

# New Biotechs Face Mixed Future<sup>\*</sup>

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**Summary.** Preliminary final reports for the 2002-2003 financial year, which were required to be filed by 12 September, reveal that only one of Australia's newly-listed biotechnology companies has achieved profitability, while some have yet to make their first sale and others face dwindling reserves of cash. The share market performance of the group as a whole continues to outpace both the All Ordinaries Index and the performance of a matched set of non-biotech IPOs, and the recent rise in the biotech sector both here and in America has encouraged a spate of secondary offerings. While the fate of these relatively young companies remains uncertain, there is reason to be optimistic about the Australian biotech sector as a whole. In particular, emerging business models point out way in which Australian biotechs can succeed in a globally competitive business.

**Introduction.** Our research has tracked the performance of 24 core biotechnology companies that listed on the Australian Stock Exchange between 1998 and 2002. All of these companies are still in business, and following their initial public offerings their shares have risen or fallen in almost exactly the same proportion as those of all IPOs on the ASX:

| Year                              | Total IPOs | %       |         |        |      |
|-----------------------------------|------------|---------|---------|--------|------|
|                                   |            | Gainers | Gainers | Losers | Even |
| 2002-03                           | 55         | 27      | 49.1%   | 26     | 2    |
| 2001-02                           | 61         | 22      | 36.1%   | 38     | 1    |
| 2000-01                           | 122        | 51      | 41.8%   | 69     | 2    |
| 1999-00                           | 155        | 71      | 45.8%   | 84     | 0    |
| 1998-99                           | 53         | 31      | 58.5%   | 20     | 2    |
| TOTAL 1998 - 2003                 | 446        | 202     | 45.3%   | 237    | 7    |
| biotech IPOs 1998 - 2002          | 24         | 11      | 45.8%   | 13     | 0    |
| random sample of non-biotech IPOs | 45         | 16      | 35.6%   | 28     | 1    |

Data sources: *Australian Financial Review*, ASX

The big difference in share performance shows up in the *extent* of the rise or fall. An investor who bought \$1,000 worth of shares in each of the 24 biotech IPOs at listing would have owned, as of 12 September, shares worth \$61,061, an increase of more than 150%. An investor in our matched set of ASX non-biotech IPOs would now hold shares worth 7% *less* than the amount invested, and an investor who put an equal amount into the All Ordinaries at the time of each

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biotech IPO would have gained just over 2%. An investor who adopted the same strategy with regard to all American biotech IPOs between 1998 and 2002 would have lost 27% of the amount invested. The 24 listed companies resemble a typical venture capital portfolio, from which some companies will go bust, most will be moderately successful, and a few will return 10 or 20 times the amount invested. This resemblance is not accidental; most of the 24 companies told us in interviews that they went public largely because they were unable to raise the funds they needed from other sources, including venture capital. Had they been seeking funds in a different phase of the market, these companies might well have become part of venture capital portfolios and remained there for some years until a trade sale or public listing took place.

The 24 companies, which we label “core biotechs”, are Analytica, Antisense Therapeutics, Anadis, AXON Instruments, Bresagen, Biotron, Bionomics, Bioprospect, Compumedics, Chemeq, Cellestis, Epitan, Genesis Biomedical, Genesis R&D, GroPep, Metabolic Pharmaceuticals, Norwood Abbey, NSL Health, Network Ltd (formerly Pi2), Prana Biotechnology, Peplin, Sirtex Medical, and VRI Biomedical. Each of these companies listed on the ASX between 1998 and 2002. All faced relatively long development time frames and considerable uncertainty, and all required substantial capital in order to achieve their goals. Unusually for a group of high-tech IPO companies of this age, all are still in business. However, NSL Health and Network Ltd have exited the biotechnology sector, and will be excluded from the analysis that follows.

The Path to Profitability. The 22 companies in the sample spent an average of \$ 3.5 million on research and development in the 2002-2003 fiscal year. That level of spending represents an average 18% of the market capitalisation of the firms. From another perspective, of the 16 companies that had sales revenue in the 2002-2003 financial year, five spent more than twice their revenue on R&D, while another four spent between one and two times revenues, and six spent between 10% and 100% of revenues. Clearly most of these young biotechs are still early-stage companies, whose cash-burning R&D engines will need frequent stoking. Since markets have, until recently, been less receptive to follow-on financing, many of the companies have expanded their business models to include revenue generating activities such as contract research, toll manufacturing, product and process consulting, and in a few cases acquiring cash-generating businesses tangentially related to the firm’s overall strategy. The challenge for management is to balance the need to bring in short term cash against the need to focus on their firm’s long-term technology development goals.

The company reports indicate that in the 2002 – 2003 financial year just one of the 22 companies – Sirtex – was profitable. However, six others reduced their losses from the previous year. The other 15 lost more than in the previous year, suggesting that they are still in a relatively early phase of their development or are ramping up production. Four of the companies, although not yet profitable, reported their first sales to customers in the year just ended; of those that were already making sales, only half showed increases in sales compared to the previous year, again indicating the early stage of the companies’ development – and perhaps some market risk around their initial products.

