Achieving venture returns through corporate spinouts

Date received (in revised form): 3rd April, 2002

Ashley Ledbetter and Ilan Zipkin

Ashley Ledbetter, PhD is a Principal in MPM's San Francisco office and was previously a Healthcare Equities Analyst at Tiger Management and at Dresdner RCM Global Investors. MPM Capital is a healthcare investment firm focused on private and public equity investing in biotechnology, emerging pharmaceuticals and medical devices. MPM's BioVentures venture capital funds and its BioEquities public hedge fund are active in establishing independent companies via spinouts from large pharmaceutical organisations.

Ilan Zipkin, PhD is an Associate in MPM's San Francisco office and was previously the Science Editor for BioCentury Publications. MPM Capital is a healthcare investment firm focused on private and public equity investing in biotechnology, emerging pharmaceuticals and medical devices. MPM's BioVentures venture capital funds and its BioEquities public hedge fund are active in establishing independent companies via spinouts from large pharmaceutical organisations.

Ashley Ledbetter
MPM Capital LP,
601 Gateway Blvd,
Suite 350,
South San Francisco,
CA 94080, USA

Tel: +1 650 553 3312
Fax: +1 650 553 3301
E-mail: aledbetter@mpmcapital.com

Abstract As the biotechnology industry matures, the opportunity arises to establish companies by 'spinning out' undervalued but significant assets from larger biotechnology or pharmaceutical parent companies. Recognising the value in such assets and achieving rapid and meaningful returns on investments in corporate spinouts requires the infusion of the operational discipline of start-up companies along with the entrepreneurial spirit of a high-growth company. For this reason, spinout investing seems to be a natural fit with venture capitalists, whose perspective, experience and network can add tremendous value to a company at this stage. And yet spinout investing is also an area that can require significant cash commitments, which exceed the scale at which biotechnology venture capitalists have typically invested. With the emergence of a new breed of larger life science private equity firms that can now bring both the know-how and the capital to spinout investing, this is no longer an issue. Such investors are catalysing and driving the success of this growing class of investments to achieve the kinds of returns that will make these entities compelling opportunities for both parent companies and the limited partners of venture funds.

Keywords: spinout, venture capital, corporate development, biotechnology

Definition of spinouts

For the purposes of this discussion we define a spinout as a divestiture of assets (which might include products, research programmes and/or personnel) into a *newly created* corporate entity that is open to separate external financing. This is in contrast to terminology that sometimes classifies a spinout as a transaction in which assets are sold or licensed to an *existing* company for further development in exchange for either cash payments, equity in the purchasing company or a combination of both. Though sometimes thought of as large transactions involving companies cut from whole cloth, spinouts as we define them can incorporate as little as a single product or technology concept and can range in size from a few employees to several hundred. Spinouts represent a corporate strategy to enhance shareholder value by releasing the true value of a component of the parent company's business while at the same time reducing the parent company's burden to support that component.[1]

Recognising undervalued assets and creating value

The key to a successful spinout lies in recognising and then unlocking the value in a programme that is not being realised despite investment in the programme by the parent company. Whether that is a single

underutilised non-core asset or whether that is a more fully developed business unit, a clear opportunity to spin-out assets comes when the benefit of removing those assets from the parent organisation's balance sheet outweighs any contribution those programmes may be making relative to the parent company's market valuation.

