

IN brief

Amylase corn sparks worries



Corn millers have voiced quality concerns.

A genetically modified (GM) variety of corn intended for ethanol production is drawing objections not only from anti-GM organizations but also from some biotech supporters. The crop, approved in February by the US Department of Agriculture, and developed by Basel-based Syngenta and marketed as Enogen,

expresses an α -amylase enzyme, which helps break down the starch in corn more efficiently during ethanol production. The trait could cut costs for the ethanol industry by reducing water, energy and chemical use. But if it enters the food processing stream, it could damage corn-based food quality, resulting in sticky tortillas, dense corn puffs and gummy bread, say corn millers and food processors. Wayne Moore, a food scientist and independent consultant hired to review Syngenta's data by the North American Millers' Association in Washington, DC, says, "I'm concerned that if it gets into food processing it could cause some serious problems." A Syngenta spokesperson said there is validity to the Millers' Association complaints. "I think they have a legitimate concern," says Jack Bernens, head of technology acceptance at Syngenta. Bernens adds, however, that the probability of amylase corn getting into the food supply is "very, very low." In its proposed voluntary containment plan Syngenta says growers will sign contracts that specify how the corn will be transported and how delivery and harvest equipment will be cleaned. Farmers will not be allowed to grow amylase corn within certain distances—usually 40 miles—of food corn mills. The supply of seed will be limited at first to growers working within the vicinity of certain ethanol plants, and will ramp up slowly. Syngenta's plan "looks good on paper," says Moore, "but I don't know that it's going to work in practice."

Emily Waltz

IN their words



"There have been numerous instances of what I refer to as bad behavior—combined with short-sighted, brass-knuckle negotiating tactics—by some pharma companies that really go to the heart of whether this

partnership between big pharma and biotech can really continue." Avalon Ventures' Kevin Kinsella bemoans the predatory business practices of some pharmas that are making early-stage venturing difficult. (*Xconomy*, 17 February 2011)

ous sales goals, starting at \$400 million within a specified time. Each dollar paid out through the CVR will cost Sanofi ~\$272 million. But three of the milestones—\$10 of the \$14 total value of the CVR—are predicated on Lemtrada reaching \$1.8 billion or more in sales over four quarters. "This clearly reflects expectations that some—particularly Genzyme management—are putting on this drug," Sanofi CFO Jerome Contamine told investors when the final deal terms were announced. Analysts are assigning only a low probability of this occurring.

Since Sanofi went public with its pursuit of Genzyme, reports would surface almost daily, handicapping the probabilities of the deal going through and suggesting which issues were sticking points: the valuation of Lemtrada and whether Genzyme was on track to resolve its manufacturing issues. That some influential shareholders, notably the professional investor and board member Carl Icahn, had previously and quite vocally called for Termeer to resign, added to the public spectacle. "My strong suspicion is the deal was very noisy almost entirely because of the investors sitting on the board," says Leerink Swann pharmaceuticals analyst Seamus Fernandez. There was also a lot of talk on the Sanofi side, he points out, possibly encouraged by two of its major shareholders, L'Oreal Asset Management, and Total, an energy company.

Now that the close of the deal is imminent, the focus can turn to how Sanofi will manage and reshape Genzyme. Sanofi CEO Chris Viehbacher emphasizes the importance of establishing a US biotech presence. "The most numerous opportunities are still in the United States," he told investors the day Genzyme agreed to terms. "They really operate a collaborative model that we felt we really needed to have a stronger presence here in the US, particularly on the research side."

Viehbacher acknowledges that despite its size, Sanofi had not previously embraced biotech (*Nat. Biotechnol.* 27, 581–582, 2009), with only 20–30% of its R&D pipeline in biologics and "really nothing on the marketplace, at least on the treatment side." What's more, the ERT business differs greatly from those areas of biologics where Sanofi does have experience—the relatively straightforward production of vaccines and insulin. Genzyme's high-priced Fabrazyme, for example, is expected to sell somewhere between \$300–350 million this year, based on production of less than 80,000 vials of the drug. The yields and volumes are "clearly different than Sanofi-aventis' business," he said. "It's going to be important for us to listen and learn and make sure we understand how best to put the businesses together."

"The ERT business is the key asset," says Fernandez. "To have a longer term presence in the orphan drug space at a level that Genzyme brings to the table is very significant." That means retaining key people. "You can't have that blow up on you. Sanofi has to be very careful to keep the best people in that business," continue to develop new products and make sure that Myozyme (alglucosidase alfa)—its potential blockbuster ERT for Pompe's disease—has a successful launch, he says. "You still have to have people beating the bushes to find every patient globally, in the way Genzyme knows exactly how to."

That said, orphan diseases account for only 40% of Genzyme's sales. Sanofi is sure to look hard at its other businesses, which include a cardio/renal franchise, an oncology/hematology franchise, biomaterials and a biosurgery unit. According to Viehbacher, "Some of those will, I think, fit extremely well." In other words, some may not, and will be jettisoned or absorbed. The oncology business may be most at risk, in part because Sanofi will have excess sales force capacity as the Taxotere business winds down and also because Genzyme's vision of shoring up its oncology portfolio by acquisition never materialized.

Acquisitions inevitably lead to departures, either through consolidation of resources or culture clashes. In some cases that attrition is minimized by keeping a strong management team, as was the case with Roche-Genentech, at least initially. Genzyme has already disposed of some of its non-core assets, including a genetic testing operation, other diagnostics and a pharmaceutical intermediates business. Termeer has already announced his departure. "I think Genzyme will lose many of their scientific and medical talent," says Neil Solomon, president of executive search firm the Neil Michael Group, in Great Neck, New York. "But I don't know if that matters to Sanofi based on why they did the acquisition." Aside from the ERT business, he says, "I don't think they'll be terribly worried about people leaving."

Unless Sanofi were to pull out of the area, which would run counter to its desire to establish a Boston-area hub to ease the formation of future R&D collaborations, Sanofi's move is unlikely to alter the biotech landscape. There's a strong big pharma presence in Cambridge. "As long as you keep large science companies with strong heartbeats in the area, it's okay," says Solomon, whether it's pharma or biotech. "The venture capital and smaller, early-stage, very high-quality science companies will keep popping up."

Mark Ratner Cambridge, Massachusetts