On the other hand, six of the companies reported no sales to customers during the year. This does not mean that these companies had no cash coming in – some received government research grants, and many earned interest on the money they had already raised, in addition to the cash-generating activities described earlier. (In fact, the category “revenue from ordinary activities” in some of the company reports also included tax refunds, sale of plant and equipment, insurance settlements, and other inflows that are unlikely to be repeated in future years.) Interestingly, the market does not seem particularly concerned about the lack of sales – the shares of the six companies that have yet to make a sale have risen, on average, almost 500% since IPO, and five of the six have successfully sold shares in the secondary market in 2003.

For many young companies, of course, cash is more important than profits. After adjusting the companies' expenses for non-cash items (depreciation and amortisation, for example), it appears that two firms – again Sirtex, and also Compumedics – are generating cash from operations. The others are burning cash to a greater or lesser extent, and must rely on savings and secondary raisings to supply the cash required to keep the business moving forward. Comparing these companies' cash burn rate to their cash supply as of the end of the year showed that the average company had, as of 1 July, 20 months' of cash left. Nine companies had less than one year's cash, six had between one and two years' supply, and five had more than two years' worth. Only seven of the companies had more cash at the end of this financial year than at the end of the previous financial year, but eight had more than at the mid-point of the financial year, suggesting the impact either of raising funds or of cutting expenses.

Attempts to cut spending almost inevitably centre on scaling back research and development, the major expenditure for most of the young biotechs. Rather than reducing the depth of their research, these companies have tended to reduce the breadth. Compared to the very broad R&D programmes spelled out in their prospectuses, the companies' current efforts are substantially more focussed, partially because some of their pursuits reached dead ends, but primarily because of the need to focus their limited resources on their best opportunities.

Raising funds in the secondary market has become more popular as the market has improved. So far this calendar year, 13 of the 22 companies have raised funds by selling additional shares, including sales sold when options were exercised. Ten companies have made such offerings since the beginning of the new financial year; importantly, these companies include eight of the nine whose cash reserves at the end of the previous financial year had dwindled to less than twelve months' supply.

The future of the sector. Clearly a biotechnology company whose research and development results fall behind expectations could find itself in a downward spiral – low revenue, little cash, and no way to reduce spending except by cutting R&D, which might accelerate the spiral. If the company's share price has fallen significantly, then raising additional funds may require selling a large number of shares, if indeed investors can be found at all. This scenario has raised questions about the possibility of consolidation across the sector on the basis of mergers and acquisitions. So far one of the 22 companies – once again, Sirtex – in the sample has been the subject of a takeover attempt, and another has made an offer, since withdrawn, for a company in the sector but not in the sample.

The basis on which consolidation would take place is not immediately obvious. While some of the 22 companies are targeting the same diseases (obesity, psoriasis, and various cancers, for example), their approaches to these diseases differ substantially. It is not clear, therefore, that there are many scientific synergies to be attained. From an operational perspective, none of the companies has developed a sales or distribution network that could readily be shared; indeed, the companies often rely on third parties to sell and distribute their products, especially in overseas markets. Consolidation might take place on the basis of superior management – firms with better managers could conceivably buy up firms that were less well managed, and achieve improved results through the application of superior managerial techniques. However, the senior managers we spoke to unanimously felt that they already had plenty to do running their existing firms, without taking on the additional responsibility of fixing up another organisation.

Another avenue of consolidation would be with firms outside the biotechnology sector. Although such combinations are often viewed with scepticism – the stereotypical image is of a mining company, already transformed into a dot com, now undergoing a second reincarnation as a biotech – there could be sensible combinations of companies that have more opportunities than cash with those in the opposite situation. Naturally, the senior management and boards of the combining organisations would have to be consolidated and refined in order to suit the needs of the resulting company. The outcome could be positive for shareholders as well as for the future

of the biotech sector as a whole. Recent examples of such combinations, not involving companies in the sample, are Imugene (formerly Vostech Limited), Benitec (formerly Queensland Opals), and Australian Cancer Technology (formerly Exodus Minerals).

Perhaps a more likely outcome is vertical consolidation – acquisition by a larger “upstream” company, for example a large pharmaceutical, and perhaps one with which the biotech has an established research or marketing relationship. Many Australian biotechs have such alliances already, and the knowledge shared in the course of working together could smooth the path to consolidation. The combined market capitalisation of the 22 companies as at 12 September was less than \$2 billion, making the average market cap, even given the recent share market increase, less than \$90 million – a small amount for a large organisation to pay. Although much concern has been expressed about the “loss” of Australian companies to overseas ownership, vertical consolidation may, in some cases, represent the best outcome for shareholders, employees, and the commercialisation of Australian intellectual property. Most of these companies are too small to fund their journey through the entire regulatory approval process, much less the cost of establishing production and distribution systems needed to complete the commercialisation process.

Conclusion. At IPO the 22 companies in the core biotech group were 6.5 years old on average. Many of the companies in the group are now more than a decade old – and almost all are still not profitable. Moreover, two-thirds of the firms lost more money, and ended up with less cash, last year than the year before, suggesting that they might not yet have turned the corner towards self-sufficiency. While not unusual in the biotech sector, this situation creates challenges for the firms and their investors. Firms continue to focus on revenue generation but, with the share market once again interested in the biotech sector, they are well advised to raise more money while they can. The structure of the sector appears to support consolidation through acquisition by larger firms, suggesting that Australian biotechs that want to retain their identity must quickly turn their attention to issues of cash flow, profitability, and eventually scale.