

A Biotech and Money Publication

Issue 1 | June 2014

Removing the hype from IPO

Horizon Discoverys' CEO, Dr Darrin Disley talks education, their high profile IPO and future growth

Tapping the markets

Dr Chris Blackwell, CEO of Vectura and Peter Grant, CEO of Skyepharma discuss their recent successful placements

Taking aim at the Alternative Investment Market

Lucy Tarleton of London Stock Exchange discusses IPO cycles, successful floats and their new Elite programme

biotechandmoney bringing deals to life

FEATURE: MedCity comes online

Dr Eliot Forster, CEO of Creabilis and Chair of MedCity talks collaboration, innovation and a new era for UK bioscience

Building the next billion dollar businesses

Nigel Pitchford, Imperial Innovations' CIO talks Circassia, public market momentum and its own unique investment approach

Minding (and funding) the gap

David Grainger of Index Ventures discusses their 'market backwards' approach to spotting innovation

The Elephant in the room

Sam Fazeli of Bloomberg and Dr Paul Cuddon of Peel Hunt talk market trends and dispelling the 'B' word

Going with the Flow The money flow issue.

Welcome



Dear Reader,

At Biotech and Money, we're building a brand new community of top level executives from the biopharma industry with a view to crowd source solutions and ideas to the many challenges facing biotech CEO's particularly as it pertains to finding the capital and partnerships that will propel the industry forward.

This magazine, Drugs and Dealers, is the personification of that mission. It is market intelligence sourced directly from our membership: the leaders, movers and shakers of the biotech industry. We are very proud to be able to share our insights, and after reading them we are confident you will learn new ideas for your business.

Terence O'Dwyer and Neil Darkes

Co-founders, Biotech and Money





A little more about Biotech and Money

Biotech and Money is the first truly crowd sourced member's only community of senior level executives from the global biopharma industry.

The global community provides an exclusive nexus between bioscience, investors, financiers, legal and professional advisors. It's provides a new approach to matching innovation with investors and partners.

Our community helps catalyse early stage innovation through peer-to-peer education and knowledge sharing, networking, partnering and deal making to champion the most exciting and innovative ideas.

Our community revolves around three major activities: market intelligence and ideas, online connections and live events and conferences.

Visit the website at www.biotechandmoney.com to understand how you could benefit from this exclusive community.

Meet the Advisory Board



David Grainger, Venture Partner, Index Ventures

David develops exciting new drugs, with novel mechanisms of action, challenging conventional wisdom on how drugs should be developed at every step. He is a Venture Partner at Index Ventures, one of the leading life sciences Venture funds worldwide. He is also a Director of half a dozen biotech companies, many of which where he was a founder, including XO1, TCP Innovations, Epsilon-3 Bio and RxCelerate. He is an inventor on more than 150 patent applications, including more than 20 granted US patents. These inventions range from novel chemical entities for use as anti-inflammatory drugs, to new methods for diagnosing diseases and novel functional foods. Currently, he acts as Chairman and Chief Scientist at XO1, a biotechnology company developing an antibody against thrombin exosite 1 yielding anticoagulation without increased risk of bleeding.



Martin Walton, CEO, Excalibur Group Martin is CEO responsible for all the

investment and business activities of Excalibur and its subsidiary companies. In addition to managing Excalibur's existing activities, this involves the evaluation, implementation and oversight of new initiatives conceived with and by group chairman, Professor Sir Chris Evans OBE. Martin joined the company in early 2011 after a 25-year career in the capital markets, as an investment banker for several major banks and also as an investor in medical and other sectors, having run investment and trading businesses, private equity portfolios and hedge funds with assets in excess of \$8bn, in the UK, USA, Ireland, Canada and China.



Keith Powell, Chairman, Domainex, BioMoti and Canbex

Dr Keith Powell has been in Biotechnology since it started. Having worked for GSK and ICI/Zeneca in genetics/molecular biology he led several large groups including Discovery, finally running the patent group. He then left for the USA and worked in a company on the West Coast, Maxygen, leading the small molecule group through the IPO and growing a business which eventually spun out as "Codexis". On coming back to the UK, Keith worked with a fund called BBSF and acted as CEO for several of the companies in the portfolio, including Spear, sold to Advent International. He led Domainex through a merger with NCE to form a successful business in protein structure-based chemistry. Polytherics was built through organic growth since 2005 to a company of >30 people. Keith is currently chairman of Domainex, Biomoti and Canbex.



Sally Shorthose, Partner, Bird & Bird Sally is one of their leading intellectual property (IP) partners. She provides a full range of intellectual property commercial advice and support to her clients, including licensing, partnering and exploitation agreements, research, development and marketing collaborations. She also frequently advises clients on regulatory and 'freedom to operate' matters, and manages significant due diligence matters. As a transactional intellectual property lawyer, she provides advice in relation to the protection and exploitation of a full range of IP rights, both in stand alone transactions and as part of an acquisition, divestment or investment activity.

Contents

Interviews

5 Removing the hype from IPO

Dr Darrin Disley, CEO of Horizon Discovery talks education, their high profile IPO, the secrets of its success and where now the company

9 Tapping the markets – part 1

Dr Christopher Blackwell, CEO of Vectura talks through their recent £130m acquisition, the successful placement process and what the future holds for Vectura

14 Tapping the markets - part 2

Peter Grant, CEO of Skyepharma discuss placements, the wider investment landscape and Skyepharma's growing portfolio of products and partnerships

18 Taking aim at the Alternative Investment Market

Lucy Tarleton of LSE discusses IPO cycles, successful floats and their new Elite programme

23 Building the next billion dollar businesses

Nigel Pitchford, the CIO of Imperial Innovations talks Circassia, public market momentum and its own unique investment approach

27 Minding (and funding) the gap

David Grainger of Index Ventures discusses their 'market backwards' approach to spotting innovation

32 Lessons learned - what can the last IPO window teach us?

Sam Fazeli discusses the main lessons learned from the previous cycle, his assessment of the current market for biotech investment and his predictions on investment trends

36 Market assessment and the Elephant in the room

Dr Paul Cuddon imparts his advice for biotechs looking to raise capital, talks to us about his concerns for the industry and dispelling the 'B' word

Biotech and Money

- 2 About Biotech and Money
- 3 Meet the Advisory Board
- 45 Biotech and Money calendar of events
- 50 Subscription, Membership and Partnership information

Features

40 MedCity comes online

Executive Chair Dr Eliot Forster talks collaboration, innovation and a new era for UK bioscience

46 What is keeping Biotech CEO's awake at night?

We ask about the challenges giving biotech CEOs headaches

47 The funding and investment outlook: sunny or stormy?

Biotech CEOs offer their take on the current funding and investment climate

Editorial
Managing Editors:
Neil Darkes
Terence O'Dwyer
Advertising
partner@biotechandmoney.com
Published by
Biotech and Money Ltd.

The Euston Office 40 Melton St. Euston London, NW1 2FD Tel: +44 (0) 203 5744619

No part of this publication may be reproduced without the express permission of the publisher.

Removing the hype from IPO



Dr Darrin Disley, President & CEO, Horizon Discovery

Dr Darrin Disley is President and CEO of Horizon Discovery. A life scientist with a track record of raising c\$190 million in business financing from grant, angel, corporate and venture capital sources as well as closing c\$300 million in product, service, and licensing deals. In 2012, Darrin was named Business Leader of the Year at the European Life Science Awards.

Most recently, Darrin was the driving force behind the success of Horizon Discovery's recent \$113 million listing on the Alternative Investment Market of the London Stock Exchange, an all-time record for a Life Science company.

We spoke to him to find out more about his challenges in growing Horizon, his sense for the opportunities out there and his secrets to the success of the IPO.

B&M: I want to start with an understanding of your company's story. Give me your elevator pitch. What makes you different?

Darrin Disley: Horizon is a translational genomics company. We take the output from human genome sequencing efforts and enable researchers to translate that data into usable information and invention. The scale of this activity is exploding as the costs of genome sequencing have exponentially declined and the challenge for researcher moves to elucidating the genetic basis of disease.

Horizon's approach to this problem has been to use our GENESIS[™] genome-editing platform to genetically alter the genome of normal human cells to recapitulate the disease causing features found in real patients. You end up with a perfectly matched pair of cells modelling a patient's 'diseased' versus 'normal' state, allowing researchers in drug discovery & development to identify the impact of specific genetic changes on drug activity, patient responsiveness and resistance using what can essentially be considered as 'patients in a test tube'.

These genetically-defined cells are monetised in many different ways. They are licensed directly as products to academic, biotech, diagnostic and pharma companies engaged in drug discovery and development ; modified to create thousands of products capable of addressing different applications and market sectors; or we deploy them in drug discovery services - where we're now packaging them with expertise in cancer research to generate high margins.

Because the tools, services and know-how we have is novel generating new IP and margins are very high, we're now able to leverage into the pharmaceutical value chain of our customers. So you're not just getting revenues, you're getting upside potential, milestones and product royalties but without investing the cash to get them. I call it the bread, butter, jam on top model.

B&M: Tell me about your focus at the moment. What is it you're really concentrating on?

Darrin Disley: We've got these 3 different areas: services, products and this leveraged R&D. The services are more mature as in they are already positively contributing cash into the business. Moving forward the focus here is really about scaling that business, but doing so without just adding more and more people to the equation and making sure that we maintain our high margins. Any investment has to be accretive to the P&L, and if we were to do a M&A it would likely be in that area. Then there's the product side, which is a little less mature, but it's where the scale can come from within the business. The next 2 years is about a deep investment into the scale of the cell line and reagent products.

The final area is leveraged R&D. We're putting a larger amount of money to work than we have in the past, but still not a vast amount, and we will continue to leverage our IP portfolio and high margins with a bit of cash to try and get a multiplier of that. That part of the business is valued on a discounted cash flow basis, wheras the products and services side of the business is based on a revenue multiple. It's about how do we drive value in all 3 of those areas.

B&M: What do you see as the biggest challenge to achieving that scale and achieving those goals?

Darrin Disley: Being exclusively based in the UK comes with its challenges. There are so many good things happening here in the UK in terms of the eco system for entrepreneurship and commercialising technology; there's a fantastic push out of the universities; it's easier to raise funds now; entrepreneurs can keep most of what they earn and pile it back into the ecosystem etc. but ultimately you've still got a culture in which not



many companies have become global players. Having a discipline of competing on an international basis requires us to branch out so I think we will need to establish a significant footprint in America.

You've got to look at things on a global basis as well. We're selling into 45 countries (we're only really represented heavily in a small number of those and the rest is ecommerce), but clearly we've got to find ways of getting a sustainable penetration into all of these markets and new geographical locations.

B&M: What do you think is the key success factor to mitigating your risks?

Darrin Disley: The key is to be measured and pragmatic.

If you think about it you've got a lot of money to put to work and you've got lots of money coming in from customers. The danger is that you try to expand too quickly in each area in parallel - it's about targeting the investment in those key areas that are going to make a difference.

Then you need to let the investments breathe a little bit rather than just rushing everything because of the money, so it's about making sure you understand the risk/reward with any type of investment that you're making in those areas. Otherwise they don't become investments - you are just supporting operations and you don't raise funds to support operations, you raise them to invest and if you throw money at everything too quickly the whole organisation can be put at risk.

B&M: So now that you're a publically listed company, what is the single biggest thing that keeps you awake at night?

Darrin Disley: I think it's how do we deploy the money – specifically, how do we deploy it in a way that doesn't overcook the business. Deploying it sensibly is vital. We're very frugal with every pound and the danger is now you've got a lot of cash that you put it to work in ways that are not as efficient as they should be.

B&M: One of the things we were really keen to talk about was the IPO. So let's start from the beginning here. Was IPO always the plan?

Darrin Disley: No. Prior to our seed round in March 2008 we had £9000, that was it, a former toilet for an office in the Babraham Institute and one PhD student in a lab in Torino - that was the company!

The vision when we got £150,000 seed funding on 26 March 2008 was to build a business based on selling cell line products by 2013, that had a couple of million in revenue that we could sell for £14-16m and give the university and Jonathan Milner (our investors) 14 to 16 times their money back!

I'm pleased to say that we actually did deliver that kind of valuation up-lift within a couple of years and along the way returned >\$8 million to founders and shareholders in pre-IPO place-outs. At the IPO >\$45 million was returned at up to 32X multiple which seems staggering when you consider the limited vision we had for the company in 2008.

B&M: So when did you decide that IPO was the right strategy?

Darrin Disley: We started talking about it in 2011-12. It wasn't IPO per se that interested us, it was about building a business where we could retain control of the vision of where we wanted the business to go. Our key principles when we started were firstly to make a real difference to cancer patients and secondly to build a sustainable business that by delivery of scientific excellence and industry excellence would generate the cash and the space to deliver the other things that we wanted to deliver.

There was always the intention from 2010 that an IPO would probably be the best way of having the company achieve long-term sustainability.

B&M: To prepare the groundwork for the offering, what were the major steps that you took?

Darrin Disley: I spent a lot of time 'educating' (or browbeating is another way of saying it!) the investors on the benefits, particularly the venture investors. They generally like IPOs when that's the exit point so it can be challenging.

What we had to do was an extensive period of premarketing to convince them that we could get this complex story across to both specialists, but more particularly generalist investors. The rest was using a bit of fear to be honest. 'This IPO window is not going to be open for very long, lets drive this through...' and then it got momentum behind it and we had a very good pitch and were able to deliver it very well to people and everyone piled in.

B&M: What were the biggest challenges you faced when making a move to list on the market. Was it the convincing of the generalist investors?

Darrin Disley: To be honest it was pretty easy with the generalist investors because we got the story right and we put it across in the way that they understood. That, and obviously we had a track record of revenue growth, with a rate of >125 per cent (CAGR) over the whole lifetime of the company.

B&M: If you had to distil the elements, what would you say are the things that made it so successful?

Darrin Disley: We tried to pitch them our ambition, and that really resonated because they could see historically that we returned money to shareholders early and we were all people who had track records and thus were not doing this for money alone, so we clearly weren't doing this for an exit point. The IPO is merely a first step in how we build something great and that really resonated. Then you obviously had to have a proposition that showed a genuine engine for growth moving forward; in our case capital growth for a couple of years and then moving into revenue generating type of growth in subsequent years.

You had to show you had a platform and business model that could scale, had flexibility, wasn't a one trick pony etc. and had some upside potential. We also had a management team that had been there and done it before. We had a board that was outstanding.