- InterMune Pharmaceuticals, which spun out of Connetics Corp. in 1999, is an excellent example of a parent company creating a spinout in order to *monetise a non-core asset*. Connetics in 1998 had in-licensed from Genentech its Actimmune gamma-interferon, which was approved in the USA for marketing to treat chronic granulomatous disease, for use in dermatological indications. When a Phase III trial of Actimmune in atopic dermatitis failed, Connetics realised it was not in a position to fully develop the product in other, non-dermatological diseases. InterMune (currently valued at US$1.2bn) now is developing Actimmune in a range of different indications, including idiopathic pulmonary fibrosis and ovarian cancer. Although the value of this product could not be realised within Connetics, it did retain a 10 per cent stake in InterMune and through this equity ownership the company was able to realise an interesting return on its previous investment.
- Guidant, which represents the 1994 spinout of the combination of pharmaceutical company Eli Lilly's medical device divisions, is an excellent example of a parent company *spinning out a fully operational subunit.* Not only did this transaction allow the Guidant management the freedom to realise its potential, but it maximised the value of these assets for Lilly while simultaneously giving Lilly the opportunity to improve its earnings profile in the near term. At the time of Guidant's initial public offering (IPO), Lilly owned 80 per cent of Guidant. Since that time, Guidant shares have appreciated to more than ten times their 1994 value. At the beginning of 2002, the company was valued at close to US$15bn.
- Similarly, the pharmaceutical giant GlaxoSmithKline in 2001 spun out the chemistry department of its research centre in Milan into an independent company – another example of a *fully operational subunit spinout*. The resulting company, NiKem Research, now provides chemistry services and products to pharma and biotechnology companies. Capitalising on the success of other chemistry services companies in 2001, such as Array BioPharma (itself a venture-backed 1998 spinout from biotechnology leader Amgen), GlaxoSmithKline retained a minority equity stake in NiKem that is likely to bring in more value than the department was generating as part of the pharma company.
- Even spun-out companies can themselves develop undervalued assets that serve as the basis for *serial spinout company formation*. For example, DNA chip manufacturer Affymetrix, which was spun out of Affymax in 1992, itself spun out Perlegen Sciences in October 2000 to capitalise on its whole-genome scanning capabilities. As Affymetrix is valued in the public markets based on sales of its GeneChip microarrays, the value of Perlegen's technology was unrecognised until the spinout. Perlegen investors, who included Lombard Odier & Cie and Alejandro Zaffaroni, contributed US$100m to the company, coincident with Affymetrix reducing its ownership to 52 per cent and signing a technology purchase agreement with Perlegen.

The disparity in value that can arise when an asset is either neglected or unrecognised within a larger organisation is demonstrated by the fact that spun-out companies often can grow to be more highly valued by the public market than their parent companies. In these cases, independence (both in management and financing) fosters more rapid growth than would have been possible if resources from the parent company had been required. Given that past investment in the asset reflects sunk costs for the parent company, any gain generated by a spinout can represent pure positive performance going forward with little or no downside risk.

- For example, Abgenix, a human monoclonal antibody company that was spun-out of Cell Genesys in mid-1996 with US$10m in cash and a US$4m equity line of credit, is now valued near US$2.25bn (Abgenix went public in June 1998 with a post-money market cap of US$88m). Meanwhile, former parent Cell Genesys, which develops gene therapy products, was valued at almost US$800m as 2002 began, which included more than US$300m worth of equity in Abgenix. At one point in the fourth quarter of 2000, Abgenix had a market cap that was 8.5 times that of Cell Genesys.
- Similarly, Guilford Pharmaceuticals was formed as a neurology-focused off-balance sheet R&D subsidiary of Scios (then Scios Nova) in 1993 with an initial US$2.5m investment, and was spun out of Scios in a 1994 IPO that raised US$15m and valued the company at US$31.2m. While Scios is now valued at close to US$1bn versus Guilford's market cap of about US$250m, between May 1999 and November 2000 the situation was reversed, with Guilford at one point (March 2000) being valued at US$845m compared with Scios's valuation at the time of US$269m.

As emerging growth companies, spinouts often have fairly large initial capital requirements – which is a major reason they have turned to the public markets to raise cash in the past. However, these companies can often benefit from an intermediate period of incubation before becoming a listed public entity. In recent years, the availability of larger pools of venture capital (VC) has made a new strategic pathway possible: specifically, larger VC funds now have the opportunity to capitalise these large spinouts adequately – spinouts that upon inception might rank among the larger companies in the biotechnology sector. Furthermore, VC investors bring the kind of critical managerial and entrepreneurial expertise to these companies that is absent in the traditionally well-capitalised but 'hands-off' and impatient style of public market institutional investors. By giving the spinout an opportunity to take a transitional financing step before selling shares in the public market, venture investors can add substantial value and can groom the company for an eventual public offering or a sale to a more suitable parent.

