



# A rapid reinvention

In just four years BTG has gone from a loss-making company with a broad spectrum of products to the UK's most commercially successful biotech. *Mark Greener* talks to Chief Executive Louise Makin about the company's rapid progress

You'd be hard-pressed to find any company – let alone a biotech – with a product pipeline that includes treatments for conditions as diverse as varicose veins, oesophageal cancer, multiple sclerosis and a vaccine for hypertension: or indeed a company that has reinvented itself so rapidly.

Four years ago, BTG was a loss-making concern that commercialised a broad portfolio of intellectual property across the physical and life sciences, as well as funding several venture capital projects. However, Chief Executive Louise Makin and her management team made a bold decision to focus on healthcare. The result: BTG has been profitable for the past three years and is now the UK's most commercially successful biotech company. The acquisition of Protherics in December 2008, in a deal worth around £218 million, consolidated BTG's position in the FTSE 250, augmented its market capitalisation to around £350 million and represented the latest stage in BTG's evolution into a

specialist pharmaceutical company.

BTG already has several successful brands that generate valuable revenue streams. These include Benefix – the only recombinant factor IX for haemophilia B – which is marketed by Wyeth and contributed £16.9 million to BTG's bottom line last year. CroFab (anti-venom for Crotalid snakes, such as rattlesnakes) and the digoxin antidote DigiFab, both of which are currently distributed in the USA by Nycomed, generate around £20 million annually, and Campath, marketed by Genzyme for the commonest form of chronic lymphocytic leukaemia, adds around £5 million each year to the coffers. Following the acquisition of Protherics, BTG is conducting a comprehensive portfolio review to determine "exactly how much we want to invest in each product, and to decide which products we will sell directly to specialists ourselves and which we will license out", Makin says.

This commercial emphasis reflects Makin's background – she's closer to the

dragon's den than the academic lab after working for ICI and spending four years at Baxter Healthcare. "There's one theme throughout my career," Makin says. "I generated the maximum commercial value from a technology-driven business. I tend to look at things with a business mind and my wider background in non-biomedical technology offers the flexibility to consider radical changes when needed, such as when we decided to focus on healthcare."

BTG's focus on financial and strategic factors – rather than solely the scientific considerations – generated the diversity that characterises the company.

Nevertheless, many BTG products are at the cutting edge of biomedical science. The angiotensin therapeutic vaccine, for example, is designed to stimulate the immune system to produce antibodies that neutralise angiotensin I, a peptide hormone that modulates blood pressure. "It is anticipated the vaccine will require administration only a few times a year, providing an opportunity to improve patient compliance compared with current treatment options," Makin explains.

While the portfolio review is still underway, BTG will likely license out its development candidate at the 'proof of concept' stage and will use the resulting revenue streams to fund the in-licensing and development of specialist products that will join the brands to be promoted by BTG's planned salesforce. This

salesforce – designed to be in place when the US marketing rights to CroFab and DigiFab revert to BTG in 2010 – will initially focus on emergency medicine in hospitals.

"The salesforce offers a strong base that allows us to leverage our position," Makin says. "We intend to acquire and develop additional products that can be sold through the same hospital sales infrastructure."

BTG seems to have selected an area with the potential for considerable growth: critical care is underdeveloped both commercially and clinically. For example, CytoFab – an antibody that neutralises tumour necrosis factor alpha and has been licensed to AstraZeneca – is currently in Phase II for severe sepsis, and the company estimates the market to be worth some £8 billion. Lilly's Xigris (drotrecogin alfa) is the only product currently approved specifically for severe sepsis, but is associated with a significant risk of serious bleeding.

"Severe sepsis is a high-risk indication, but the rewards are also high," Makin comments. Under the deal with AZ, BTG will receive a 20% royalty on sales and a further 5% for manufacturing. But the company isn't risking its future on a single product. Varisolve (polidocanol endovenous microfoam) for varicose veins offers lower rewards, but is much less risky: it replaces surgical ablation with a simple outpatient injection that closes and

seals the open varicose veins.

"The commercial risk profiles of Varisolve and CytoFab differ markedly," Makin says. "These exemplify the optimal balance of risk across our portfolio."

Over the years, diversity has allowed BTG to develop a strong financial position despite the economic downturn. The firm's current products generated around £100 million in revenues last year, including sales, royalties and milestone payments for drugs in development.

Before the acquisition, BTG was self-sustaining while Protherics had not yet reached profitability. "Our aim is to return to self-sustaining status as quickly as possible. We aim to cut around £20 million of expenditure and to be cash neutral by 2010/2011," Makin points out. "Indeed, we expect the economic downturn may lead to companies that are not in as favourable a financial position as us divesting certain products, which we could acquire to further enhance the value of our pipeline."

BTG's board has a clear vision. "Over the next five to 10 years, we aim to become a self-sustaining, consistently profitable and significantly larger company that sells a range of products directly to hospital specialists," Makin comments. It might seem ambitious in the current climate, but the success of its diverse portfolio combined with a commercial focus uncommon in biotech suggests the company will succeed. **PT**