We were much more open than most people. Financial PR people try and control what we say and we know what we shouldn't say, but I believe investors deserve enough information to make their decisions.

B&M: There are definitely many lessons there for biotechs. If you had to give one piece of advice to any biotech that's considering an IPO at the moment, what would it be?

Darrin Disley: Biotechs need to understand what resonates with investors. For an investor, this is a commercial enterprise, it's not a science project, it's not about you and your Nobel Prize winning technology, it's a business and all businesses are about customers.

Who is the customer, where are they, why would they buy the product or service, how can we create a win-win deal? Every business should be about the commerce whether it's really high-end molecular biology or it's a low end consumable manufacturing. When you go into it, the way you humanise the story to generalist investors is for them to have a really strong sense that

Biotechs need to understand what resonates with investors. For an investor, this is a commercial enterprise, it's not a science project, it's not about you and your Nobel Prize winning technology, it's a business and all businesses are about customers.

💓 Tweet this!

this is a group of people that understands that the business is about customers. They've gone out and got customer validation on this, they've evolved their business into a flexible, scalable model and they've provided a road map of how they're going to get there and understood the risks of getting there.

B&M: What is your general view on the IPO markets, are we talking revival or are we talking bubble?

Darrin Disley: That's just a ridiculous way of looking at it. A great invention is a great invention and a great business is a great business whether it's done in the socalled bubble or the pit of a recession. Investors should be getting the balance right of considering the macroeconomic and the micro-economic factors influencing their investment decisions. The problem is they often don't have the technical or market know-how to do the micro-economic, or they can't look at a particular biotech as a stand-alone entity and say I want to invest in that solely on its merits.

Horizon is a great company so just because the sentiment for Biotech investment goes in the US, why should our share price drop 20 per cent? It doesn't make any sense whatsoever. It should be here's the company, here's what its metrics are, here's how we value it, here's what it's done versus its targets.

The challenge is in how do you educate people so that they match the right funding to the right stage of development of the business, from seed through to the public market

Read the full interview at www.biotechandmoney.com

Tapping the markets - Part 1



In March this year Vectura, a product development company that focuses on the development of pharmaceutical therapies for the treatment of airways-related diseases acquired private German company Activaero, focused on the development of products for the treatment of respiratory diseases. The total consideration of the acquisition was €130m funded through a combination of cash and equity. Vectura also raised £52m to fund the augmented pipeline making it the latest in a line of British biotech firms to tap the markets in recent months.

We caught up with Dr Christopher Blackwell, CEO of Vectura, to talk us through the acquisition and placement process and to gain an idea of what the future holds for Vectura and its newly acquired pipeline portfolio.

B&M: First of all, congratulations on the raising of £52m, making it one of the UK's largest biotech placements in recent times. But for those unfamiliar with the recent transaction, are you able to briefly explain the details of the acquisition?

Chris Blackwell: The deal had two components; the acquisition of Activaero, a privately owned, VC backed company in Germany and a placing with institutional

investors to raise the £52million. However, the two were not linked and the acquisition was not predicated on us doing the placing.

The acquisition cost, in total, ≤ 130 m, consisting of an upfront payment of ≤ 95 m (≤ 45 m in cash and ≤ 50 m in equity) followed by a further, non-contingent cash payment in August 2015 of ≤ 35 m.

This transaction aligned closely with our stated strategic intent and enhances our medium- to long-term growth prospects. The acquisition brought us a proprietary smart nebuliser-based technology, FAVORITE, that facilitates targeting inhaled drugs into pre-selected areas of the lung. FAVORITE is incorporated into a range of products, with application to branded and generic drugs, for small molecules and for biologics. Our enhanced technology offering now spans both dry powder and liquid/aerosol forms of delivery to the lung. The acquisition also brought us a balanced pipeline of partnered and un-partnered drug assets through seven clinical and several pre-clinical stage programmes.

A significant attribute of the deal was that it augmented our pipeline through a single transaction, not only providing a balance of drug assets across development phases, but doing so with limited use of human and financial capital when compared to the cash outlay that would be required to acquire a similar asset base through a series of individual transactions.

B&M: The deal happened to complete on the same day as Circassia floated in London, but how long had this acquisition been on your radar and what was the rationale behind the decision to carry out a placement? Chris Blackwell: We had known about Activaero for quite some time but we got talking in earnest after a meeting last summer, when we realised how applicable their technology was in the treatment of airways related disease, especially the ability to pre-select areas of the lung for targeting inhaled therapeutics.

The rationale behind the fund-raising is simple: the cash will be used to fund the development of the Company's existing pipeline and the new pipeline following the acquisition. Vectura will also proceed with on-going and future clinical/regulatory work for the acquired partner programmes where appropriate.

The fact that we completed on the same day as the Circassia float and the fact that our placing was three times oversubscribed is testament to the support we had from the market and our shareholders.

B&M: Once you were committed to the acquisition how did you lay the groundwork for the placement and who was involved in that process?

Chris Blackwell: The acquisition took a lot of negotiation by senior management and our advisors, especially our financial advisor, Rothschilds and our legal team at Covington and Burling. We also had an in-house diligence team, supplemented where appropriate by external consultants.

The placing was carried out by our joint brokers, Peel Hunt and JP Morgan Cazenove.

B&M: To help fund the purchase you placed shares with new and existing investors, primarily in the UK. How was the placing originally viewed when



speaking to investors? What was your angle to them and did the recent uplift in the market help the discussions?

Chris Blackwell: The acquisition was funded from our own cash resources and equity, and was not dependent on us raising the capital. The aim of the placing was to allow us to invest in our augmented pipeline in a proportionate way, so that the inherent value in the pipeline could be realised at an appropriate level of investment.

We positioned the deal as an important part of our strategy, because it is! In summary, Vectura's strategy is to develop and commercialise products for the treatment of airways diseases, leading and enabling the development of innovative and efficacious medicines to address unmet medical and payer needs.

We also set out our strategic priorities and demonstrated how Activaero addressed these. For example, we needed products to create a pipeline that was balanced in terms of risk and investment with the potential to realise returns in the short to mid-term. Activaero provides mid- and late-stage assets, some of which are partnered, others available for us to develop ourselves.

Most investors understood this rationale and thought that the deal made strategic sense and offered a very

good fit. They also recognised it broadens Vectura's technology base (adding smart nebulisation technology to our recognised competencies in dry powder inhalation formulation and device design).

B&M: The initial and deferred cash payments on the acquisition were made from existing resources. Did you have a figure in mind before the placement and what are your plans for the majority of capital raised by the placement?

Chris Blackwell: We didn't have an explicit figure in mind but we did want to signal to our investors that by staying at or below our 10% pre-emption threshold that we would be very financially disciplined in how we develop our pipeline. This has historically been a strong point in the Vectura investment case and one that we wanted to signal very clearly in our meetings with investors.

B&M: Why do you think the placement was so successful? What were the key success factors that contributed to the £52m raise?

Chris Blackwell: I like to think it was the strategic fit, our continued desire to grow whilst maintaining our financial discipline and our communication of the opportunity.

B&M: What did you find most challenging during the time of the placement? In hindsight, any advice for biotechs readying a placement of their own?

Chris Blackwell: I don't think I can offer advice that isn't already out there. These events are always going to put a strain on the management team, primarily due to the huge amount of time that needs to be devoted to them. In that regard, having a good team of senior people definitely helps as well as experienced advisors who can communicate with you effectively on issues that may need resolving in real time.

For those biotechs readying themselves for a placing, I would suggest doing as much preparation as they can ahead of the transaction and getting advisors that are experienced and with whom they get along. As with most things in life, clear communication and an understanding of the goals are key.

B&M: How have the last few months been since the placement and acquisition? What's been the major focus of your time since March 13th?

Chris Blackwell: In short, running the business. However, a number of activities have taken up a large proportion of my time. Shortly after the transaction, we held an investor day, which was very important for us as we went into additional detail about the acquisition, expanded upon our strategic intent to become a specialty pharma company focussed on airways disease and highlighted some aspects of our product and technology opportunities.

A lot of my time, and that of my senior colleagues, has been spent supporting the integration teams bringing the two companies together. We are also undertaking a project review and we are assessing new business development opportunities that have arisen as a result of the acquisition.

B&M: The acquisition appears to be highly complementary to Vectura's core capabilities,

Yeet this!

As with most things in life, clear communication and an understanding of the goals are key.

so what now in terms of a priority of focus for Vectura's legacy portfolio and its newly acquired pipeline?

Chris Blackwell: We must complete the integration and realise the value we see in our business. As I mentioned earlier, we are in the process of a full development pipeline review and we will need to prioritise the investments we make in all of our assets.

B&M: Tell me more about the lead product candidate FAVOLIR®. What do you see as the greatest opportunities for this product and the market it will serve?

Chris Blackwell: During the inhalation of a therapeutic drug, control of the flow and volume of the drug aerosol can improve the efficiency of delivery of drug. Vectura



AKITA® JET nebuliser



APIXNEB



Fox inhalation system

uses this principle in its FAVORITE technology, to enable a drug to be delivered to targeted areas of the lung, with high efficiency, where drug deposition may provide greater benefit to a patient.

VR475 (FAVOLIR®) is an investigational product that comprises the inhaled corticosteroid budesonide, delivered with Vectura's smart nebuliser system, the Akita Jet. With this system, FAVORITE technology is used to deliver budesonide more efficiently to uncontrolled, severe, oral corticosteroid (OCS)-dependent asthmatics such that their dose of OCS may be reduced or they may be weaned off OCS totally. OCS therapy is often associated with severe adverse reactions, and dosereduction or weaning is a desirable end-point for these patients, provided asthma control is maintained.

We have data from one multi-centre, double-blind, randomised, placebo controlled Phase IIb trial (AICS 01), which met its primary endpoint with supporting secondary endpoints . We will soon initiate a Phase III study to support filing a Marketing Authorisation Application (MAA) in Europe. A pharmacokinetic study to support initial development of VR475 in the US is also being planned to start later this year.

B&M: Your clinical portfolio consists of 10 products at the moment, with 7in active partnership. What are your expectations for those currently in partnerships and what are your goals for the remaining three?

Chris Blackwell: We will support the partnered assets where that would be beneficial use of our skills and expertise. These assets are progressing and we are working closely with our partners. The un-partnered assets will be evaluated as part of the development pipeline review.

B&M: Looking at the next 12 months, what is the single greatest opportunity that lays ahead for Vectura and how do you aim to exploit it?

Vectura is fortunate in that it derives revenues from a growing and diversified set of marketed drugs and so interest always gathers around the reporting dates of our partners. In addition, Novartis aims to file QVA149 and NVA237 in the US by end of 2014. These are important events for us as they are a step towards realising value, in the US, in addition to that we are starting to see from those products as they reach the market across Europe and the rest of the world.

The outcome of the pipeline review will be an important event, and there are other value drivers we hope to be in a position to talk about, but I think that the greatest opportunity is for us to demonstrate to the market that the acquisition of Activaero was a success with regard to integration and value to our shareholders.

B&M: One final question, looking at Vectura's experience with the raise, would you say biotechs looking to emulate you should be buoyed by the reaction of the market to your placement?

Chris Blackwell: The placing was a success but the general market since then has been disappointingly weak. We are experienced enough to know that we cannot predict or control the markets. Our focus is to deliver value from the right strategy with the support of our shareholders. If we achieve that, the share price will take care of itself

"Knowledge is power. Information is liberating. Education is the premise of progress."

Kofi Annan

"Read it and reap!"

Biotech and Money

At Biotech and Money our mission is to share and disseminate knowledge and expertise so as to educate on a broad level. We crowd source the very best minds in the biopharma industry and help share that wealth of knowledge through our Drugs&Dealers magazine, blog and associated articles.

The strength and IP of a community is in its members.

We offer unique, timely and thought provoking business and market intelligence that marries the dynamic of bioscience, investment, partnerships and strategy. Access interviews, reports, surveys and the bi-monthly magazine to keep up with your peers.

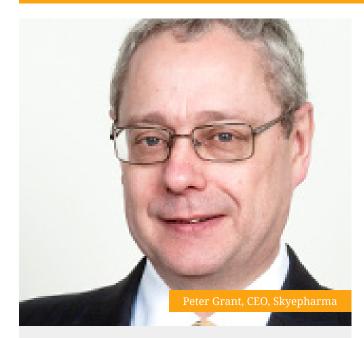
Read, digest and act or comment and contribute. Either way, you're guaranteed to learn.

Join an ever-growing number of biopharma executives within the Biotech and Money community taking advantage of this exclusive content on a day-to-day basis.

Sign up today at www.bitoechandmoney.com/become-a-member call us on +44 (0) 203 5744619 or email us at member@biotechandmoney.com



Tapping the markets - Part 2



In March this year, expert drug delivery company Skyepharma joined an exclusive club in 2014, of companies who have placed and successfully raised significant amounts of capital, £112m to be precise.

Skyepharma develops innovative oral and inhalation pharmaceutical products, and we caught up with CEO, Peter Grant to discuss placements, the wider investment landscape and Skyepharma's growing portfolio of products and partnerships. B&M: Do you want to start by quickly giving us your company story, your elevator pitch?

Peter Grant: The business is all around generating long-term royalties and milestones so it's a reoccurring revenue model. We've got propriety technologies and proven skills that combine together to undertake complex developments for partners. On the oral side there are a number of technologies that are in the process of refreshing at the moment with some internal ideas, and on the inhalation side there's both metered dose and dry powder inhaler developments for asthma and COPD. So it's playing from the track record of that as well as the technologies to develop some of the most complex products in the world in the oral and inhalation space.

B&M: Congratulations on the placing and the raising of £112m, for those unfamiliar with the placement, what was the rationale behind the decision to raise the capital in the first place?

Peter Grant: In simple terms we were carrying a large amount of convertible debt for many years that 2 years ago we changed so it became non-convertible bond debt, with a large amount to be paid off in 2017. That was putting shackles on the business because we were spending most of our time generating the cash mountain to pay the bonds. At the same time so many things had happened with the business, there was so much positive news, we believed the time was right to raise equity to pay off the bonds and we were able to negotiate a discount with bond holders that saves us £25m over what we would have spent between now and 2017. So we went to the market effectively saying if we raise the equity we're going to save £25m and by the way, here's a good story.

B&M: Once you were committed to the placements how did you lay the groundwork and what was involved in that process?