- As an example, the metabolic disease research division and recombinant and plasma-based protein manufacturing groups of Pharmacia, representing 900 employees, were spun out through VC investment into Biovitrum. This organisation received an initial investment of approximately US$130m, which would not have been possible without large VC funds that believed that the combination of capital and venture-level expertise could power enormous value creation and upside in the investment. (See below for a more complete discussion of Biovitrum.)
- Similarly, Italian oncology company Novuspharma was formed in 1998 as a spinout of Boehringer Mannheim's Italy R&D centre, following the acquisition of Boehringer Mannheim by pharma powerhouse Hoffmann-La Roche. The spinout included both managers and scientists from the centre, which had 13 years of drug discovery experience prior to its divestiture. Novuspharma was established with €18m invested over 3 years from venture firms 3i Group, Atlas Venture and Sofinnova – the company went public on the Milan exchange in 2000 and is now valued near €200m.
- Another late-stage spinout from big pharma is Basilea Pharmaceutica Ltd, which was founded in October 2000 as a spinout from Hoffmann-La Roche. The spinout included Roche's entire anti-bacterial and anti-fungal R&D portfolio of compounds and intellectual property and a significant portion of Roche's dermatology portfolio. Basilea has an intravenous broad-spectrum cephalosporin antibiotic in Phase I testing, and oral compounds for psoriasis and eczema in Phase II. Roche retained a minority interest in Basilea as well as

opt-in rights on seven Basilea molecules at the end of Phase II development.
- Similarly, in March 2002 Roche spun-out BioXell SpA to develop novel immunology research as well as a portfolio of vitamin D analogues for indications such as secondary hyperparathyroidism, benign prostatic hyperplasia and psoriasis. BioXell received €22m ($19.3m) from MPM Capital, Index Ventures and Life Sciences Partners, while Roche retained a 17 per cent interest in BioXell.

Pharmaceutical companies and venture firms – partnering to create value

Spinning out undervalued assets can be a double-edged sword to a parent company – while scarce financial and personnel resources are required to develop a drug development programme fully, the risk of having another company turn one's back-burnered product into a blockbuster drug has kept many large pharmaceutical and biotechnology companies from licensing-out their programmes. Quite reasonably, therefore, spinouts were difficult to come by since pharma and large biotechnology companies were unwilling to give up control over assets that later could turn out to be valuable. However, these companies are now coming under increased pressure to maintain earnings growth and optimise pipeline development. This pressure is forcing the realisation that equity in a spinout is sufficient reward if the asset does succeed, without requiring R&D investment that was too costly on an earnings basis to be practical anyway. Depending on the current needs of the parent pharmaceutical company, cash may also be appropriate tender for the spinout rather than equity.

Thus over the past 6–12 months, large pharmaceutical and biotechnology companies have become increasingly open to monetising those assets in their portfolios that they determine to be outside their area of focus or that do not meet their increasingly high hurdle rates. And as large companies have developed a sensitivity to top line growth issues, many have put in place much more formal and systematic processes and are thinking broadly about value creation. For example, the previously mentioned NiKem spinout from GlaxoSmithKline's Genetics and Discovery Ventures group seeks to maximise the value of GlaxoSmithKline assets that have been formally terminated or for which GlaxoSmithKline has determined that exclusivity is not required.

