

The UK prides itself on its scientific pedigree – some of the largest pharmaceutical discoveries of the past have been made in there. From the discovery of penicillin to helping map the human genome, the UK has been, and continues to be, an innovator in the world pharmaceutical and biotech industries, yet it lags behind much of the Western world in its uptake rate of new medicines.

The Association of the British Pharmaceutical Industry (ABPI) is the trade association for more than 75 UK companies producing prescription medicines. Dr Richard Barker, ABPI director general, explains that while the UK has one of the strongest pharmaceutical industries in the world, it is coming under growing pressure to make more of a mark in clinical development and it cannot afford to take its past reputation for granted.

‘The UK industry is one of the strongest worldwide – the second most productive in terms of coming up with new molecules,’ he says. ‘But it’s under increasing pressure from around the world in terms of basic research and clinical development, particularly from India, China and Singapore – and from Eastern Europe in terms of clinical development. So it cannot rest on its laurels. But the industry continues to punch very substantially above its weight. In terms of share of global clinical trials, the UK has about 9% of clinical trials and only 3.5% of the world market.’

Welcome support

The government-commissioned review by Sir David Cooksey on how to build an agreement on the best institutional arrangements for the funding of health research is a major

boost for the public sector and medical research, and will encourage more public-private partnerships, enabling the UK to build on its long-standing strengths. The review also placed renewed emphasis on translational medicine, which Barker believes will be a major strength of the UK industry in the future.

The UK has also become a significant participant in the Innovative Medicines Initiative (IMI), which aims to remove bottlenecks hampering the efficiency of the development of new medicines. The IMI will put research at the heart of its activities, enabling European biopharma companies to become world leaders, and provide faster access to better medicines.

The ABPI is working hard to improve the speed of clinical research and contain the cost of clinical trials in the UK. ‘No-one doubts that the UK has a high-quality reputation, but it has allowed itself to become much too fragmented and disappointingly slow in recruiting patients,’ says Barker.

To this end, the ABPI has set up a model clinical trial agreement, which means that instead of every NHS Trust having separate conversations with the sponsoring company, there will be a single agreement that can be signed. The agreements will allow for greater transparency and aim to eliminate unfair overheads in clinical trials. Of course, it is hard to mention clinical trials in the UK without the disastrous TGN1412 trial coming to mind. In March 2006, TGN1412 hit the headlines when its first clinical trials resulted in catastrophic systematic failure and multiple organ

The UK has a successful history in the field of pharma and biotechnology, but its recent progress in drug discovery and new medicines has been surpassed by the Far East and the rest of Europe. Dr Richard Barker, ABPI director general, tells James Drury why he believes the country is still an attractive investment for world pharma.

DON'T RULE OUT BRITANNIA

WHY THE UK?

- Strong science base
- Gateway to Europe
- Focus on translational medicine and clinical development
- Close relationship with the government

dysfunction among its human subjects. ‘That was one of the big events of 2006,’ says Barker. ‘In conjunction with the Bioindustry Association, we immediately set up a task force to look at how this came about and how it could be prevented in the future.’

The resulting report by Professor Gordon Duff came up with a new concept, the minimal anticipated biological effect level, to help calculate the correct starting dose for this type of unique molecule. But the disastrous events of the trials could have happened anywhere. ‘It’s worth noting that it had received approval to be conducted in Germany,’ adds Barker. ‘The world will look at the recommendations from the Duff Commission and want to adopt them.’

Unique strength

The UK is seeking to maintain its strong leadership position in terms of R&D, but acknowledges that it is also facing increasing competition from Asia regarding cost differences. Yet Barker believes that by focusing on the areas where the UK has a unique advantage, such as translational medicine, it will remain a competitive force to be reckoned with.

‘Other areas include phase 1 and phase 2 clinical studies and we will probably want to focus our energies on fewer diseases and build world-class research networks – one-stop shops for particular forms of cancer and cardiovascular conditions,’ he says, adding that the NHS national programme for IT, Connecting For Health, could provide the UK with its USP through an electronic central system that finds patients for trials.

The UK lags behind the rest of Europe in its uptake of new medicines, and the industry is lobbying hard on the issue: a recent poll for *Pharmafocus* found that while the UK spent less of its prescribing budget on medicines launched in the last five years than France, Germany, Spain or Italy, 58% of doctors thought the UK’s uptake was ‘about right’.

‘The UK is an extremely rich country,’ says Barker. ‘We have all kinds of technologies, so to have the same uptake levels as former-Soviet countries is not a tenable position.’

According to Barker, there are many attractions for pharma and biotech companies looking to have a presence in the UK:

- The strength of its science base is formidable.
- It is a bridge to Europe, with few language barriers for many companies – a strength that often means it attracts the European headquarters of US and Japanese companies.
- It is currently positioning itself as a leader in translational medicine and clinical development.
- The pharma industry enjoys an unusually close relationship with the government and, although the two sides do not always agree, there is regular dialogue through a twice-yearly ministerial strategy group.
- The pharmaceutical industry is the largest private R&D investor in the UK.
- Economically, the UK is very strong: its pharmaceutical trade balance is £3 billion in its favour, and London is the financial capital of the world.

SCOTTISH SUCCESS STORY

One of the UK’s outstanding achievements is Scotland’s biotech sector. Famed for more than Dolly the cloned sheep, Scotland houses all aspects of the life sciences industry – from drug discovery and development to cancer research, genomics and biomanufacturing.

For a country with around five million people, Scotland produces twice as many life sciences professionals as other EU countries. Pharma-related business activity in Scotland directly contributes around £830 million annually to the gross output of the Scottish economy, adds over £350 million to the gross value of the economy and directly injects around £230 million through gross salaries.

In Europe, the UK has twice as many products in development as its main competitor, Germany.

Bioscience powerhouse

It is not just pharmaceuticals that perform strongly; the UK bioscience industry is widely recognised as one of the most advanced in the world. Its innovative and entrepreneurial sector is the largest in Europe and second only to the US.

There are about 50 UK companies and five non-UK companies developing biopharmaceutical products in the UK, according to the BioIndustry Association. The UK’s work on the Human Genome Project and further genomic projects through the Wellcome Trust Sanger Institute is renowned worldwide. In Europe, the UK has twice as many products in development as its main competitor, Germany.

Transparent winner

The UK’s pharmaceutical industry has received much criticism from the media, but this is not in sync with public perception. There is a big gap between the tone of press comment and what the public – the patient and the patient’s family – thinks. They appreciate the huge advances that pharma has made in fields such as cancer, heart disease and asthma over the last few decades.

Barker says the difference between media reports and public perception is the result of health remaining a huge political issue in the media, which seizes on anything that goes wrong in the healthcare sector. ‘But I think we can change the situation if we are more outgoing about what the industry does and more focussed on transparency,’ he explains. ‘The more transparent and actively educated this industry is in what it does, the less scope there is for this narrative.’

The UK pharmaceutical industry’s achievements during the 20th century represent one of the country’s greatest successes. It is now facing a number of challenges in the future, but with exemplary science as a basis, as well as a dynamic and adaptable industry, it looks as though history will repeat itself. **END**