Peter Grant: Actually we moved very quickly, we'd been reviewing other potential options for refinancing the debt and we concluded that actually an equity raise was the best solution, so we made the decision in early February in principle and concluded the deal by the end of March with the announcement. We already had advisors lined up with the in-house brokers, Singers, to do the fundraising exercise and we had all the accountants and lawyers lined up from previous work we'd done so we could move very quickly.

B&M: Did you find any particular challenges in doing so, what was the most difficult thing about making the move?

Peter Grant: In the scheme of things it was relatively straightforward because the story is very good. Probably the biggest complication was that we were trying to complete our annual accounts at the same time as doing the fundraise, so when I said to the team I want to do this and I want to do it quickly, there were a few gasps and concerns as it was going to be really challenging to finalise annual accounts as well as produce a full prospectus and go on the road show and do everything else. But we did that, including having the complete reports and accounts ready for printing on the day we announced.

B&M: What were the key success factors to making the placement so successful, obviously you've got a very good story, you demonstrate what resonates very well but if you had to distil the elements what would they be?

Peter Grant: There's always credibility of management in a story so, do investors believe the story or does it sound like its hyped too much? My style is to tell it as it is. There's good awareness of the company after all we've been around, we've met quite a lot of investors, I've met a lot of investors with other hats on in the past in other sectors so that can help as well. Our brokers did a really good job, they undertook concurrent research and prepared the appropriate supporting documentation. They had experienced sales people on the road supporting the story and specialist sales people with healthcare knowledge and analysts who could support as well, so it was a combination.

I think the market conditions helped. At the time it was quite a buoyant market, there were a lot of IPOs on the road and what resonated with generalist investors was they'd seen businesses that were raising large amounts of money but didn't yet have an approved product, didn't have significant revenues or maybe no revenues, were losing money and there were some that required faith that everything was going to come though. Against that, we were coming in with a story in a sector where it didn't need that faith in potential approvals, it just needed understanding the basic messages. Those who were probably more cautious on those more early-stage business actually were quite refreshed by our story.

B&M: Is there any advice you might give a biotech that's currently ready for a placement of their own?

Peter Grant: I think it depends entirely on the strength of the story. You've got to pick the right timing of the story having enough proof of concept. Ideally you go in with a reasonable degree of corner stone support.

We went into the fundraise knowing that we had half the funds that we needed if we wanted though, we didn't in the end need that much from those investors but we could have got half from 2 investors so I think it depends very much on the story and the stage of the business and the more you're at the early stage the more it depends on market conditions. I believe we'd have got this away in most market conditions, the pricing may have been a bit weaker, but we had to price at the average price at the time we priced it, no discounts at all.

B&M: Let's talk about the market conditions. Do you think the current space for successful placements IPOs represents a significant upturn in the fortunes in the UK biotech industry?

Peter Grant: I think there has been a shift because for a number of years, investors, generalist investors in particular, were cautious about the sector because they'd had their fingers burnt a number of times and they didn't feel they had to enter the sector so they would perhaps stick more with med tech and so on and they would keep away from businesses where there were big binary events based on approvals. I think now

There's always credibility of management in a story so, do investors believe the story or does it sound like its hyped too much? My style is to tell it as it is.

🈏 Tweet this!

companies are coming through that show that you can actually make money in the sector, that's helped the sentiment generally and we've probably helped it further with our story as well, so in a way success breeds success, so I think that's really helped get generalist investors back on side.

B&M: Are you currently optimistic then about the funding environment going forward for the next 5 or 10 years?

Peter Grant: I'm a natural optimist but it's weaker now than it was 3 months ago, there's no doubt it's more difficult right now and these things do tend to go in cycles and it can get knocked very easily, so there's no certainty. I think there's been a change going on for 7 years. I've seen change over the last 2 years for



generalist investors being prepared to invest in good businesses in this segment that wouldn't have invested, I'd probably have to go back to 2008 because nobody invested in 2008, so 2007 there was probably a wariness amongst UK generalists to invest in the sector and now there's a greater propensity to invest because of the successes that have happened.

B&M: Lets talk about the generalist investors. What sort of role do you think they will have to play in the biotech industry?

Peter Grant: If you're looking at equity markets you need to have stories that work for generalist investors and it could be quite a complex story but it's the job of the management to cut a complex story down to something that can be understood. During the roadshow we met an investor who had an oil rig picture on his desk that was from a previous meeting and then he's looking at a pharmaceutical company and trying to understand how you develop a product like ours, so they've got to be pretty agile. B&M: What do you think is the key to unlocking the generalist investor's cash piles? How do you get the message through to them and convince them of the value?

Peter Grant: I think it's believability that's going to generate the returns, generate cash and that's part of the way the story is presented. Anyone can draw a hockey stick curve and say that's what's going to happen, generalist investors aren't going to buy that message they want feet on the ground and say well it might not happen. There's no point going to a generalist investor and saying this is going to get approved next year, you'd have to say we've got 5 shots on goal and there's an 80% chance of each one getting approved.

B&M: Let's focus a little bit on Skyepharma more broadly, what are the value drivers, products of the business and where do you see opportunities for these products and the market?

Peter Grant: We've got 16 approved products from which we get revenues and they're all their own value drivers. Flutiform is probably the biggest, which is our metered dose inhaler combination product and that's now approved in 29 countries and rolling out in more all the time. It's tackling the asthma market, a large and growing market, and it has a number of unique benefits against major competitors like Seretide and Symbicort and we've got strong marketing partners who are putting a lot of muscle and spend and effort behind it, so that would be one.

We get revenues on Pacira's Exparel which is a pain relief product from our former injectable business that we sold, we get 3% of net sales and some quite interesting milestones and the product has been going great guns in the States, \$34m sales in the first quarter this year.

We also get a royalty capped at £9m a year from the new GSK respiratory products, the once a day products, so we've kind of got separate players there, we're not involved in developing either of those two products but they're nice financial assets and then we've got our own capabilities, we are looking at new oral delivery technologies and these are new platforms, we haven't disclosed what they are yet, but the idea is they'll meet unmet drug delivery needs.

B&M: What's the most exciting thing for you at the moment? What's making you get out of bed in the morning and say yes I really want to come to work and do this?

Peter Grant: It's just exciting that there's always new news and there's always something happening on some other launch or further growth or a bit more information on development, another partnership we can enter into.

It's great because there are multiple opportunities all the time. I spent half my career in growth businesses and half in restructuring and it's far more fun in growth than it is restructuring, no one thanks you for structuring, you rescue a business yeah great, no one says fantastic job. Growth can be self-rewarding, you see the top line growing and the bottom line growing and you can then think of other things you can do with that capability.

B&M: What do you think are the ingredients to

that growth, the key success factors for you at Skyepharma?

Peter Grant: I think it's understanding our place in the world, there's no point thinking that the grass is greener in different business models so we understand what we're good at, we understand what our embedded core skills are and its leveraging those and we're well respecting in the industry when we've got a new oral drug delivery platform technology and we knock on doors of big pharma, we will get to talk to the right people because they know we can deliver. One of our ideas is to look at little micro acquisitions so the typical 2 or 3 man spinout from University, probably very technically driven, probably could have really good ideas these guys could knock on the doors of Novartis and Sanofi and people forever and they'll never get a transaction and they'll never know why and it's a whole range of skills. We have the medical regulatory, the quality, the commercial, the public management a whole range of skills beyond the technical that can provide assurance to the customer that we'll deliver so if we find those micro acquisitions and we validate them and say yes that technology is good we can probably get a tremendous leverage out of it.

B&M: Let's talk about challenges. What are the things that are keeping you awake at night?

Peter Grant: I think the major challenge we face at the moment is probably transitioning the business from a real cost constraint environment which we had do for a number of years while we were waiting for these things to come through and bringing them through to growth mode and it's a transition in mind set of a business. People are not used to even asking to be able to take on some more resource whereas now we're saying to them you've not only got to ask, you've got to do it and I don't want you to come to me and say I wasn't able to do that great idea for 3 months because I was too busy doing something else. You've got to come to me and say the way of doing this is to take on an extra resource from here so it's a mind set change which needs managing carefully, you can let it get out of control the other way and that's no good either but I think there is transition to make and it's all about recognising the stage a business is at and what kind of mind set we need and then how you're going to develop people.

I'd like us to become more innovative, innovation comes from people having space and time to think. We've got some really good innovators in the business but there'll be built in additional innovation skills because people are too busy doing their day job to think so again, that's the second stage. Once they've got used to the idea of growth, then there's the next stage of idea of innovation.

B&M: What are you concerns about the biotech industry?

Peter Grant: There's inherent inefficiencies, it's hard to get your head around you'd have a highly capable salesman knocking on the doors of GPs selling their own product and not really selling but promoting it and yes you'd need the information for the doctors, they'd need to understand what these medications do, it gets down to the patients as part of the reach to patients but is inherently a tremendous inefficiency. The idea that you might spend 20% - 30% of sales on getting the product to market to getting to draw parallels with other industries, it would be unthinkable to spend



that sort of money and there are other ways as tools emerging to communicate and educate and I think this is going to have to get into the 21st Century, that with reduced prices and opportunities as well.

B&M: Do you have any ideas or thoughts on how that inefficiency and funding gap can be closed?

Peter Grant: There's a number of things that would help - more certainty on the regulatory pathways would help, more harmonisation on regulatory pathways would help enormously, more predictability of pricing reimbursement because you can develop a really good drug but if you don't get pricing reimbursement on it, you've lost your return. So more assurance of how the return is going to arise would make it easier to get that funded. There are some specialist investors in quite an open space that can fund those things. I'm not sure that it's a shortage of money I think it's the shortage of assurance that it's worth taking the bet

Taking aim at the Alternative Investment Market



With the recent spate of biotech IPO's in London, we wanted to find out about the pitfalls to floating on the stock market, the options available to biotechs considering a listing and what some of the keys to a successful float would be.

To do so, who better to ask than the LSE itself? We caught up with Lucy Tarleton, a manager in the UK Equity Primary Markets team at the London Stock Exchange, who told us what she saw is the most common mistakes companies made and what initiatives the LSE is currently working on to support the equity funding chain.

B&M: Lucy, can you give our readers a brief overview of the primary markets role at the London Stock Exchange and specifically your role here?

Lucy Tarleton: I'm a manager in primary markets working on IPO origination- working with and providing support and guidance to private companies who are looking at potentially going public one day and are looking at an IPO as part of their future strategy. I look after companies that are looking at coming to AIM and the Main Market and I have a regional responsibility for London and the South.

B&M: Can you summarise for me the USPs talking about AIM in particular? Why should companies consider listing?

Lucy Tarleton: One of the main reasons that companies come to AIM or the Main Market is to access capital to further their growth. Obviously it's not just about access to capital. Companies list to raise their profile and increase their credibility and visibility and we know a number of companies saying since they've been a quoted company that their credibility with customers and suppliers has increased significantly and they can enter into a contract or put in tenders for big pieces of work that they might not otherwise have been able to enter into. A lot of companies also use being quoted on a public market to expand into international markets as well.

B&M: What are they keys to a successful float?

Lucy Tarleton: The key to a successful float is probably all in the preparation. Really thinking about why you want to take your company public. Some slightly smaller businesses are perhaps not aware of all the IPO process entails and actually get very focused on the IPO process itself and not thinking about life as a public company afterwards, they're not really thinking to the future or too long-term so if businesses management of companies are quite short-term in that vision then public markets are probably not going to be for them.

The IPO process itself does take time, it takes between 3 to 6 months typically for a company once it's appointed its advisors to actually go through the whole process but when we're talking to companies we would certainly advise them to start talking to their NOMADs, their accountants, lawyers, financial PR talking to them sooner rather than later to get an idea of how they are going to position themselves as a company, what the process entails and really getting familiar with themselves and also as a company, getting their house in order, getting policies and procedures all set up which they will need to do as a growing business in any case but that is required as part of the IPO process.

B&M: What are some of the most common challenges or problems that companies experience in listing?

Lucy Tarleton: For us, the main pitfall is where companies just haven't been sufficiently prepared for adapting to life as a public company and wanting to be too hasty to get to the market. Also focusing too much on the valuation so thinking of that value that their

The key to a successful float is probably all in the preparation. Really think about why you want to take your company public.





company will be valued at on Day One and not thinking about what's going to happen afterwards. An IPO is really a transformation of the business and it's really the start of the next phase of the company's development; yes it's the end of one process but it's actually the start of a new chapter in the company's life and they need to be ready to focus on that.

B&M: Any other common mistakes companies make?

Lucy Tarleton: Not appointing the right advisors to help

them through the process, the companies themselves not actually doing their own due diligence on whether an IPO is right for them and that they haven't got their story right but probably the biggest one is over promising and under-delivering.

B&M: Let's return to your role in primary markets at the moment. What is your key focus?

Lucy Tarleton: At the moment the IPO market is quite buoyant so we're talking to directors of companies and their investors about IPO as a viable option for companies and particularly with the smaller end of the market with SMEs. We spend a lot of time with the SME community talking to them about what an IPO is, what does it entail, who are the key advisors, key people who work in that sphere, telling them what we're seeing in the market, insights into recent deals.

For the LSE, it's not just about IPOs - it's about the supporting the whole funding ladder and how do we get companies to use equity funding to support their growth. So we are looking at working with angel investment, private equity and how that all ties in together.

As part of that we've launched this new programme called Elite in collaboration with Imperial College Business School. We launched with the first cohort of companies of which there are 19 and the idea is to provide them with a cohesive, constructive support network and programme to help them get their businesses ready to access external finance whether that is from the VC community, whether it's from public markets, whatever the business is seeking to do to grow.

B&M: I want to talk now a little about the bioscience sector. How important is that sector for your role and for the London Stock Exchange in general?

Lucy Tarleton: All sectors are important to the London Stock Exchange but we are seeing an increased level of interest from companies in the Biotech and wider Life Sciences sector and certainly going back to the point around innovation there is a lot of good science here in the UK and actually commercialising some of that science and getting it to become a proper company and actually getting those companies to grow and also getting the companies to grow in their own right and not accept the first cheque that's sent their way or potentially move overseas so we're hearing and seeing a lot going on in the sector and there's always a lot of discussion around the access to finance topic because these businesses are very R&D focused which requires quite a lot of money and obviously where we sit, certainly with AIM it can be an option for companies in that sector to potentially tap into.