This corporate environment creates the opportunity for VC investors to leverage their expertise in project selection and resource allocation to finance and build spinout companies for independent growth. Where leveraged buy-out (LBO) players might be motivated by EBITDA (earnings before interest, taxes, depreciation and amortisation) concerns, the venture investor can look further downstream and help to realise the untapped potential of a research programme. However, this opportunity not only relies on drug development and operational experience among biotechnology venture firms, but also on the larger pools of venture capital that have recently become available. In 2001 alone, venture firms raised roughly US$9.6bn in funds earmarked for life science investments. Of those firms, 11 raised funds of more than US$250m completely dedicated to the biomedical sector.

Nevertheless, from a venture perspective, spinouts must still fit the requirements for rate of return held by the investing fund(s). Owing to the typical size of the investment necessary to obtain assets that have been developed inside another organisation (and R&D budget), venture firms must be even more rigorous in the application of such requirements. Careful modelling of the base case and alternative scenarios for corporate development and the timing and magnitude of potential financial return is essential.

With smaller spinouts, such as those containing only a single product or perhaps a small portfolio of compounds and limited personnel, expectations for return can be much the same as with more traditional academic-based start-up companies. While

initial valuation may differ slightly due to the investment that a parent company has made in an undervalued asset, the fact that the programme is undervalued and is being spun out naturally limits the immediate valuation. Therefore a relatively small amount of money can be put in (US$5m–20m) at a reasonable valuation (US$5m–30m pre-money), with the expectation that the company will grow to either a subsequent acquisition or IPO to provide an exit that yields a 4–15× cash-on-cash return.

On the other hand, when larger organisations are spun out of pharmaceutical companies, including clinical development programmes, revenue streams and a significant head count, more substantial sums can and must be put to work (US$30m–100m) with even a 2× return yielding a significant cash return for investors. Moreover, these companies are often much closer to being ready for public market offerings, leading to shorter periods of time to realise returns and subsequently enhanced internal rates of return (IRRs) for the venture fund.

It is in building a company that meets those return criteria that the biotechnology-specific expertise of a VC firm becomes most critical. Increasingly, general partners in VC firms (at least those that are successful in raising substantial funds) have hands-on experience within biotechnology or pharma companies, either in research, management, business development or legal affairs. This experience allows such investors to help a company prioritise and direct its resources towards development programmes that are more likely to be successful and business models that allow sustainable growth. Complementing this experience is the extensive network available to venture capitalists to bring in outside consultants, hire management and scientists, and ensure the availability of subsequent financing. Often venture firms will employ 'entrepreneurs in residence', also former researchers or managers with specialised skills in a particular field who are available to devote a large percentage of their time to nurturing a new investment. Thus for companies looking to create a successful spinout, it is important to work with investment firms that have not only capital but relevant experience as well.

In addition, for both parent companies and venture capitalists, established but undervalued assets represent a much lower-risk private equity investment strategy than placing a bet on an unproven and underdeveloped technology that has come out of an academic setting. For venture firms, spinouts can therefore serve as a useful complement to more traditional investments, that both mitigate exposure to higher-risk opportunities while at the same time retaining the potential to generate true 'venture style' returns. For example, enzyme replacement therapy company BioMarin Pharmaceutical was spun out of carbohydrate chemistry company Glyko Biomedical in 1997 with an initial VC investment of US$10m. By focusing the company on a relatively low-risk development programme for a niche indication (which required fairly short clinical trials with small numbers of patients, but nevertheless addressed a price-insensitive market with essentially no competition) venture firms such as MPM Capital were able to generate a 17× return on their investment.

By supporting such spinouts on a private basis, both with capital and expertise, VC investors can not only add value and help increase the eventual return on their investment, but also enhance the return realised by the parent company through retained equity ownership.

