

LIFE SCIENCES AND HEALTHCARE

INTRODUCTION

The life sciences and healthcare industry is one of the fastest growing sectors in India. In recent months, the most notably booming subsectors include: biotechnology, generic drug manufacture, building new hospitals and medical infrastructure, and medical devices.

To explore potential opportunities in technology collaboration and development, we are supporting a UKTI-led delegation of UK universities to India during 23-27 June.

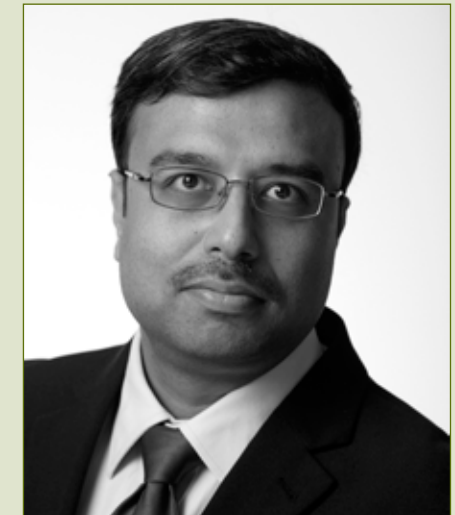
UKIBC's Life sciences and Healthcare sector forum seeks to connect UK companies to the India opportunity. In this report, we present the latest developments and potential business opportunities. For more information please do get in touch.

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FURTHER INFORMATION

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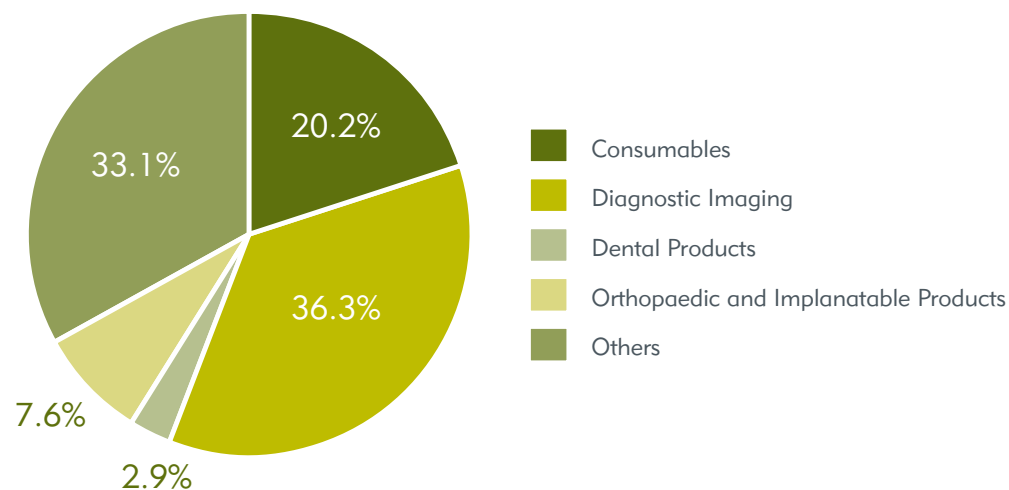


MARKET UPDATE

The life sciences and healthcare sector in India is growing rapidly. According to an Epsicom Business Intelligence report, private sector investment in healthcare has been increasing since the mid 1980s and it is expected that future increased demand will come from private sector hospitals. Companies such as Apollo Hospitals Group, Fortis Healthcare and Max India have been building hospitals equipped to a very high standard and capable of undertaking complex procedures.

The best of India's private hospitals aim to attract an increasing number of health tourists - private patients from overseas who are able to take advantage of India's good healthcare services at relatively low prices. There is certainly an opportunity for UK and other global manufacturers of high quality products. Though there is a market (especially in the private sector) for high tech equipment, the Indian market definitely considers value for money. Given that India has a very good manufacturing and IT base, there are opportunities for UK companies to enter into collaborative manufacturing and technology development and transfer. Many international players are keen to take advantage the expertise that India has to offer, and the low cost base to look at accessing not only the Indian market but other developing markets as well.

The medical devices market is possibly one of the key areas for potential collaboration for UK businesses to explore in India. The major components of the medical devices market in India is shown in the chart below:



Source: Epsicom research

At the other end of the scale, India has a vast rural population, for whom all but basic healthcare provision will remain out of reach for the foreseeable future. There are a number of ongoing World Bank assisted projects that aim to improve the healthcare infrastructure.

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INDIAN GOVERNMENT WAIVES OFF PLANNED 5% SERVICE TAX ON PRIVATE HEALTHCARE SERVICES

To boost private sector participation in healthcare services and infrastructure creation, the Indian government has rolled back the 5% planned tax on healthcare services. The tax has been exempted both in respect of services provided by hospitals as well diagnostic tests.

The medical tourism industry in India is also relieved with this move as there were concerns that it would make private treatment in India more expensive and as such the healthcare facilities would have been at a competitive disadvantage against other Asian markets. The Indian medical tourism industry has been growing substantially and is projected to generate over £1.2 billion a year in revenue by 2012, with growing number of people visiting from Western Europe, North America and Africa for receiving medical treatment.