B&M: What is your assessment in particular of the UK biotechs in the past year? What sort of impact has the recent successful listings of Circassia and Horizon had?

Lucy Tarleton: I think it's had quite a big impact. Precedents are great because it's all very well for us here at the London Stock Exchange to talk about why companies should float and the benefits of going public but when you've actually got CEOs of companies like Circassia and Horizon actually coming to the markets and then saying that it's providing a platform to support their growth and the reasons why they came public, that is a far stronger message than what we can say. It's good to see that the UK biotech sector is beginning to look to the public markets and the fact that the investor community is also looking at these businesses in the sector coming through and it's not just UK investors, US investors can access companies coming here and certainly what we see is another one of the reasons companies come to London is actually the depth and the spread of the capital you can access is not just UK money it's actually global capital that is available.

B&M: What do you think are the factors that

contributed to the success of the biotechs in the past year and what's underpinning it, what is driving that positive performance?

Lucy Tarleton: There's probably a couple of things. One is obviously where we are in the IPO cycle: the markets are buoyant, we are seeing an increased level of activity across sectors coming to the market and the majority of the those companies are UK businesses looking at the market so there is renewed optimism around.

I think also investors are looking at new opportunities coming through and when they see good businesses that have good management teams, people who can lead the business, have got that established track record, a proven business model and good science from the UK they are prepared to invest.

B&M: There's a lot of talk about boom and bubble in the market: do you view the IPO market at the moment in those terms particularly as it relates to biotech?

Lucy Tarleton: I wouldn't say we've got a boom or a bubble with biotech. We are seeing a steady increase in the appetite from investors and companies looking at going public in the sector. Yes we've had 5 healthcare IPOs this year but certainly within the pipeline I know we have a number of others we've been talking to who are looking at hopefully coming in the second half of this year. There's a lot of talk and sometimes the media can get carried away but certainly that's not what we're seeing. We're seeing a healthy pipeline of quality businesses that are looking at going public.

B&M: Okay. Let's talk about the industry a little bit.



What do you see from your point of view are the issues within healthcare and biotech industry that concern you the most?

Lucy Tarleton: For us, we're coming at it from the funding side and here at the Exchange what we're faced with a lot is the challenge of the US. It's not necessarily at the IPO level, it's about going back to the funding ladder in terms of what comes before going public and actually here in the UK there's not a huge biotech VC community, there's specialist investors and what we hear from companies is that they struggle because it is very capital intensive and they struggle to get that money to fund the R&D and keep getting that money.

Here in the UK there's a lot of support for very early stage start-ups getting businesses growing and getting them off the ground, then there's quite a lot of support at the last stages for more established. There is however a gap in between. AIM does seek to address that in some aspects but AIM is still a public market so businesses do have to be credible, they do have to be a company. What we hear a lot of is companies have got off the ground and they say we've tried talking to people to get money but no one is wanting to invest the amount of money that we need to get to where we want to be so they start talking to the US where there's a much wider pool of investors.

B&M: That represents a huge challenge from where you're sitting?

Lucy Tarleton: One of the aims of the Elite programme is to address exactly that challenge – to make sure that these companies know all of their options and talk to the right people. At the moment, often they'd talk to two people and they'd think that was all the options.

B&M: What are the challenges that are keeping you awake? You mentioned a couple of the challenges you are facing such as education and creating awareness - are those the dominating factors or are you more concerned about the market itself and what direction it's heading and what mood sentiment is out there?

Lucy Tarleton: That does play into it, the state of the economy impacts all businesses. We do spend a lot

of time talking to companies, educating businesses and if we here in the UK and this is working with universities, government, advisers, investor community, if we can't find a solution to get the community all working together then there is a big risk that we do lose businesses, we do lose talent, jobs, the UK economy doesn't grow, it does have a wider impact, it's not just about IPOs.

B&M: What about conversely? What's really exciting at the moment, where do you see cause for optimism and hope?

Lucy Tarleton: We're seeing some fantastic businesses here in the UK that want to grow and that are considering what their options would be. Just hearing how companies have been growing throughout the recession and the downturn and what they've done to keep their businesses going and now are looking to the future with brightness - that is quite exciting and with the biotech sector in particular we are seeing a lot more interest in the sector from the public markets.

B&M: One last thing to end the interview, what message would you give to UK biotechs at the moment looking to raise capital?

Lucy Tarleton: They should talk to as many people as they can, whether that's investors, advisers and other biotech networks, and they should make use of all the resources that are available to them. We are here at the London Stock Exchange to help. With programs like Elite, we have initiatives and resources here to help companies to grow, to put them in touch with the right advisers and investors, so the message is use the resources available to you and make them count

"Information is a source of learning. But unless it is organised, processed, and available to the right people in a format for decision making, it is a burden, not a benefit."

William Pollard

At Biotech and Money we offer biotech, medtech and diagnostic companies a completely free virtual platform from which to promote and educate the wider community members of your cutting edge research 365 days a year.

Gone are the days you waited a whole year for those cherished 10mins slots at traditional events.

A platform from which to promote your financing or partnering requirements in addition to uploading press release feeds, poster PDFs, audio slide decks and video, all through a secure, gated community website.

Its real-time and it's a highly targeted and time effective way to get your research and company noticed.

Join an ever-growing number of biopharma executives within the Biotech and Money private community taking advantage of a new way of showcasing all that is great about their business.

By the way did we already mention it's free?

Sign up today at www.bitoechandmoney.com/become-a-member call us on +44 (0) 203 5744619 or email us at member@biotechandmoney.com



Building the next billion dollar businesses



Biotech and Money caught up with one of Britain's leading figures in biotechnology innovation. Nigel Pitchford, CIO, Imperial Innovations is the man responsible for developing and implementing the investment strategy of the venture team at Imperial Innovations and has a long history and track record of success in building and developing successful biotechs: during his venture career he has been responsible for leading investment rounds into Domantis (sold to GSK for \$454m), Apatech (sold to Baxter for \$330m), Arakis (sold to Sosei Pharma for \$187m), Horizon Discovery (AIM: HZD) and Oxford Immunotec (NASDAQ: OXFD), amongst others. B&M: Nigel you're the Chief Investment Officer within Imperial Innovations and responsible for the Group's investment activities, but what does that equate to on a day-to-day basis? Where is your time spent?

Nigel Pitchford: Being the Chief Investment Officer means that ultimately I lead all of our investment activities and that in itself means developing and implementing our investment strategy. The key piece there is that I chair both our healthcare and our technology investment committees and the challenge is therefore to ensure that we're investing in high quality opportunities, but then also working with my team members to ensure that both new and existing investments continue to develop in the direction that we think they should take.

Outside of that I am a Director on a portfolio of Innovations companies. I currently sit on the boards of companies such as Veryan Medical, PolyTherics, Psychology Online, Epsilon 3 Bio and Oxford Immunotec. I am also an Executive Director of Imperial Innovations Group plc. So my time is split between managing the business at the Group level, managing our investment strategy and how that translates into making investments, as well as looking after the companies within my own portfolio. B&M: Imperial Innovation invests broadly in ventures from Imperial College London, Cambridge and Oxford universities and UCL, but in your mind what is it about UK biotech at the moment that is creating such a buzz?

Nigel Pitchford: I think that UK biotech is in a pretty good place at the moment and that's probably down to a combination of factors. I think we are fortunate that there remains a number of very good, high profile, venture capital investors who have been investing since the 90's in the UK and are still here, still good names, raising money and looking to invest that. They're typically looking to invest on a more global basis but being based in London, they also spend a lot of time looking at opportunites that are on their doorstep. On top of that you've had newcomer funds created such as Innovations, Syncona from the Wellcome Trust, and the Pioneer Fund out of CRT. These funds have a more "evergreen" approach and can support companies for a longer period of time. I think you've also seen the environment change with regards to pharma companies who have always viewed the UK as being a home to innovative science, but are now investing in venture backed businesses as well as increasingly looking to engage at the even earlier stages by going into the Universities directly and engaging with targeted research groups. This is really encouraging.

The UK has also benefitted from some successful government led initiatives over the last 4 or 5 years, in particular the Biomedical Catalyst. The investments made into places like the Sanger Institute, the Babraham Research Campus, and the Crick Institute, are also examples of investing in the biotech infrastructure that will support the industry in the UK over the next 20 years. I think it is really positive that policymakers are putting a bit of muscle behind that ambition. So I think there's a combination of environmental factors supporting the buzz, but ultimately we are also seeing interesting new companies being created around exceptional science, strong management teams being recycled into those businesses and a high level of ambition.

B&M: What do you think is still missing from the UK biotech industry?

Nigel Pitchford: We still lack critical mass, both in terms of exciting young companies but also those more established businesses which can anchor the sector. This translates to our public capital markets which lack sufficient mass of interesting companies to invest in or follow, and who subsequently find it hard to consider biotech – particularly after the blow-ups of the 90's. I think if we really are to see the sector build and grow and go from strength to strength, we're going to have to make sure that public market money is also available for these businesses, when they need it.

B&M: So we're talking about educating generalist investors here?

Nigel Pitchford: Yes, I think we are. I think that education is going on. Generalists are clearly seeing some interesting opportunities now in the public market space, and to date have been receptive to them, but it's not yet a mainstream activity. We need more analysts, more research, and more specialist funds dedicated to this area, to rebuild the sector and educate the generalists. Of course, we also need to demonstrate performance. What will reinforce the belief amongst public market investors is that this is a sector that is now starting to show some degree of maturity and where investment propositions are more robust and likely to deliver returns for them in the long-haul.

B&M: It's been a very successful year so far for Imperial Innovations and a number of its portfolio companies. Talk me through some of those highlights and what's been the most satisfying personally?

Nigel Pitchford: We've had a nice year to date, particularly with the IPO of Circassia which was really well received here in the UK and hopefully will create some of that momentum in the public markets. Within the last 12 months we have also seen Oxford Immunotec float on NASDAQ, and we were clearly very pleased to get that business onto the market with a really supportive group of new investors sitting behind it, and to see the positive post-IPO performance of that business. So both these companies are now fully funded and moving forward. On the private side we've delivered a number of both new and further rounds of investment over the last 9 months - all consistent with our investment theme. As well as a number of spinouts from Universities, we've seen substantial rounds of investment complete for four biotech companies: Pulmocide, Crescendo Biologics, Mission Therapeutics and TopiVert. All four were VC rounds raising between £17m to £20m, and financing those companies for the next 2-3 years.

I would probably highlight Pulmocide as being particularly satisfying as it's a good example of what we would like to do more of. It's built around a founding team of Garth Rapeport and Pete Strong. Imperial



Innovations had previously backed the same team in a business called Respivert some 7 years ago, which was subsequently sold to Johnson & Johnson for \$100m. The team has been within Johnson & Johnson for the last few years, taking their lead product into the clinic. Having achieved that they've now come out of J&J, with J&J's blessing, to create Pulmocide, a new entrepreneurial venture bringing together the same team with the same group of co-investors as before comprising Innovations, SVLS, Fidelity Biosciences and JJDC - the venture arm of Johnson & Johnson - to create a new company, focused on developing new medicines for respiratory infections, for which a £17m investment round was raised just before Christmas.

B&M: Given the success of Circassia and the current favourable stockmarket conditions, are you seeing the rest of your portfolio companies re-examining their own future funding options?

Nigel Pitchford: Our investment strategies have not been predicated on IPO markets being available to us - particularly here in the UK where the door has been broadly shut for most of the last decade. Most of the companies that we've been instrumental in setting up and funding are more likely to have a strategy which ultimately sees them move more towards a trade sale. Now, clearly if the public markets remain open and receptive then that becomes an alternative direction for those companies to take. We're not averse to them going in that direction, but we do believe that we should be preserving the public market space for companies that are robust, that have good management teams, and that can survive and thrive in that public market environment.

B&M: Focusing in on Circassia for the moment, what role did Imperial Innovations play in the build up to the IPO of Circassia? What's been its role since the offering?

Nigel Pitchford: Circassia is an investment that we've been in since it was originally started up in 2007, when we backed the current team to get it up and going. My colleague, Russ Cummings, led that investment and has been on the board of that business right from the start. He remains a director even after the IPO. Innovations not only provided its own capital through the evolution of the company but it was also instrumental in bringing the other investors to the company over multiple funding rounds. Typical with all of our investments, we were intimately involved in the development of the company's strategy as well as the implementation of that strategy through the building and supporting of the right management team and board. With Circassia we were very fortunate to have a highly experienced team from the outset, in Charles [Swingland] and Steve [Harris], and we look forward to continuing to see them execute in the public domain.

B&M: Moving on your other portfolio companies,

talk me through some of Imperial Innovations other leading assets and what your outlook is for them over the next 12 months?

Nigel Pitchford: Veryan is a medical devices business that's developed a peripheral stent with a novel 3D helical geometry. The recent clinical data shows significant clinical differentiation against a market leading straight stent product. Given that it's already got a CE mark this data enables us to begin commercialising the product in Europe, whilst also putting in place the studies required to secure a PMA for the US market. With plenty of corporate activity in the peripheral market, the company is now in an interesting position that we will seek to capitalise on and grow value from over the next 12 months.

Another one that's been more public about its ambitions is Cell Medica. This is a cell therapy business whose CEO, Gregg Sando, has spoken openly about his fundraising ambition. I think it likely that this company will raise a significant amount of money, possibly in the order of £40m to £50m, over the next 12 months to support its activities going forward. They include running clinical trials for its main product Cytorex, but also commencing commercialisation activities for its Cytovir products as they come through regulatory hurdles here in Europe. It's an exciting time for this company.

B&M: Across the portfolio companies, has there been a consistent theme or preference to the companies Imperial Innovations have chosen to invest in? What do you personally look for in those potential investments and what makes you take notice? Nigel Pitchford: Our investing approach is different to most venture capital investors. We are much more interested in getting involved in creating companies from the outset, than we are in being presented with business plans for companies that have already been formed by others. As such we are typically targeting key academic groups within the golden triangle, seeing whether there is really interesting technology there, whether there are potential leaders within those groups, bringing in experienced management, developing up our investment thesis, and then looking to lead the creation of those companies. These startups are normally around really novel areas of biology, typically from labs who are world-leaders in those fields. There has to be a substantial market opportunity ultimately to justify the risks, but this is what we are aiming to get involved in.

B&M: What are the particular therapeutic areas or subsectors that are attracting your attention at the moment? Are there subsectors that you'd like to see represented within your broadening portfolio?