Spinouts – the value of independence

An analysis of spinout investing would be incomplete without an acknowledgement of the fact that parent company management teams often have multiple options when considering how to increase the value of the assets under consideration. One direct and popular alternative to spinning out these assets into a new company is to instead distribute to the parent company's shareholders shares of a separate class of

stock (often called 'letter stock', 'targeted stock' or 'tracking stock') representing these assets or this discrete business component. Examples include the creation of the Celera tracking stock out of parent company Perkin Elmer (now Applera) in May 1999. This strategy has many benefits in that it can draw attention to a particular division by increasing Wall Street analyst coverage, highlighting a high-growth or emerging business strategy, and providing investors with much-desired improved visibility into the overall organisation. Additionally, tracking stocks give management bifurcated access to capital markets, which can be a quite powerful tool. However these vehicles are often hindered by several factors – most importantly by their lack of independence from the parent company: a lack of synergy or, even worse, a conflict of interest between parent companies and subdivisions can arise. The perception of added complexity in the investment vehicle and overall corporate structure can dissuade new investors from investing. Additionally, the fact that tracking stocks can be reversed and that the covered divisions remain at all times part of the parent company eliminates certain premiums (eg 'take out premiums') that might otherwise be attached to an independent company.

In the event that the division remains highly complementary to the parent company and mature enough to stand alone as a publicly traded entity, these trade-offs are often acceptable to management and the parent company may move forward with a tracking stock in order to maintain tight control over the entity despite the limitations of this structure. However, particularly in the cases where a valuable but non-core asset is under consideration or when the assets need a bit more time to mature before becoming a stand-alone company, an independent spinout to venture investors is an attractive option. Spinouts have multiple attractive features, the most compelling of which are their sovereignty from the parent company, which enables them to pursue an aggressive, entrepreneurial, optimised and truly independent path, and their ability to develop for a time as an independent company before going public or joining another parent. By infusing a new entity of this sort with 'smart money', both the parent company and new investors have an opportunity to generate maximised returns.

But just as individual freedom often requires personal sacrifice, economic independence for spinout companies also comes with a price. In particular, the cost of research is much higher in a company that does not have pharmaceutical sales to support its R&D engine. For spinout companies, project management requires a much more stringent eye towards terminating projects less likely to be successful earlier in the development process, to avoid wasting resources better spent elsewhere. Similarly, to avoid collapse, spinouts with larger organisations to support must focus on achieving and maintaining sustainable product or collaborative revenue to a greater extent than newly started biotechnology companies. However, the founding management team does not always hold this view of resource allocation, especially when that team has been part of a larger business (ie pharma). Table 1 shows selected biotechnology spinouts.

For this reason, venture investors must infuse spinout companies in particular with an entrepreneurial spirit. Investor input (and occasionally new management) is required to help change corporate culture from a bureaucratic structure to one that fosters innovation and a greater degree of risk-taking in exchange for a share of the reward – a spinout is not simply a division of a pharma company running autonomously with its own balance sheet. In fact, often this entrepreneurial spirit is what is required to take an organisation that was not thriving inside a parent company and turn it into a successful business. Affymax and ZymoGenetics, both former independent biotechnology companies that were acquired by pharma and later spun back out, exemplify this difference in cultural attitude.

Affymax was founded as an early combinatorial chemistry company, and after

Table 1 Selected biotechnology spinouts

Spinout	Parent	Year of spinout	Current market value (US$) of spinout	Current market value (US$) of parent
Abgenix (ABGX)	Cell Genesys (CEGE)	1996	2.1bn	542m
Affymax (Private)	GlaxoSmithKline (GSK)	2001	Private	154bn
Affymetrix (AFFX)	Affymax (Private)	1992	1.5bn	154bn
Array (ARRY)	Amgen (AMGN)	1998	283m	61.3bn
Basilea (Private)	Hoffmann-La Roche	2000	Private	68.1bn
BioXell (Private)	Hoffmann-La Roche	2002	Private	68.1bn
BioMarin (BMRN)	Glyko Biomedical (GBL)	1997	525m	114m
Biovitrum (Private)	Pharmacia (PHA)	2001	Private	51.7bn
Guidant (GDT)	Eli Lilly (LLY)	1994	13bn	85.4bn
Guilford (GLFD)	Scios (SCIO)	1993	256m	992m
Iconix (Private)	Microcide (now Essential Therapeutics, ETRX)	1998	Private	40m
InterMune (ITMN)	Connetics (CNCT)	1999	1.1bn	335.8
Maxygen (MAXY)	Glaxo Wellcome – Affymax (GSK)	1997	414m	154bn
Nikem Research	GlaxoSmithKline (GSK)	2001	Private	154bn
Novuspharma (NOV – Milan Exchange)	Boehringer Mannheim/ Roche (RHHBY)	1998	€202m ($174m)	68.1bn
Perlegen (Private)	Affymetrix (AFFX)	2001	Private	1.6bn
ZymoGenetics (ZGEN)	Novo Nordisk (NVO)	2000	422m	11.7bn

