The death spiral

every year, *Nature Biotechnology* publishes a financial survey of the public biotech sector (p. 625); this year, for the first time, we also analyze the financial health of that other uncharted universe, private biotech firms (p. 635). Throughout biotech's history, few have questioned the wisdom of using the stock market as a source of fresh cash to invigorate firms subsisting on meager resources. But there are increasing indications that public markets may not always be the best financing route for a biotech company, particularly if that company is unprepared or unable to raise its profile sufficiently to register on investors' radar.

Should investors and entrepreneurs start mulling more seriously the virtues of staying private rather than trying to go public—at least for the time being, given the current low-yield initial public offering (IPO) trend and the onerous issues associated with Sarbanes-Oxley compliance? Certainly, for every company that raises more than \$100 million on Nasdaq (and even on the increasingly popular AIM and EuroNext markets in Europe), there are dozens more that raise a meager \$50 million or less. In the United States, where there are lots of biotech investors and already lots of public biotechs, it is becoming increasingly difficult to attract the attention of institutional investors like pension and mutual funds, let alone individual investors. There are so many distractions for biotech investors in the public market today, unless a newly public firm has a truly differentiated story, with compelling data and a \$500 million-plus market cap to back it up, it will find itself quickly lost in the crowd, completely overlooked by analysts, investors and the financial press. Without exposure to these key audiences, retail support for the stock will be hard to come by; the end result is scant trading volume and a puny share price.

The problem with the IPO is that it tells you, as a small company, exactly what you are worth—your share price times the number of shares outstanding. Your technology may be amazing, the potential of your drugs earth-stopping, and your friends and family think you're wonderful, but if investors won't buy at the price, then the price is too high.

As Bill Kridel, Jr., managing director of Ferghana Partners in New York has noted, the predilection of many biotechs to go public prematurely is only making matters worse. Institutional investors are currently sending a clear message to biotech that such floatations are doomed. The result, more often than not, is a financing death spiral, in which a company raises smaller and smaller amounts, has a share price that is hammered almost at launch—a fate derisively referred to as a 'haircut'—and an ever-smaller small market cap thereafter.

Unless the market has already been extremely generous, which can happen but not often, firms will thus quickly burn through the proceeds of their IPO. Trying to raise more capital will dilute existing shareholders, shareholders who, you will recall, have just seen their initial punt sublimate after the IPO. They are likely to cut their losses

and sell, creating even more downward pressure on the share price. That will make it very difficult to raise big money in a follow-on or post-IPO. Thus, the helix of life becomes the spiral of death spiral.

Another problem for any biotechs considering IPOs now is that the current bull market has already exceeded the length of every other previous bull market. Judging by the net capital outflow from biotech stocks and the poor after-market performance of recent biotech stock launches, the party seems to be winding down. Biotech firms are having to adjust their proposed offering prices downward and investors are looking out over the growing queue wondering if they are looking at naive opportunists or just lemmings.

The real problem for biotech companies, though, is that many of them need cash to stay in business or, less desperately, they need the stability and negotiating position that comes with having a slug of cash in the bank. For companies with options, postponing an IPO may be one of them. Going through with an IPO that doesn't provide the cash a company needs should not be an option; it serves no purpose for the company and may risk any good will that currently exists: a company that spends other people's money without adding value is acting irresponsibly both from its own perspective and that of the wider biotech community.

On the other hand, if a company has a clear strategy then it should consider financing it by different means. Several European companies, Solexa, Cyclacel and Micromet, for instance, have each merged into struggling US companies, not quite shells but fairly tortoise-like. From the European point of view, this not only takes them onto Nasdaq (often key to credibility back home) but also instantly creates at least some investor goodwill: loyal investors in the shells will recognize that the merger has created value, and this may be rewarded with an uptick in stock price. This momentum may provide an opportunity for money-raising through a secondary offering. If the shell company is in roughly the same business area, then its current investors may recognize that the merger does indeed bring value.

Ironically, as the bulls kick up the dust in their retreat, being a humbly capitalized company may be an advantage. Small, nearly public companies are well-placed to maintain momentum in the second half of 2006 simply because they have options beyond the IPO. Charles Duncan of JMP Securities puts it this way: "Regardless of the cycle, large pharmaceutical and biotech firms need to replenish their pipelines...so, companies with phase 1 products and even some discovery-stage biotechs are increasingly attractive for both M&A and development deals."

Small private companies can reverse in, sell out (M&A) or sell on (license). Whichever course of action they take, they will have the huge advantage of not being overtly valued. In contrast, companies going public have the huge handicap that their valuation is not negotiable: it is set by a market mechanism that will take a disinterested, and it seems increasingly uninterested, view.