Nigel Pitchford: We don't really target specific therapeutic areas. We focus on novel science with substantial market potential that we can believe in. We have a high weighting of cancer companies within the portfolio, which reflects the research activities within the golden triangle universities in this field, but that wouldn't stop us from continuing to look for exciting new opportunities in cancer. As our investment model is long term we try not to second guess what the industry might or might not be interested in ten years from now. We are starting to look at novel diagnostic platforms – an area that many investors shy away from – and also have an interest in healthcare IT, particularly where this can be applied to mental health or dementia care.

B&M: Coming now onto the wider UK industry space, what is your outlook for the UK Bioscience industry over the next 12 months?

Nigel Pitchford: I think we'll see more growth. I think there is an increasing ground swell of activities, particularly in developing infrastructure like the Crick Institute and the Cell Therapy Catapult. There is also starting to be better coordination, with initiatives such as MedCity recently being launched. The continued implementation of the UK Life Science Strategy, and increasing engagement with the NHS will be an important differentiator. That's the direction of travel that I think we will continue on. Pharma will increasingly reach back into the UK universities and I think we will see more engagement and investment there. It's not a tidal wave, it's a ground swell. I think we've got a pretty good basis here and it's about building this industry in a considered way and not over hyping it.

B&M: Do you see a tidal change in the interest levels shown by US investors in UK biotech?

Nigel Pitchford: I think there are certainly more US funds who are becoming alive to the opportunities that are here in the UK and also in Europe. They know that there's great technology here down to the historically strong research and academic base which has consistently generated interesting ideas and companies. I think the big difference between the UK and the US in this context is around critical mass and access to public markets. So whilst more US investors are showing interest, I still think they are cautious.

B&M: What do you see as the main differences between these two markets?

Nigel Pitchford: The US has a big public market with significant critical mass around the biotech industry generally, which also includes the ancillary companies, and that has a huge impact. There are public market investors who have made money out of biotech and as a result of that will continue to invest in it. There are lots of specialists, more investment banks, plenty of good analysts, and the market support is high. That's something that we need to build here in the UK if we are going to have a longer term sustainable biotech sector because our companies will need access to that level of capital to grow and remain independent. It doesn't happen overnight though, and in the meantime NASDAQ will provide an attractive alternative for many companies to listing on the LSE.

B&M: Where you see the major opportunities in the next 12 months for Imperial Innovations?

NP: Some of our businesses will continue to move towards a trade sale or some form of liquidity event. However, I also think there will be opportunities for us to deploy substantial amounts of capital behind businesses that we think we can build into the next generation of billion dollar companies. That's certainly our ambition. We're not in any hurry to sell out of companies, particularly if they have that capacity to scale.

I think this point about critical mass is important. I think the UK needs to build a critical mass of billion dollar businesses and ultimately if we can do that privately, that's one means of getting there. If public markets

Select your investors wisely and make sure those investors have a strong alignment with your desire, and your ambition, for that business.

💓 Tweet this!

are also available and amenable to building those businesses then that's also great. We have a core group of our own shareholders who are really supportive of that overall strategy and with their continued support, patience and ambition, that's what we'll aim to do.

B&M: To round off, if you could impart one piece or wisdom to a CEO of a UK Biotech positioning itself to raise capital or attract funding what would that be?

Nigel Pitchford: I think one key piece of advice is select your investors wisely and make sure those investors have a strong alignment with your desire, and your ambition, for that business. I think too often when there is a lack of alignment between investors and management it can really create substantial problems down the track. So finding investors who share your ambition, and are aligned with where you want to take that company, is really important and it's one of the key things to get right at the outset

Minding (and funding) the gap



David Grainger is a Venture Partner at Index Ventures, one of the leading life sciences Venture funds worldwide. He is also a Director of half a dozen biotech companies, many of which where he was a founder, including XO1, TCP Innovations, Epsilon-3 Bio and RxCelerate.

Biotech and Money caught up with him at his offices in London.

B&M: So David, let's start by you just telling me a little bit about your VC firm, what is your history and your key focus?

David GraInger: Index was founded in 1996. In the first year, the investments were in technology, but today, about a third of the capital under management is in healthcare. In terms of investments, we're absolutely agnostic about factors such as geography or source of ideas. What they have to be is truly innovative, things which are disruptive. We're looking for ideas that can really shake up the healthcare space.

B&M: What are the characteristics that define that?

David GraInger: We operate what I call a "market backwards" approach rather than a "technology forwards" one. We are looking for the solution to a problem that we can see in the marketplace, in clinical practice. We identify the problem and then we scan the technology providers, the academics, everywhere you can imagine looking, to try and find a solution to that particular problem, rather than taking the reverse approach of looking at what's out there in terms of technological solutions and then wondering what clever things one might be able to do with the capabilities that are out there.

B&M: What do you think determines the success of a VC?

David Gralnger: I think ruthless ability to kill things when they no longer have a sufficient chance of being successful. The biggest killer of efficiency in the large pharmaceutical drug development enterprises, and for healthcare VCs in general, is keeping going with things when somebody somewhere really knows that this is no longer the thing to pursue. We, as human beings, always like to cling on to the remaining possibilities of things working out big. We don't like to crystallise losses. We don't like to admit defeat. You hear people saying 'every good idea almost died 20 times and if it hadn't been for the perseverance of the people working on it this would never have come through'. That may or may not be true, but the danger is that this kind of determination leads to things continuing when they should have been killed. I call then "zombie projects": they're shambling forwards, they're consuming capital, people's attention and resources and efforts when actually everybody involved knows deep down that particular idea has lost most of its shine.

B&M: Okay, turning to your own challenges and concerns, what is keeping you awake at the

moment? What are the biggest challenges you're facing?

David GraInger: I think the biggest challenge we face here is identifying individuals to lead our projects who have a sufficiently broad experience of drug development processes. People with the required "helicopter-view" of the drug development process are very thin on the ground because most people got their experience of drug development through large pharma companies and there, with teams of hundreds of people developing a drug, there's often no one individual who is, if you like, the overall pilot. Those individuals who understand the whole process are rare and, I would argue, are the limiting factor for our ability to scale the operations and do more than we do.

B&M: Okay. If the biggest challenge is finding and identifying the individual, what is the biggest opportunity?

David GraInger: I think the biggest opportunity lies in the healthcare revolution that's unfolding as the public at large wakes up and takes issue with the high prices they are paying for many drugs. Up to very recently there has been a tacit willingness to pay whatever it takes to access healthcare – and this has cushioned the drugs industry until it's become plump - to put it politely - on a surfeit of public payments. Paying high prices has allowed inefficiency to take root, probably over 3 decades now. Pharma R&D strategies have just become bigger and bigger and grander and more and more expensive and yet as costs have spiralled the number of approved drugs has been gradually trickling downwards. That's now yielded a situation where people are sitting there and saying "hang on a



minute, are we just going to keep on paying a greater and greater proportion of national productivity of GDP on drugs when the guys who are producing them are spending ever increasing sums of money on producing less and less?."

The moment is coming over the next several years when the dam is going to break. That pressure from public opinion is going to become unsustainable and there's going to have to be a revolution in R&D strategies. For those of us who operate small, virtual businesses, whose focus is on efficiency, on producing more per dollar rather than simply producing more, then, that revolution represents an enormous opportunity. B&M: What do you see as the biggest opportunity for biotechs?

David Gralnger: I think to replace the R&D monoliths that are currently inside large pharma, with smaller, nimbly and most importantly more capital-efficient R&D operations.

We're already seeing signs that these large pharma R&D operations are going to be significantly trimmed: for example, as a result of renewed interest that Pfizer have shown for acquiring AstraZeneca. If you put two large companies together then they're going to significantly reduce the size of R&D per revenue dollar, with twice as many products yielding revenues but



only one R&D engine to sustain that. Simialrly, we're seeing the interest of Pershing Square and Valeant in acquiring Allergan. There again you've got a situation where somebody is saying let's buy this, let's harvest the revenues and shutter the R&D infrastructure. Faced with those kinds of pressures you're going to see global Pharma companies trim down their R&D operations significantly over the next several years and there will be a massive opportunity for the smaller biotechs to fill the gap. It's the mammals versus the dinosaurs. At the moment when the meteor strikes, there's a population explosion in the mammals and we're seeing the first steps in that process right now.

B&M: What do you notice are the major differences between investors in the UK and Europe and the ones in the US for example?

David Gralnger: I think there is a greater conservatism among European investors. I think US investors are just inherently more willing to take risks. Some of the European characteristics can be beneficial. A degree of

conservatism in deciding what to invest in is excellent, but that fear of crystallising losses is probably stronger in Europe than it is in the US. The US guys are happier to take the poison pill than we are and again that comes down to the ready supply of recycling opportunities. The danger here is in a smaller ecosystem there's a smaller pool of capital, a smaller number of opportunities. You might be less willing to say "actually you know what guys, this thing isn't really going to work" because you've not got the same certainty that something exciting is going to turn up 20 minutes later for you to jump onto (whether as an investor or an entrepreneur), something thats going to be funded, so you're going to have an exciting new team and a shiny new asset. In the larger US ecosystem, therefore, the ability to make those tough "kill" decisions is actually easier - it's a function of size.

B&M: We've talked a lot about the opportunity, particularly what's coming around the corner, but what about the biotech industry as a whole concerns you the most at the moment and do you have any advice on what should be done about it?

David GraInger: I think the thing that concerns me the most is the public perception of the biotech and pharma industry generally. One hears enormous cynicism about the drugs industry. I think people out there generally assume that we're all here just to rip them off, to take as much money as possible out of the system and deliver as little value as possible. But there's no one that I know in this industry who isn't fundamentally doing healthcare because they believe that it has an enormous potential to deliver benefit to mankind. So there's this huge mismatch between what most individuals within the drugs industry are trying to deliver and what the public at large sense.

B&M: And that's hugely important for the industry to address. What would you suggest they do to tackle this public perception problem?

David GraInger: I think the industry is taking a few tentative steps. Transparency is usually an important medicine for increasing confidence. In the one hand, it sometimes feels like transparency is a burden - it doesn't help everybody to know everything because unless you know how to interpret information you can get a more skewed picture than before. Bald data doesn't necessarily give you the true picture of what's happening and sometimes revealing the details results in real pain. But that pain is something which has to be taken. I think at the end of the day, until everybody can see deep inside the organisations that are responsible for developing their medicines and see all of the data that was generated, I don't think people's beliefs will change. B&M: We've talked over the course of the interview about a number of characteristics that you'd look for in a biotech but perhaps you could just summarise. What are the key things you look for in a biotech that you would be investing in?

David Gralnger: I think the number one criterion is an asset which we can move forward over a period of 4 or 5 years with an accessible chunk of capital - say \$25m, that sort of figure - in order to deliver a package that really believably can change healthcare outcomes in some particular space. The right people are a critical component too, but we already have people that we know that we can match with the right assets in order to deliver them, if that's what is required as well. I was accused of being an 'assetophile' the other day because that really is what we are assessing.

B&M: You mentioned people a number of times in the interview, so how exactly do you judge the level of management in a company and how important is it to get management structure in a company correct?

David GraInger: It's absolutely essential because, as I just said, while we like taking technical risk, we absolutely detest taking operational risk. In other words, having an asset that would have worked, would have been the biggest selling drug of all time, except for the fact that people who were responsible for looking after it took the wrong decisions. That is what I call unacceptable failure. If you failed because you did the wrong things, please don't come back and see me again. If you failed because the asset didn't in the end have the properties that we originally thought it would have, but you did all the right things to demonstrate that quickly and cheaply, then you're our kind of person.

B&M: How do you mitigate that operational risk?

David Gralnger: Here, the Index Ventures approach to that is to provide assistance to the management team that goes beyond simply providing capital and then turning up every third Tuesday to see how things are going along. We actually have the members of the investing team here with operational roles within the portfolio companies. If you were being unkind, you might call that "micro-management", but we see it as standing shoulder to shoulder with the entrepreneurs and with the managers. That takes away the inefficiency of communication between investor and manager - it's not one PowerPoint deck every 2 months at a board meeting; we're there assessing the information with them in real time.

B&M: I would like to focus now on what advice you could impart to biotechs, particularly is it pertains to capital. How would you advise a biotech to best position themselves to raise capital and to attract funds?

David GraInger: If you want to raise capital from a VC investor, worry less about the technical aspects and much more about selling me on why this thing is going to be revolutionary if it works.

B&M: To wrap up, what is the single piece of advice you would give to a biotech who is looking to raise capital?

David GraInger: The single piece of advice I would give to a biotech is to simplify, strip out everything that's not



core and tell me what the USP really is here and make that clear. It's the old fashioned "elevator pitch". We can worry about whether the details are correct afterwards but right now, if you can't tell me in 30 seconds why what you've got is revolutionary, you're probably going to struggle to raise capital.

We often see an entrepreneur who will return over a 5 year period with various rehashes of the same idea when we, and presumably everyone else, has suggested that's not a fundable asset for various reasons - no amount of rehashing it is going to change that if the fundamental 30 second elevator pitch isn't strong enough.

If you can't find anyone who'll buy your elevator pitch, it's time to say "let's do something else" before it soaks up a lot of otherwise useful capabilities and cash. But you can only make that ruthless assessment (whether yourself or as an investor) if the critical components of the plan have been boiled down to the simplest possible form

"In the end we can never be given knowledge by others; we can only be stimulated. We must develop our own knowledge."

Charles T Tart

At Biotech and Money we offer biopharma executives a more constructive way of learning and engaging at conferences. We avoid the death by powerpoint route, instead we create events of engagement, shared knowledge and expertise and genuine peer-to-peer learning.

Not one person holds court, everyone has a voice, everyone has input.

Through blue sky themed group discussions, highly targeted roundtable sessions, dedicated 1-2-1 networking time and a pre-night gala dinner time you'll come away from a Biotech and Money event with genuine take homes and more than just a pocket full of business cards.

Just incase you still want the powerpoint, well its all on our virtual platform waiting for you.

Join an ever-growing number of biopharma executives within the Biotech and Money private community taking advantage of these highly effective conference formats and dedicated 1-2-1 networking sessions.