having achieved success in that area was acquired by Glaxo Wellcome in January 1995 for US$533m. Following the Glaxo Wellcome merger with SmithKline Beecham to form GlaxoSmithKline, a decision was made to improve bottom line earnings through targeted cost savings including the elimination of Affymax's US$50m annual research budget. The spinout of Affymax allowed a venture syndicate including Patricof & Co. Ventures, the Sprout Group, MPM Capital and Apax Partners to invest US$51m and a significant amount of time to establish an independent drug discovery company once again. With its original chemical compound and screening technologies coupled with targeted drug development programmes, Affymax recently hired a biotechnology-experienced CEO to solidify its entrepreneurial stance.

Similarly, ZymoGenetics had its roots as an academic-founded company in 1981, focusing on the production of recombinant proteins. Following a 1982 collaboration with pharmaceutical company Novo Nordisk, ZymoGenetics was acquired by Novo Nordisk in 1988. Since that time, with more than US$500m invested in R&D and five protein drugs on the market, ZymoGenetics developed its own pipeline of therapeutic protein product opportunities and intellectual property that no longer fit with Novo Nordisk's historical disease indication franchises.

Again, to exploit the value in ZymoGenetics that was not fully realised in Novo Nordisk's valuation, a venture syndicate including Patricof, E.M. Warburg Pincus and Frazier & Co. invested US$150m to re-establish ZymoGenetics' independence. Bruce Carter, once Novo Nordisk's CSO, now serves as president and CEO of ZymoGenetics, which has roughly 300 employees and expects to enter clinical testing with its own lead therapeutic protein in late 2002. Thus early ZymoGenetics investors benefited once through the acquisition of the company by Novo Nordisk, and both Novo Nordisk and former ZymoGenetics shareholders have the opportunity to benefit further by spinning ZymoGenetics out. Post-IPO, ZymoGenetics is valued at roughly US$425m.

Case study: Biovitrum

In an ideal world, the VC-backed spinout biotechnology company should combine the best of the establishment and experience of its parent company combined with the

untapped growth potential of its entrepreneurial scientists. Such a company would have a steady and substantial revenue stream, a promising portfolio of earlier stage product candidates, validating partnerships already in place, and experienced management who exhibit the entrepreneurial drive. While this type of mature company may require a substantial initial investment to support ongoing operations, as discussed above the potential near term return can more than make up for that requirement.

While the ideal case does not always exist, or at best is very rare and lacks certain ideal elements, when it does present itself the ideal spinout can serve as an example for future endeavours. One spinout that may approach the ideal for a venture model is Biovitrum AB. Formerly a division of global pharmaceutical company Pharmacia, Biovitrum is involved in the research of metabolic diseases, such as type 2 diabetes and obesity, and in the development, production and marketing of recombinant and plasma-derived protein therapeutics. With 900 employees, Biovitrum upon inception was one of the largest biotechnology companies in Europe.

Biovitrum's maturity is not simply reflected in its size, however, but in the combination of assets that investors and Pharmacia were able to assemble. While these programmes were not central to Pharmacia's global operations, they nevertheless contain a great deal of value that both Pharmacia and investors hope to build and capture. First, Biovitrum has a plasma products business that manufactures and markets nine products derived from human plasma. These products include Factor VIII and Factor IX for haemophilia, gamma globulin and more specific immune globulins, and albumin and antithrombin III for use in the intensive care setting. All told, Biovitrum had more than US$95m in revenue in 2001; a figure that is rare for even mature biotechnology companies much less newly formed companies.

