although a generic-drug-style abbreviated pathway looks increasingly unlikely. As clinical trial costs will, mostly likely, be added to the cost of developing a follow-on biologics environment, the investment and expertise needed for success could be considerable. But considering the large number of leading biologics, such as Epogen (epoetin alfa), Enbrel (etanercept) and Avastin (bevacizumab), facing patent expirations through 2017, and the diminished late-stage risk involved in producing follow-on biologics, Merck's strategy is timely. Basel-based Novartis and Petach Tikva, Israel-based Teva already market follow-on biologics in Europe and India, and several other companies also have the cash and the technology to enter the race. "Over the longer term, we will also apply our unique humanized GlycoFi yeast technology platform to the development of novel biologics," says Caroline Lappetito, Merck's director of global communications. -Victor Bethencourt

Table 1 Top ten biggest rounds for private biotech firms in 2008. Amount invested (\$ millions) Company Round number Date closed OncoMed Pharmaceuticals 169 12 December 2 Portola 130 3 9 July Pacific Biosciences 100 5 14 July 82 5 З Radius Health 20 November

Raulus Health	02.5	5	20 November
Ganymed Pharmaceuticals	82.2	4	18 November
Proteolix	79	3	8 September
ESBATech	62.5	2	7 August
Merrimack Pharmaceuticals	60	6	10 June
Biolex Therapeutics	60	4	6 October
Intrexon	55	3	7 May

Source: BCIQ: BioCentury Online Intelligence

in public equities (PIPEs). "Some of the laterstage public market biotech and medical device companies have taken big hits on valuations, making them very attractive investments for us," he says. Moreover, Frazier is planning to shift its investment away from the biotech sector to growth equity, funding companies that are already profitable but need more capital to expand, often in the pharma or healthcare services sector. This naturally delivers lower multiples on exit, but it mitigates development risk, which is the top priority right now.

Abingworth's McQuitty agrees. "Several larger funds have even gone to a PIPE-only strategy; they feel they want to take time out from investing in private companies at all." Abingworth is, he assures, still willing to do early-stage investing, though possibly less so than before.

Figures from Dow Jones Venture confirm that funding has indeed shifted away from seed financing toward the later-stage companies, falling from 23% in the first quarter of 2008 to 18% in the third quarter (in all VC sectors, not just healthcare). This trend, however, was already apparent before 2008.

VC funds associated with pharmaceutical companies (e.g., GSK Ventures or MedImmune Ventures) are bucking this trend and are still actively interested in funding early technology ventures."They have not just investment focus but also strategic focus; they want to access an innovation," says Topper. "That's good for the industry, because for other VCs [like Frazier] it is very hard to make a rational argument for taking a chance on an early startup when you are not sure just how they are going to finance themselves later." An example of this 'strategic financing' is the backing of CVRx by J&J Development in New Brunswick, New Jersey, owned by Johnson & Johnson (J&J), also in New Brunswick. J&J led the \$83.9 million financing, in cooperation with NEA and several other top-ranking healthcare VC investors, including Frazier and InterWest Partners in Menlo Park and Houston.

Another trend inspired by the credit drought is stronger interest in co-investing and pre-syndication. "We are aware that later funding rounds may not be easy, so there is a move to pre-syndicating either the whole funding process or a big chunk, say 80%, right at the start," says Abingworth's McQuitty. "The company directors don't then have to be out pounding the pavement looking for their next rounds."

Jens Eckstein, partner at TVM Capital in Boston, points to more subtle shifts in the structure of seed financing. "The trend is for incubating rather than 'official' seed funding—a stealth mode with tight control on spending," he says. This has coincided with larger first rounds combining series A and B, funded by syndicates strong enough to advance the biotech companies enough money to keep going longer, without having to look for further financing. The result has been some series A fundings worth as much as \$30 million.

Eckstein believes European biotech has been hit significantly harder than the US, with very few big VCs still active. Besides Sofinnova in Paris, Abingworth and TVM itself, several firms have dropped out of the sector entirely. Dow Jones Venture numbers back this up: VC investing into European healthcare companies flopped from €468 million in 61 deals in the first quarter to €164 million in 32 deals in the second quarter. Significantly, Germany has now taken the lead in European VC investing, as UK activity fell off a cliff in 2008.

But all is not lost, insists Eckstein. "A number of VC firms have kept their powder dry, with money in hand still to invest, having only recently closed their latest funds." He also notes the merger and acquisition environment remains strong, with cash-rich pharma in buying mode by necessity as they face pipeline issues. "There has been no real slowdown in deal flow," he says. "But the pressure is on startups to think through their plans more critically."

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