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Diversify to multiply

Tom Jacobs

To invest in biotech is to dream of a better future for patients and of sharing in the profits. But even the surest biotech dream—a company with a marketed drug on the way to billions in sales—can become a nightmare. The best way to keep your dreams pleasant, nightmares few, and next day bright, is diversification—or, in the case of biotech investing, biodiversification.

Nightmare scenarios

Biotech investors can suffer two main nightmares apart from management misconduct. The first occurs when a newer company's only near-term product suffers a clinical or regulatory setback. The second, less anticipated, arises when a company takes a promising drug through approval and marketing, only to withdraw it when unintended effects appear. For biotech investors, each is the equivalent of Edvard Munch's *The Scream*.

Consider BiogenIdec (Cambridge, MA, USA; Nasdaq:BIIB) and Élan (Dublin, Ireland; NYSE: ELN). They share most of the revenues from natalizumab (Tysabri; formerly Antegren), a new monoclonal IgG4 drug for multiple sclerosis. Approved in November 2004, Tysabri had been expected to grow to billions in annual sales. At that rate, even Protein Design Labs' (Fremont, CA, USA: Nasdaq:PDLI) 3% royalty on Tysabri sales would lift the company's fortunes nicely.

Investors smacked their lips in anticipation, boosting all three companies' stocks sharply. BiogenIdec and Protein Design Labs more than doubled in the past two years, and Élan recovered from around death-rattle $1 in 2002 after its accounting scandal, to the upper $20s. Very nice.

But then on February 28, the companies voluntarily withdrew Tysabri from the market and clinical trials when two patients contracted a rare and fatal disease. With billions in sales jeopardized, BiogenIdec shares plummeted 43%, Élan, 70%, and Protein Design Labs, a smaller but significant 14%. Investors watched $18 billion dollars of market value spontaneously combust. That's roughly the combined market value of Genzyme (Cambridge, MA, USA; Nasdaq: GENZ) and MedImmune (Gaithersburg, MD, USA; Nasdaq: MEDI), or many companies whose brands you know: Gap jeans, Harley-Davidson motorcycles, Fuji film, Heinz ketchup or Hershey chocolate.

Blood baths and egg baskets

The blood spilled everywhere. *The Wall Street Journal* reported that one hedge fund manager had 25% and 10% of his funds, respectively, in BiogenIdec and Élan. (Talk about a bad day, and a Monday no less.) The manager's certainty made him forget two basic rules of investing. First, you never know anything for sure, especially in biotech, where uncontrollable risks from human metabolism, pervasive governmental regulation and eye-popping costs for failure can flatten you without warning. And second, the axiom "Never put all your eggs in one basket." He violated both these rules by betting 35% of his and his clients' money primarily on the fate of one drug.

Look at how hard it is for him to recover the losses for his clients. BiogenIdec's 43% drop requires a 75% gain there or elsewhere. For Élan, it's worse: the 70% drop requires a 233% vault. If he had owned each company in smaller amounts among more stocks, his losses would be smaller, return to profits shorter and future brighter.

Adversity and diversity

If you invest in individual stocks, a rule of thumb is to have on average at least 12 but no more than 18 in different industries, each in equal shares, about 5.6–8.25% of your total dollars in stocks. Biotech investors usually gravitate to biotechs for familiarity and interest, but diversity doesn't mean owning six biotechs and feeling diversified because four are unprofitable speculations and two are large, profitable biotech drugmakers. Pick a leader or two in different industries, and if you can't find 12–18 stocks, then diversify by leaving the rest of the money in a broad stock market index fund.

Why 12–18? Fewer than 12 is under-diversification, bringing more risk when one pulls a BiogenIdec or Élan ('blows up' is the technical term). Greater than 18 is over-diversification, where not only do you have too many companies to follow, but you decrease any overall benefit from one stock's success. That means you are likely to get the same results from a broad stock market mutual fund, which you should then do, eliminating much work and leaving more time for family, friends, skittles and beer.

Too many eggs at the office?

Readers who work in biotech should consider another factor. Don't forget to count your company stock and/or stock options when determining how diversified you really are. Some companies let you buy their stock at a discount or offer it as a 'free' contribution to your retirement account. They may also award you stock options as an incentive to stay with them. Don't think that these are free because they almost always are offered in place of salary and benefits. That means you really have made a substantial cash investment in your company.

Imagine that your stock and options are worth roughly $50,000. If you count this investment in your biotech employer as one of 12 stocks in your portfolio, the other 11 stocks (each at 8.25%) would need to bring the total portfolio to $606,000; if your portfolio contained 18 stocks (each at 5.6%), you'd be talking about a whopping $893,000 portfolio. Thus, unless you're a financial high roller, you shouldn't invest any more money in your company's stock or options. That way, if there's bad news at the office, you haven't put your entire investing DNA into one host.

Biotech is exciting, but as with all passions, it is important to enjoy but not suffer the worst of their vicissitudes. Diversification ensures that while investing nightmares will come, the next day will still dawn.

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