As an added bonus, Biovitrum has real estate in central Stockholm, where its main facilities are located. This asset is important from an investor's perspective since it provides not only a solid foundation upon which to value the company but also assurance that even in a worst-case scenario the investment will retain a significant amount of value.

Biovitrum's manufacturing revenue stream supports its internal research and clinical development organisation, which has a yearly budget of more than US$66m. About 25 per cent of this R&D expense is funded through outside partnerships, which serve not only to offset the burn rate and provide downstream development capacity, but also to validate the research programmes. Biovitrum's programmes are more established (and less in need of validation) than the usual biotechnology research effort, however, since they have essentially incubated within Pharmacia prior to achieving independence. These programmes include research on the serotonin 5HT2c receptor – a selective receptor agonist is in Phase II clinical development to treat obesity – as well as on a centrally acting agent to lower body weight and an enzyme inhibitor to lower blood glucose without inducing hypoglycaemia.

While plasma products provide a present revenue stream, Biovitrum's management is now charged with advancing the clinical pipeline to achieve long-term sustainable growth. Additional clinical data and new clinical trials are expected in 2002. The key task for investors will be to ensure that Biovitrum's management infuses the company with the entrepreneurial mission of doing it on their own rather than within Pharmacia – however Biovitrum has already attained a level that would require more than a decade of development for a pure biotechnology start-up. And in fact, Biovitrum's management has put in more than that decade – CEO Mats Pettersson was formerly a senior vice-president within Pharmacia, where he had worked for 25 years. Johan Kordel, SVP of research at Biovitrum, has had 6 years of research expertise within Pharmacia, most recently

as deputy head of its Metabolic Diseases Research group.

Thus from a venture perspective, Biovitrum represented the opportunity to take a maturing product pipeline and a manufacturing business with a significant revenue stream, 900 employees, experienced management and excellent scientific research base, and create a company that ranks among the larger biotechnology players. This was made possible through the ability of investors to contribute a large amount of capital to the venture as well as contribute experience with both pharma culture and entrepreneurship.

Biovitrum's initial investors, who included MPM Capital (through both its BioVentures and BioEquities funds) and Nordic Capital, along with ABN AMRO Ventures, Carnegie Asset Management and HB Capital, committed a total of up to US$130m to the spinout, most of which was used to finance Biovitrum's operations while a smaller part went to buy shares directly from Pharmacia. Alta Partners and HBM BioVentures subsequently acquired a combined 15 per cent stake in Biovitrum, also through the purchase of shares directly from Pharmacia, which after both transactions retained a 19 per cent equity interest in Biovitrum. In directing the growth of Biovitrum toward an independent IPO, venture investors will help create the spirit of individual involvement necessary to spur innovation and creativity that characterises the biotechnology industry, while at the same time reshaping the bureaucracy inherent in a large pharmaceutical organisation.

Conclusions

Given the wealth of promising assets that lie dormant in large pharma/large biotechnology and given the financial and operational resources that biotechnology private equity firms can now bring to bear, it is clear that the time for spinout investing has come. Such spinouts can streamline the profit and loss statement of a parent company and experienced venture investors can bring much needed expertise and capital to the table. There are also attractive downstream economic incentives in place to make spinouts attractive to both parent companies and to investors. Furthermore, by partnering to build creative, efficient, high-growth companies around assets that might otherwise remain undeveloped, parent company management teams and venture capital investors are enabling the development and commercialisation of important products to treat patient populations very much in need of care.

Reference

1. Dewdney, J. and Phillips, A. (1999), 'Spin-outs on the menu?', *J. Comm. Biotechnol.*, Vol. 6, No. 1, pp. 3–11.