Sign up today at www.bitoechandmoney.com/become-a-member call us on +44 (0) 203 5744619 or email us at member@biotechandmoney.com



Lessons learned – what can the last IPO window teach us about this one?



am Fazeli, Head of European Research, Bloomberg Industries

Sam Fazeli is well known as the biotech analyst guru who was at the forefront of the cutting edge analysis of the last IPO window and cycle. We caught up with him to find out what he feels were the main lessons learned from the previous cycle, his assessment of the current market for biotech investment and his predictions on investment trends. B&M: Sam, from a European perspective, what feels different this time from the previous IPO window?

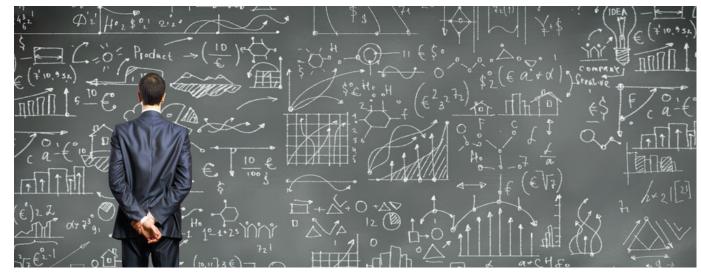
Sam Fazeli: I think the one thing that stands out specifically is the IPO of Circassia which I think ended up being one of the biggest fundraisings in biotech globally. Now that's saying something because we have a picture of Europe that says that investors are not biotech friendly and yet we end up with an IPO that raises £211m! If I look at the history of IPOs you would find it would be at the very top end of biotech so that is one thing that is very different this time.

One of the other things that is important is we've seen a lot of medical device or devices types of IPOs but we haven't seen anything in-between. We haven't really seen any early stage Phase 1, Phase 2 companies which is what we used to do, so that's where I think it will be interesting to look at.

The other thing that is quite different this time is that we did have at least 2 companies that IPO'd in the US, now we haven't had that very often. In the old days US investors weren't really prepared to look significantly into European IPOs but then these aren't European IPOs that are literally going and listing their shares there, so that was another nuance or ripple that's different this time round.

B&M: Do you think is it the number of deals and size of deals, is that significant in your assessment?

Sam Fazeli: Well the size certainly is, the number I don't think has knocked my socks off yet. I think the window opened very late here compared to the US - there was a good 18 months lag, probably because the companies



just weren't ready.

B&M: You said that the number of deals hasn't exactly blown your socks off but what are you seeing for the next quarter? Are you seeing a continuance from Q1? Are you seeing a slowdown in things happening?

Sam Fazeli: The market as a whole has slowed down, that's definitely the case. You can see that in the last couple of months in terms of the total number of IPOs - I think the current risk averseness has affected IPOs. I've seen quite a few US IPOs pulling their listings or at least delaying their listings.

I think what we're going to see is that the large biotechs will continue to do quite well – they have had really quite significant performance recently. However, If you look at the development stage biotechs you'll see a very different story, with some rises but a lot of significant share price setbacks recently.

Investors are generally shying away from development stage biotechs in the past few months and you can see that there has been a pretty awful performance. I would assume that although we joined the window a lot later, if the risk aversion which is apparent persists it's possible to see another 2 or 3 IPOs before that window probably snaps shut.

B&M: It's the general consensus that the structure of capital markets in the UK is more risk averse. Do you think maybe the recent flow of money into biotech in the UK is a short blip and now investors are reverting to type again?



Sam Fazeli: It's really difficult to read investor sentiment in the UK with regards to biotech. If you look at the case here it was only really doable because there was some very significant, or at least at the level it was done, very significant cornerstones: Invesco themselves, Lansdowne, they came in for a very significant amount of stock. Without these players it wouldn't have happened and that's not necessarily a bad thing but then we know that Lansdowne and Invesco are investors that look at long term and they get in early so they're essentially supporting their own investment, not a bad thing, but this doesn't give me a picture of the health of the biotech IPO market in the UK, it is a very special place.

B&M: What would you say are the ingredients that made the Circassia IPO successful?

Sam Fazeli: The company has good management, when you look at biotech you have to say that the 3

most important things in a biotech company to look for are management, management and management. You can take an excellent drug and put it in the hands of the wrong management team and you have a high probability they'll mess it up. They'll do the wrong trials, they'll organise badly, the company won't be organised correctly, they won't be trusted, whatever the reason. You get a very good CEO and they can turn around companies that are on their knees, so I think we have here a management team who is well known with a strong background in fundraising, licencing deals and eventually M&A so these were elements and aspects that really made a difference.

B&M: What do you think should be Circassia's next steps?

Sam Fazeli: I think they should use their business as a base to build on because who wants to take the risk of one Phase 3 asset or 1 technology, it's risky, you might

be the best science in the world but something might be slightly weird with the patient group you recruit or the season in which we're testing the allergy although it's not seasonal allergies that's rubbish, it's perennial allergies, but something.

B&M: What do you think some of the other biotechs currently considering IPO could learn from the success of Circassia?

Sam Fazeli: Make sure you have a well-known and investor friendly management team and make sure there are no skeletons in the closet.

B&M: What do you think is the main lesson learned from the last IPO cycle applied to this one?

Sam Fazeli: Nobody learns a lesson in the financial market otherwise we'd never have booms and busts! I think the thing to always watch out for is when you're buying a company in an IPO is to not assume that it is a genuine IPO. A lot of the time it's just an extension of essentially a private fundraising because all the people that want to buy it buy it, then it goes into the market and of course it sits there, really you need some other event then. Just because you've become public doesn't suddenly mean that everybody's going to start trading your shares. You need some other event to then drive the potential new buyer into the stock.

The other thing is people have to be very careful in getting excited about the value of one product or two products. People who buy them have to understand that you've got to wait for the long term - you are going to have failed products. If there's anything you can guarantee in biotech it's that you will have failed drugs.



The first lesson that everyone should learn when they go into biotech investment is: don't get annoyed when products fail. The second lesson is that for very early stage companies, you're going to have to wait a long time for them to become an income stream, a long long time, 10-15 years sometimes.

🈏 Tweet this!

Those eyes have to be open and you've got to be cark and know what it is that you are getting into. The earlier you go in development of a product, the longer you have to wait before you find out whether your product works or not so you have to have a very clear vision as to why you're investing in the stocks. The first lesson that everyone should learn when they go into biotech investment is: don't get annoyed when products fail. The second lesson is that for very early stage companies, you're going to have to wait a long time for them to become an income stream, a long long time, 10-15 years sometimes.

B&M: What do you think needs to change among the generalist investors for them to see the value in biotech investment? Sam Fazeli: I think there's got to be some incentive to invest in these companies. On a much more smaller scale, government incentives such as the EIS scheme work really well for all start-ups. There has to be some element for people who cannot assess the risk of these companies to be told that they will be helped in mitigating some of that risk. If the reason they're not investing is because they can't assess the risk, well give them a reason not to worry about the risk, what else can you do? You can't force them to hire analysts or raise their risk appetite.

B&M: So do you think the Government could be doing more?

Sam Fazeli: I think so, although I admit I don't know what the solution is. What's clear is that risk mitigation needs to be offered to the public market - only government people can decide how they can achieve this.

B&M: Let's talk a little bit about M&A and licencing trends, how do you see them responding when there's an open strong IPO window out there?

Sam Fazeli: What we've found is that M&A for a while had cooled off quite a bit and we basically saw licencing take off and go way above in terms of numbers with M&A and that became the preferred way for pharma companies to do deals and acquire assets and build a pipeline, obviously that's a very lower risk way of doing it and it also made sense given that with the biotechs doing what there were doing in terms of a share price, the valuations were obviously too high so going ahead and acquiring a company was too much.



B&M: What do you think underpins that, what's driving those trends? What are the key factors?

Sam Fazeli: Well the valuations are clearly driving the M&A side of things, companies are becoming more and more expensive to buy. Also the level of risk these companies were taking, maybe by going with earlier stage assets they were taking a higher risk product so that's why they wanted to do a licencing basis and acquire.

B&M: How important is the market sentiment in relation to the market valuation? Is it linked?

Sam Fazeli: Sentiment drives valuation so I think that the old adage is that biotech valuations are right twice a day, just like a clock, by accident. When you have no revenues there are no earnings, you don't have a solid accepted valuation metric, you have to do DCFs and DCFs are not a science, they are an art and in art, the beauty of it is in the eye of the beholder.

B&M: What are the things that concern you most about the biotech industry at the moment?

Sam Fazeli: What concerns me most in the UK is how are we going to solve that particular problem of enticing more people to investing into the sector. Do we have a shortage of companies? I don't think so. For the size of the country we have and the level of investment in basic research we have as a country, we are probably getting our fair share of technology and capital, so from that perspective that's our key thing that we need to do.

B&M: What about the converse of that, what is

exciting you the most about the industry? What are you optimistic about or hopeful for?

Sam Fazeli: I'm a drug guy, I'm not a device guy so I can't talk about the device side of it, I've never really gotten on with devices. From the drug side I'm really excited by the fact we're getting into a world now that we are seeing glimpses of drugs that seem to be curing things – which was rare before. I'm a pharmacologist by trade. Most drugs are there to treat symptoms, sometimes if you're lucky they'll halt the progress of the disease like anti tnf antibodies for rheumatoid arthritis, sometimes they reverse some of the damage that's been caused, rarely do they cure it.

But now we have a drug for example that launched in December 2013, costs \$100K per year but 99% of a particular group of patients with Hepatitis C if treated with it, get cured! Actually cured - not like HIV where you basically keep the virus at bay. It is this kind of science that really excites me.

It is the translation of science that's been slaved over in the past ten, fifteen, twenty years: all that genomic hoo hah that we had back in the late 90s and early 2000s that was going to revolutionise everything is now finally coming good. Back then we all had this fantastic genomic stuff being done about finding new genes and targets thinking great we're going revolutionise therapy, and now 10 years, 15 years later its baring fruit.

B&M: Your view on the markets? Are you pessimistic or optimistic for the future?

SF: I think we've had our excitement and we'll be entering into a period of consolidation now

Market assessment and the Elephant in the room



Biotech and Money caught up with one of the leading Life Science analysts in the UK, Dr Paul Cuddon at Peel Hunt. In a sector where analysts have a propensity for over-optimism, Paul leads a team that is not afraid to highlight concerns and has a reputation for independence and quality, backed up by the results of the 2013 Extel Survey which ranked Peel Hunt's Healthcare and Life Sciences Team 1st overall.

Paul was talking to us about his top picks, his concerns for the industry and his advice for biotechs looking to raise capital.

B&M: Tell me a little bit about Peel Hunt, and specifically your role here.

Paul Cuddon: We're focused on small and midsized UK companies as a firm and the equity markets in particular.. Our key customers are UK and International investors and we also provide corporate advice and broking services to companies.

Health care and Life Sciences has become an important focus for Peel Hunt and we've established a very small but committed team on the sector, where we are the top-ranked team on several measures. I'm a Research Analyst, which means I'm the guy evaluating companies, analysing the strength of the science, the quality of clinical trials, looking at the addressable market, and a company's competitive position therein. We then put all this together into an investment recommendation and I've been doing that since 2007.

B&M: Let's talk a little more about your own challenges as an analyst at Peel Hunt. What's keeping you awake at night?

Paul Cuddon: Our business hinges on our strong relationships with investors, making good recommendations based on thorough research and maintaining our credibility in the market. We have raised over £350m for corporate clients over the last 18 months or so and ensuring each company's progress is being fully communicated to their investors is one of our key roles as a broker. One of our challenges can be dealing with trial delays, setbacks or indeed outright failures, and while these can be difficult helping clients through these situations is the hallmark of a good broker.

B&M: What is your assessment of UK biotechs in the past year? How have they performed?

Paul Cuddon: UK Biopharma has performed very well over the last year and is up 60% significantly outperforming Nasdaq Biotech, which is up 30% after the recent correction. UK Biopharma has been driven by the strong performance of BTG, Vectura and GW Pharmaceuticals who have each made significant clinical and regulatory progress over the last 6 months. The performance of Biopharma helped pave the way for several recent deals that include the IPO of Circassia, the secondary fundraise for Vectura both of which Peel Hunt was joint bookrunner. The sector is now very well financed, which clearly demonstrates that public companies can no longer cite a lack of financing as the key reason the sector has underperformed historically.

B&M: What do you think underpins that success? What are the factors that are contributing to the biopharma success in the past year?

Paul Cuddon: Late stage clinical trial success and regulatory approvals. BTG for example got FDA approval for Varisolve, Vectura got European approval for its generic version of Advair (AirFluSal Forspiro) and the start of royalty payments on its respiratory products that have been licensed to Novartis. GW has also made excellent progress for an orphan epilepsy drug that 12 months ago was not factored into any valuations. Genuine progress has been made in these UK biopharma stocks as has now been reflected in their valuations. The performance of Nasdag Biotech is heavily geared to the likes of Gilead and Amgen, that represent the bulk of the index and these stocks are driven by underlying performance. However, there is a new wave of biotech companies capturing US investor attention with \$3.6bn raised through US IPOs last year. These stocks have clearly benefited from loose monetary policy, the JOBS Act and favourable appetite for risk, and have performed very well post-IPO often without any clinical or commercial catalysts. I would regard this as speculation, rather than the fundamental drivers of valuations that have positively benefited UK Biopharma.

B&M: Where are you pointing investors at the moment? What are some of your favourite stories?

Paul Cuddon: I would say we have 4 key picks at the



moment and they are in the biopharma space. Vectura is one of those and Clinigen is another both led by my colleague Stefan Hamill. We have also got a very specific view on the future of the allergic rhinitis market and the UK is fortunate to have 2 players in that space, Circassia and Allergy Therapeutics who are both developing ultra-short course treatment of allergic rhinitis. Circassia offers substantial upside through clinical success as it has retained full value of its assets, whilst Allergy operates a revenue-generating and profitable Specialty Pharma model, and is considering its strategy for the US. These two companies score very highly and we have conviction that their approaches have the potential to disrupt what could be a very large market.

B&M: What's your feeling on why Circassia was so successful?

Paul Cuddon: One of the key attractions of Circassia was that it has been properly financed prior to IPO. This is a Company since inception in 2008 has raised £105m in private markets of which £70m had been invested in clinical trials. What that allows the company to do is significantly de-risk itself before IPO so it's completed over 15 clinical trials. By the time it came to market we had a huge body of data on which to base our analysis and valuation. We got a much better sense of the Company's position and what the risks remaining are, so you get a much better sense of the risk/reward opportunity.

Another ingredient was that their pre-IPO investors were willing to follow their money and also invest in the IPO. It gives you another sign of confidence that this company has much further to go. Add that to a very strong management team who have delivered returns for shareholders twice before and a very compelling product offering in a market that is just taking off in terms of future growth potential for the next-generation of allergy immunotherapies and I think it's a very compelling proposition.

B&M: I think there were a lot of lessons there for biotechs looking to enter IPO in terms of what they need. What would you say are the two or three pieces of advice you'd give to biotechs that are looking or considering IPO?

Paul Cuddon: Firstly not to see the IPO as an exit event, it should not be seen as an end of a journey. All too often we hear private companies say our aim is to IPO, that should not be a target, that is the start of the next phase of the journey where the scrutiny on the management team just goes up another level so they cannot see it as either an exit for themselves or for their investors, they need to see it as a start of a much more public journey. The second key point will be to make sure they've completed some very good trials before IPO. UK investors are generally not willing to look at very early stage companies and so you'll need robust Phase 2 data, and be well prepared for Phase 3 trials, if not have them already started. Although if you do have an earlier stage pipeline it certainly has to have several commercial deals with big pharma and ideally revenues..

Thirdly, I think biotechs ought to recognise that in the UK we don't have a large specialist biotech investor community, they are generalists and it is important to pitch the science appropriately. It's important to be very realistic and not go out and expect high valuations just because valuations in the US are high.

B&M: If we look at biotechs as a whole when you're making your analysis, what do you look for in terms of warning signs, what are the things that set alarm bells ringing for you?

Paul Cuddon: The one that always gets me frustrated is the lack of placebo controlled Phase 2 trials. In some biotech companies you can quite often do Phase 2 trials and get a positive response that looks like you've got the best anti-cancer drug in the world but if you haven't compared it to a placebo then how do we really know that it's a genuine effect? Companies over-promoting open label Phase 2 data is a frustration because what it essentially means is that they're going into phase 3 with too many risks .

The other comment would be around the guidance over what the potential commercial opportunity for a drug would be. Getting companies to be very sensible about the commercial potential and having done proper market research. All too often we get 'there are 350 million diabetic patients in the world, if we got 1 per cent of that patient at \$1,000 a year then we've got a \$3.5bn a year drug.' That's not really good enough and that really frustrates me when people rely on those type of numbers. It doesn't show an appreciation for actually how the commercial market has changed, the way payers are focussed on value for money and also the way in which we scrutinize these numbers.

B&M: So the message is do you your homework, and do it properly.

Paul Cuddon: Absolutely. It's just about doing proper market research on the opportunity because that's going to have to go into the prospectus as how you would justify what the potential could be.

B&M: Any other frustrations with biotechs?

Paul Cuddon: It's still a frustration that in this era of personalised medicine and increased awareness over the genetic links between why a drug works on one patient and not on another, we still don't see enough companies coming through with genetic insight into their development programs. There is sadly a reliance on "re-profiling" in the UK, which is essentially finding a new application for a previous drug. Reprofiing is the cheaper way of developing drugs and in the modern era of biologics I think, it's the lazy way of doing drug development.

We'd love to see an era of new biologic drugs targeted to specific, specific genetic populations, either replacement proteins or specific drugs that target specific genetics and we don't see enough of that in the

Companies over-promoting open label Phase 2 data is a frustration because what it essentially means is that they're going into phase 3 with too many risks



UK, possibly becase these type of companies require considerably more funding than the current seed financing and government support allows.

B&M: What is your take on the current investment and funding opportunities for Biotechs?

Paul Cuddon: It's a much better landscape than it had been. Public markets have clearly demonstrated over the last 12 months that they are not shut to biopharma companies - there's been well over £500m raised by UK biopharma companies over the last 12 months.



B&M: What is your greatest concern with the industry at the moment?

Paul Cuddon: I've long campaigned on the need for commercial science to be nutured more carefully in specialist environments instead of being encouraged to set up a limited company, which entails a significant escalation of cos, which soon dwarf R&D investments. We have got the fundamental building blocks in place for a vibrant live science community: entrepreneurial tax incentives to commercialise science, the critical mass of bigger pharma companies (assuming AstraZeneca remains independent) on which to lean on for experience. We've clearly also got public markets that are receptive to leading live science companies but the problem is, if early stage science spins out too early there is not the capital available to undertake a comprehensive development plan that would position a company for IPO, which in turn would allow them to retain the value of their assets for much longer. Companies take on far too much cost too early, and then rely too heavily on government grants and a limited number of venture capital investors that they end up being positioned for a trade sale as they are not fit for IPO. Underfunding these companies just leads to an environment where some of our best science is sold to larger multinationals, who in the long term make the profits on UK investment. We would like to see far fewer companies make better use of existing government resources, which would then allow a greater concentration of venture capital, which in turn would make the businesses more suitable to IPO

and the long term betterment of the UK Biopharma Industry.

B&M: Does the current success of the IPO market that we're experiencing represent a boom rather than a bubble?

Paul Cuddon: It's difficult to say, although I certainly don't think we've got a bubble in the UK.

I've looked very closely at US Biopharma IPOs between 2009 and 2014. The earlier vintages (2009-2011) have generally reached their key catalysts and the success for a few (Pacira, Clovis, Aegerion) has offset the failures for many. The more recent vintages have generally not reached their key catalysts and so the performance of the shares reflects speculation on the likelihood of success. Until we get these results we cannot say whether the recent IPOs have been a success so in this context, yes the US is in a bit of a bubble, which may well burst if some of the best performing companies (le Intercept, Pacira, GW) begin to deliver negative clinical or commercial results.

B&M: One last question to round off the interview, where do you see the biggest opportunity for biotechs in the next 5 years?

Paul Cuddon: Tapping into the increasing amounts of genetic data that's coming out. Finding the right drug for the right patient at the right time. There is so much evidence coming out that specific genetic mutation works very differently to different mutations in the same gene. Targeting smaller groups of patients with more specific medicines is where a huge opportunity lies for UK Biopharma

Feature: MedCity comes online



Dr Eliot Forster, Executive Chair, MedCity

In April this year, the Mayor of London launched MedCity, a partnership between UCLPartners, King's Health Partners, Imperial College AHSC, Oxford, Cambridge and the Greater London Authority, to establish London and the Greater South East as a world-leading cluster for life sciences.

The vision over the next 20 years is for MedCity to position London and the greater south east of England as a world leading, interconnected region for life science research, development, manufacturing and commercialisation.

We caught up with Dr Eliot Forster, CEO of Creabilis Therapeutics and the Executive Chair of MedCity to talk us through the last couple of months progress since the launch.

B&M: First of all congratulations on your appointment as the Chair of MedCity. How did the appointment come about?

Eliot Forster: We need to go back a little bit. MedCity is a joint collaboration between the Greater London Assembly (GLA) and the three London based AHSCs in the first instance; so King's College, Imperial and UCL. The group needed someone independent from each of those organisations, with some industrial knowledge, to help them figure out how to drive economic growth from of all the great work that was coming out of London and the greater South East. There had already been some analysis undertaken and I came in and helped them further that analysis. They kindly invited me to act as an interim Chairman to help with the launch of MedCity, which I did, and subsequently to that they asked if I would do it on a permanent basis. And that's what I'm doing as the Chairman.

B&M: What are your immediate responsibilities there?

Eliot Forster: What we're doing in the first instance is staffing up MedCity and closing up financing. We've been lucky enough to receive initial seed financing from the GLA and from HEFCE, the higher education fund for England. As soon as that is done then we'll be staffing up MedCity with its small core team responsible for co-ordinating the MedCity efforts through others predominantly. The MedCity model is one of partnership, and the core team will be responsible for making those partnerships work across the key aspects of MedCity's activity.

Beyond that, as the Chairman I will run a board of directors, so the occasional board meeting, anda number of public facing responsibilities. For example, working with the press and other media MedCity has an initial five year plan and we ensure that we lay the correct foundations today in terms of operation protocols, the principles that we adopt, when we speak and when we don't and so on. The Advisory Board is critical to our success through its ability to give us feedback on our progress and to give strategic direction as to what they believe we should be doing in order to maximise the economic value of Life Science activity. And of course acting as ambassadors for MedCity. We've got some fantastic advisors.

B&M: It reads like the Who's Who of the UK bioscience industry which is incredible. Are you likely to add to that list?

Eliot Forster: We've been very lucky with the support and we're delighted with it. Certainly the initial discussions from the first Advisory Board meeting suggested that weneed to continue to expand our board membership to ensure that MedCity is aligned with strategic goals set by those members.

B&M: You mentioned the immediate goals, staffing and organisations. Am I right also in saying you had your first Advisory Board meeting a couple of weeks ago? How did that go?

Eliot Forster: Yes we did, and they re-affirmed our initial direction. The Board took the important first step in the alignment across the areas which we anticipate will resonate with industry and other 'constituents' of MedCity. Geographically, MedCity spans from Oxford through London to Cambridge, along the coast and everything in between. But we also have real important partnerships with the Cardiff Hub and the Northern Health Science Alliance, which was launched just a few weeks ago. So we've got this geographic dimension, and therefore all those institutions that sit within to navigate and support where we can. In addition to that we've deliberately set out to bring together elements of life sciences that are not obviously synchronous at first glance.



These include the academic community, the NHS, which fit together well. The life Sciencesndustry, that should naturally fit into this dynamic, but we've then we've also brought into that the charitable sector, local and regional government. and trade associations. Thedea is to be thinking about the future of life sciences rather than life sciences past which is why we do simple things like where we launched – looking to the future of Life Sciences . This is all about anticipating what needs are going to be and what new alliances will be needed in order to innovate in the future.

We've defined life sciences very broadly. We're inviting pharma, medtech, diagnostics, but also digital tech or digital health. Digital Health is a very important component in what we are going to do in MedCity. In fact some of our early first focus will be in digital health space and bringing that to bear in the life sciences market. We believe that all of these elements are going to need to be integrated to innovate our way around health needs of the future.

B&M: MedCity is a collaboration between the Mayor of London and the Capital's three Academic Health Science Centres - Imperial College Academic Health Science Centre, King's Health Partners and UCL Partners. But how do you see it fitting in across existing organisations across the Golden Triangle?

Eliot Forster: The intent of MedCity is not to be a central portal or a management organisation; its real intent is to be a catalyst for economic growth in Life Sciences. It's intent is to create a new communications and contacts portal for our 'customers', but being clear that it is only one of many options that exist in the life science sector. Our way of working is through



💓 Tweet this!

our partners and our goal is to stimulate more collaboration, to create new companies, more jobs and better therapies in Life Sciences.In the greater South East in the first instance, but clearly across the whole of the UK ultimately. We are also thinking about how we connect in our sector. If you narrow all the way down to the geography of London, there's an attractiveness of the 'Euston corridor' with where the Crick Institute will be, where the Wellcome Trust and a number of companies already are. This area specifically,has very good connectivity into Oxford and Cambridge by rail in particular. So there is some thinking beginning to evolve there and maybe that could act as a front door. Over the next couple of months we will be in Cambridge and Oxford, and soon thereafter host coastal life sciences community event as well. .

B&M: At the moment is MedCity based out of the Wellcome Trust, is that its holding bay at the moment?

Eliot Forster: Exactly, we have taken temporary accommodation for which we are grateful. The Gibbs Building is a great place to meet people and again centrally located on the Euston Road. We're in the midst of thinking about and looking for more permanent places; figuring out how the place would reflect the intent of MedCity.

B&M: Did much influence come from the lessons learned from TechCity, or has it been completely separate and the elements you're driving on MedCity are wholly different?

Eliot Forster: Well clearly a different industry but no, the philosophy is very similar. Certainly from the GLA perspective, the success of TechCity was something they wish to rekindle through MedCity. It's about creating a platform on which the industries can thrive. That's in terms of policy, it's in terms of managing the environment as much as it can be, encouraging investment and so on. All of those elements of TechCity we're hoping to mimic in MedCity in the same sort of way.

B&M: You mentioned the GLA. Kit Malthouse is obviously very much involved and is a driving force

behind the endeavour.

Eliot Forster: My impression would be that he sees MedCity first and foremost as a vehicle for creating new business, growing the economy and with that creating new jobs. But I can't help but notice that he really enthuses about biotech, medtech, and the life-sciences in general. He certainly has real insights into Life Sciences sector and we are grateful for his continued support.

B&M: There's clearly a five year plan here, but what do you see as the greatest challenge to achieving what you're setting out?

Eliot Forster: I think one of the challenges that's clear for us is being able to articulate what the offer is from the life sciences community across the greater South East. I think that's simply a case of learning, growing of the understanding of what's available and clearly communicating that. The biggest gap, and I think this is very important, is investment. Few of the aspirations of MedCity will come to fruition in the way they could unless we have a step change in the scale and the nature of investment in the life sciences in the greater southeast and the UK in general. We believe thisis the biggest challenge for us, focussing the attention of the financial community of London on life sciences and saying there is opportunity here not just for wealth creation but an opportunity through investment to deal with the challenges to our society as a whole; the challenges of diseases of ageing, degenerative diseases, greater incidence of cancers and the challenges of new forms of infection.

As I say I think investment is the key, for me and for all



of us, that's the biggest challenge. If we could get only a fraction of 1% of all of the capital churn that goes on through the city invested in life sciences then that would be transformational!

B&M: That strikes itself to me as being, one of the key contributors to success in the immediate term; engaging with the investor community and leveraging their capital?

Eliot Forster: Exactly, building the awareness of life sciences and the opportunity it brings, making sure that, on a human level, the investors, fund managers and so on, understand more about Life sciences. It is our challenge and as MedCity we will strive to do better at it

Biotech and Money London 21-22 October 2014

Biotech and Money London is the first of a new must-attend conference series for c-level biopharma executives.

Taking place on Wednesday, 22 October at an exclusive London venue, this one-day event with a pre-day gala dinner will provide the crowd sourced insight, strategies and tactics to enable more effective funding, investment and partnering within your business.

Develop valuable relationships with the pharma and the financial community, find new business partners, and strengthen your global networks. Its the first genuine peer-topeer event of its kind.

The event features a series of keynote sessions, group discussions, interactive roundtables, fireside panels and a parallel track to conduct structured 1-2-1 partnering. **PLUS** all biotech's can present their research to investors and partners through the industry's first virtual platform.

Find out more and book your place now at **www.biotechandmoney.com/events**



biotechancemoney bringing deals to life

LONDON – 21-22 October 2014 PARIS – 25-26 November 2014 MUNICH – 24-25 February 2015 EU AGM MADRID– 20-22 April 2015

Biotech and Money meetings provide a forum for the world's leading bioscience players to develop valuable relationships, find new business partners, and strengthen their global networks – all in an informal and relaxed environment.

If building close relationships with the driving elite of the biotech industry at the most senior levels can be useful, we welcome you to join us.

What are Biotech and Money meetings?	What to expect	Who can attend
Biotech and Money assemblies are 2-day gatherings of senior biopharma executives engaged in the development of therapeutics, diagnostics and medical devices. They differ from your traditional conferences through its innovative interactive group discussion groups where you can immerse yourself in a dynamic environment where everybody participates, it's unrivalled opportunities for informal networking and partnership discussions, and it's focus on crowdsourcing solutions. It provides a stage for companies developing innovative research and places them firmly in the sights of those organisations with investment and partnering capabilities and intentions.	 Biotech and Money meetings deliver conference formats that are focused on genuine peer-to-peer interaction. They educate, provide real outcomes and offer physical take homes. We don't do Powerpoint! Biotech and Money also provides high-level pre-qualified networking and deal making opportunities. We don't do exhibition! TED-style keynote sessions Interactive discussion groups based on your business needs. Crowdsourced roundtable sessions Fireside chats Online scientific presentations of all Biotech attendees Pre-event 1-2-1 networking platform For all Biotech attendees, an online virtual platform provides you opportunity to present your research to the conference audience prior to, during and after the conference. 	 Biotech CxO's Pharmaceutical BD&L Pharmaceutical Therapeutic Heads Academic Institutions/Incubators Governmental Bodies Private Equity/Venture Capital Corporate Venture Arms Law Firms (corporate, transactional, IP and regulatory) Global consultants (corporate, transactional and M&A advisory) Investment Banks (capital raising, financing and M&A advisory) Nb. Biotech and Money events do not accept attendance from company profiles from outside the above listed.

Feature: What is keeping Biotech CEOs awake at night?



What keeps Biotech CEOs awake at night?

What are the challenges that give biotech CEOs headaches? What are the issues that cause them the most consternation? To find out, we've been interviewing several biotech CEOs in the UK. Below is a collection of a few of their responses.

Understanding Biotech headaches

B&M: What is keeping you awake at night?

Tim Mitchell, CEO, Sareum: The challenge is to get our programme into the clinic with the funds we can raise from retail investors. We have our sights on becoming a deal-making clinical stage company with institutional backing, so it's about getting to the clinic as fast as we can.

Malcolm Young, CEO, e-therapeutics: I'm often asked that question and my default biotech CEO answer is: drug failure - that's definitely not a good thing! I think with our assets we have operated our platforms as fully as we can, and if we are right that it's a more realistic approach to what happens when a drug interacts with the body, the probability of a blow-up is slightly lower. So I'd say that's not a huge worry specifically for me. I think more strategically there are a number of issues: one thing is that if all goes well and the data package around our cancer asset is looking good in late 2017, we'd be looking to out-licence that to a much larger partner in 2018. If it looks good that's likely to happen. Then, developing earlier stage assets that come from our discovery platform will be critical so most my focus at the moment is on developing the next generation after this asset has gone.

Eddie Blair, CEO, GeneFirst: It's finding the killer application. We have four technologies, and I need to work out which one I should back in which application area. Once I've made that decision, I need to stick with it, but what we're giving up to do could be massive. It's the opportunity cost that keeps me a wake – we're picking a winner and the fear is that we may have missed out on picking the biggest winner.

Davidson Ateh, CEO, BioMoti: Money, money, money! We have compelling data, detailed plans and budgets for formal preclinical development to reach clinical trials - we strongly believe it is just a matter of getting this funding in. Our major block is getting the money in so we can move our lead program forward.

Darrin Disley, CEO, Horizon Discovery: I think it's how do we deploy the money we raised from our IPO– specifically, how do we deploy it in a way that doesn't overcook the business. We're very frugal with every pound and the danger is now you've got a lot of cash that you put it to work in ways that are not as efficient as they should be.

Eddie Littler, CEO, Domainex: What keeps me awake at night is worrying if we have sufficient resources to make sure we can take the projects we have, which we really believe in, we're really committed to, to get them to the value point in the right time.

At the end of the day it all boils down to money but then it boils down to some of the key infrastructure as well. Because we're in the service business we know very well that you can't cover all the aspects of a programme, it's impossible to do it. So you end up working with specialists, CRO's and service companies, and there is a lot of risk associated with that. No matter how much work you put behind the diligence of that contract research organisation, you talk to previous clients, you look at the data, you see and present, you have meetings with them - you still can't prevent something happening that you don't have control of, yet the consequences are really quite serious. A bad study, a bad piece of work can set you back a year and could waste a lot of time and money.

So, what does it boil down to?

Running a successful biotech business is clearly a highly complex and demanding job. There are a multitude of challenges that biotech CEOs must overcome to succeed. While the below list is far from exhaustive, I think the biggest fears facing CEOs can be summarized as follows:

- Drug Failure probably the single biggest concern.
- Funding whether from angels, VCs or retail investors, getting the monies together to advance their pipeline is a chief concern.
- **Opportunity cost** picking the winner. As Eddie Blair points out, the fear they may back the wrong horse causes great anxiety.
- Efficiency whether it be in deployment of new funds, or just remaining a lean operation, clearly running a tight ship is a top priority.
- Mitigating technical and operational risk picking the right CRO and other specialists partners, and doing as much due diligence to ensure the quality of research and data is up to scratch.

Obviously the challenges vary depends on what stage of development the biotech is in. For Davidson at BioMoti, an early stage biotech, clearly funding is the biggest issue, while for Darrin at Horizon, who have just raised a nice pot of cash, the challenge is more how to spend the money they've raised.

The funding and investment outlook: Stormy or Sunny?

Biotech CEOs take on the funding and investment climate and prospects for the future

The funding and investment climate definitely seems to have picked up for biotech's over the past year. Still, many biotech CEOs fret about the dearth of opportunities – particularly for early stage biotech. We've been talking to biotech's to understand their view on the current investment and funding climate – how confident they are for the future, as well as their tips for navigating the markets and pitching to investors in this climate.

Tim Mitchell, CEO, Sareum: I don't think it's in a great place at the moment. The VC model is in a state of flux – they've finally realised the 10 year investment model is too short and they are busy reinventing themselves. The public markets are improving, but it's still very tough for early stage companies unless they have a revenue stream.

Davidson Ateh, CEO, BioMoti: We are more optimistic than we were before. We were founded in 2009, and those were really bleak times, but we were lucky enough to have been incubated within the University and get to a good proof-of-concept standard. We are seeing increasing interest from the private sector in the biotech industry. Innovative public-private schemes like the TSB Biomedical Catalyst make it possible to get some funding and use that as a carrot to attract matched VC or private investment. However, the Biomedical Catalyst competition has more recently become very fierce since significantly well funded companies or



those spun out from large Pharma are increasingly also applying for this public support. We think, there may be a case for the TSB to consider revising the scheme's eligibility criteria, so that it can continue to serve much earlier stage companies with compelling ideas, but that may still lack the extensive data packages some of these excellent and more developed companies have. So in the last 4-5 years the climate has been horrible, however the feeling is improving all the time particularly now I guess because of the run of the IPOs in the US and, with a few happening in the UK I'm slightly more optimistic. Still, it is not easy and is an incredibly difficult environment to raise cash! Eddie Blair, CEO, Genefirst: Compared to the US, we are a little bit depressed, but there is clearly now an appetite to invest in the right thing. The big money is there, the angels are always there to nickel and dime, but there is still that gap, that valley of death between 2 and 10 million. Longer term, if you can get through that valley of death the chances of getting a public listing and getting decent investment is looking quite promising.

Malcolm Young, CEO, e-therapeutics: I've heard a lot of gloom but I don't share that gloom. I suppose that reflects the fact that I've raised £60m in the last couple of years. What I think is this: If you put yourselves in the minds of investors, what they like about biotech is the colossal upside potential. What they don't like is the propensity of these things to bomb and to lose their shirt.

Just before the first major funding round that we had 2 or 3 years ago, rather a lot of British biotech had in fact blown up, no residual value effectively. Renova, Minster, Neuropharm, it was like the first day of the Somme. When we were going into that round where we needed to raise a relatively small amount of money for clinical trial work, I expected that I would have to put a telephone directory down the back of my trousers. In fact what happened was that they responded to our pitch by liking the context we gave of the upside potential.

Almost without our noticing it, our proposition had covered off the upside of the opportunity, every business being free and possibly bigger because we've got a platform that can produce new, good stuff and we're not just developing things that other people have discovered. So we demonstrated plenty of upside potential.

I think the proposition for biotechs to investors is best when it's mindful of their need for upside potential and also downside risk. In our case we do that by having products that look pretty exciting and also a platform that produced those things that can produce more. So rather than leaving the telephone directory down the back of my trousers, we started off looking at £5m or something in a round and eventually it topped over £20m and that's because investors wanted us to turn back on and really get the discovery platform moving again. I think as long as those basic features that investors care about are paid attention to, it isn't too difficult to raise money actually.

It seems to have picked up. I know everyone says this, but because we have the service business plus the investment, we sort of have lots of antennae out there, and in both parts of business we're seeing movement. We're seeing a lot more biotech coming to us on the service side and wanting us to do things for them and certainly when I went out to get investment about a year ago now, it was quite a hard time to raise investment at that point in time. I'm not saying that it's getting really easy, but I have seen directly a number of people that we were talking to are now much more positive about investing and actually coming back to us and asking us 'are things progressing, can we have another discussion?' So, I am saying that the market is picking up. Its not exploding, but it's coming up in a sensible way, although I think we're still seeing decision making taking longer than it used to. That still seems to be something that's left over from the recession in 2008.

B&M: Okay, so would you say you're fairly optimistic about the prospects for a biotech seeking capital and funding?

Eddie Littler, CEO, Domainex: More than I was. I think there is still a challenge for British biotech companies. You see a much more dynamic positive atmosphere over in the States compared to the UK. I think UK biotech are still quite challenged to raise money and I think the other aspect of it is of course is that money tends to come in in tranches; the sort of attitude from British investors is to keep companies somewhat short of cash to drive forward the milestones. In the States, you get a very different attitude, which is to fund the



If you put yourselves in the minds of investors, what they like about biotech is the colossal upside potential. What they don't like is the propensity of these things to bomb and to lose their shirt.....l think the proposition for biotechs to investors is best when it's mindful of their need for upside potential and also downside risk.

companies properly for them to achieve the milestones. They quite rightly identify one of the key parameters as time to the market place, so by funding a company properly you'll get the time to the market place or the milestone, whether or not it's an IPO or a trade sale, is shortened and they're much more focused on achieving that. In the UK that dynamic doesn't seem to be quite as important to investors and they seem to want to be more in control of the cash flow of companies, they have different philosophies on investing. B&M: Why do you think that is? Do you have an opinion on why there's a more cautious approach in Britain than in the US?

Eddie Littler, CEO, Domainex: I think we have to recognise that there is a difference in the cultures in the UK and the USA. I think also because US investors had some very positive experiences in the biotech sector, some fantastic companies have come through like Gilead, who've made investors a lot of money.

In the UK that hasn't been so apparent. A number of biotechs have got to that stage where they seem to be crossing that threshold and then they've been acquired, so they've never really seen the chain going forward to the point where they see those big returns on investment.

B&M: Do you think there are sufficient funding opportunities out there at the moment? What's your take on the current funding and investment opportunities?

David Williams, CEO, Discuva: It's the best environment we've ever had for making companies in the UK, especially in the biotech sector. 10 years ago if you'd asked me I'd say go and see a VC, but now I wouldn't. There's not really places for investors to put their money now is there really? Banks are quite unstable, gilts are not as good as they ever were. Which makes it a brilliant environment for wheedling money out of investors because they want to have opportunities to increase the value of the capital. So, if there's a good opportunity, then why wouldn't you invest? I'd certainly invest if I saw a good company, because I'm going to get a better return

SUBSCRIPTION, MEMBERSHIP AND PARTNERSHIP

Biotech and Money offers three levels of participation within its community: Subscription, Membership and Partnership.

Each level carry's its own series of benefits. Simply find the one that best suits your needs. Each subsequent level offers a greater degree of services and benefits, as outlined below.

Please note Biotech and Money uses a strict vetting process on all applications received for Membership and Partnership, meaning certain profiles may be refused acceptance into the community. Subscription however remains open to all biopharma profiles.

SUBSCRIBER	MEMBER	PARTNER
Free	£495*	Enquire
	*Per Year, Free for Biotechs!	
Subscription to Biotech and Money bi- monthly magazine, <i>Drugs & Dealers</i>	Same benefit as subscriber, PLUS	Same benefits as Member, PLUS
Subscription to weekly e-newsletter and access to blog articles	Access to online portal, where you can view 00's of the biotech investment presentations and corporate profiles	Release regular market commentary reports, case studies, whitepapers and interviews with your top executives into the community
-	Full online corporate profile (company presentation/video/ communication pieces on our online platform available only to Biotech)	Dedicated advertising space in our magazine Drugs & Dealers
-	Invites and guaranteed access to our private networking functions and member city socials	Enhanced global branding and profilling activities at our flagship events, memebers socials and on our website
-	20% discount on delegate passes to the AGM and Awards (RRP £1995) - SAVE £400	Key speaking opportunities at our events including Chairman, Keynote Speaker, Panelist, Master-class Leader and Dinner Speaker
-	15% discount on delegate passes to any 2-day Biotech and Money conference (RRP £1495 per event) SAVE £225	Complimentary tickets to our flagship events, AGM, and VIP tables at our awards
-	15% discount on delegate passes to any 1-day Biotech and Money conference (RRP £995 per event) SAVE £150	Opportunity to be host of a Members' Social invite only networking event
-	Priority seating at VIP roundtables and dicussion groups	-

To subscribe, become a member or partner logon to www.biotechandmoney.com, follow the appropriate prompts and complete your submission. For questions around membership or partnership please email member@biotechandmoney.com or partner@biotechandmoney.com appropriately.



Biotech and Money Ltd. The Euston Office | One Euston Square | 40 Melton St. | London | NW1 2FD Tel: +44 (0) 203 5744619 | Email: info@biotechandmoney.com www.biotechandmoney.com