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BIOTECH

INDIAN BIOTECHNOLOGY REGULATORY BILL LIKELY TO BE PASSED BY PARLIAMENT

The biotech sector in India is expected to see significant changes in the near future. According to news reports, the National Biotechnology Regulatory Authority (NBRA) Bill is likely to be passed in the ongoing session of the Indian Parliament. The Department of Biotechnology (DBT) is confident that the new legislation, which would now take the industry to the next level of growth, will be passed, stated Dr MK Bhan, secretary, DBT.

The new Bill is meant to address burning issues the sector is facing today. Stressing that two challenges the country is facing now are the issue of safety of biotech products and the quality of scientists.

In order to strengthen the support it provides to the industry, the recent Annual Union Budget has allocated DBT a 30% increase in funding. There is also tremendous commitment among the state governments and the DBT is willing to invest more resources, he said.

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GRANT THORNTON STUDY PREDICTS INCREASED M&A ACTIVITY IN THE BIOTECH SECTOR IN INDIA

In its recent report, Grant Thornton India indicated that the biotechnology industry in India is likely to see a significant increase in merger and acquisition (M&A) activity. This will be primarily on the back of drastic restructuring that companies from the West undertook post the recession. However, challenges such as funding constraints may continue to persist, even as the Asian biotech economy continues to grow and focuses on R&D.

Mahadevan Narayanamoni, national leader (healthcare and life sciences advisory), Grant Thornton India, said: "Asia promises to be a biotechnology hub and this is made evident by the growing number of cross-border collaborations in 2010. India, China and Japan, which witnessed largest deals last year, signify that Asia is shifting strategically from a mere outsourcing destination to a centre of innovation."

The Indian biotech industry crossed the \$3-billion mark in 2010, witnessing a 23 per cent growth over the previous year. Of this, while the share of domestic firms stood at 47 per cent, exports accounted for 53 per cent of the overall revenues. India's high-skill and low-cost advantage is said to have helped in gaining export contracts and clinical research bioservices. According to the paper, the global marketing alliance between Biocon and drug-maker Pfizer for commercialisation of insulin biosimilar marks the trend.

Last year, there were 270 bio pharmaceutical alliances globally, of which 93 involved at least one Asian country. Of the 93, Japan leads with 41 alliances, while China has 22 and India registered 13 alliances. "Reeling under the pressures of imminent patent expiries, the developed markets have relied on the acquisition or alliance route to sustain the growth. Asia has, therefore, witnessed many M&As and alliances over the last three years which marked a beginning of the ten year strategy by the West," the report says.

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INDIAN BIOTECH INDUSTRY TO REACH \$10 BILLION BY 2015

The Indian biotechnology sector is expected to touch the £6 billion mark by 2015 on the back of emerging opportunities across various verticals, such as biopharma and agri-biotechnology.

Presently, the biotechnology sector in the country is estimated to be around \$4 billion of which around 40 per cent is contributed by the southern state of Karnataka.

At a recent biotechnology event, Bangalore Bio 2011, the Karnataka chief minister said that "Bangalore hosts 52 per cent of the core biotechnology companies in the country. There is clearly a favourable ecosystem for biotechnology industry in the

state and further efforts are being made to boost growth of the industry". There are four biotechnology parks in Karnataka and 12 biotech finishing schools to create the skilled workforce are being set up.

In her address, Ms Kiran Mazumdar-Shaw, CMD of Biocon said, "The whole world is looking towards emerging economies for providing solutions to global health and other problems. As India has the necessary talent pool, cost advantage along with entrepreneurial drive, we should take the benefit of this emerging opportunity". She, however, said issues related to regulatory delays should be addressed to make the country's biotechnology industry competitive.

The Indian government and industry are keen to boost R&D and actively promote start-ups. This is likely to provide significant opportunities for UK universities to undertake collaborative research programmes with Indian organisations and to set up links with education institutes to provide training courses in this area.

Opportunities for UK businesses include joint product development, technology development and transfer, manufacturing, sourcing, etc. **UKTI is planning a delegation of 16 universities to India from 23-27 June to discuss potential collaboration between industry and academia.** To learn learning more about this visit or other upcoming activity, please feel free to contact Prasenjit Dhar at: prasenjit.dhar@ukibc.com

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INVESTMENT UPDATE

COMPANY NEWS

DR REDDY'S EXPANDS CAMBRIDGE R&D CENTRE

Indian pharma company, Dr Reddy's Laboratories has opened its newly expanded Chirotech Technology Centre, a purpose-built facility to house its laboratories and offices, at the Cambridge Science Park.

"Being located in this historic university city and in one of the leading European centres for science and innovation makes it the ideal location to expand and develop our research, development and technology capabilities. The facility will be a centre of excellence for chemistry and reinforces our commitment to building a leading edge research organisation to meet the innovation needs of our customers," said GV Prasad, vice chairman and CEO of the company.

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Dr Reddy's had acquired the Chirotech R&D facility from Dow Pharma along

with its manufacturing facility in Mirfield, in 2008 for \$32 million. The additional capacity of 33,000 ft helps to house more scientists and laboratory facilities. The company has already increased the number of scientists to 40 from the previous 30.

The additional capacity will help facilitate a further doubling of scientific staff in Chirotech while providing for further capacity additions in future, the company said. It is expected to strengthen core capabilities, build capacities in fast growing segments and allow development of other areas of expertise in chemistry and processing for use in the pharmaceutical industry. The new facility is part of the custom pharmaceutical services business unit of Dr Reddy's, and will offer these expanded services to its customers worldwide.

MERCK AND WELLCOME TRUST PLAN R&D CENTRE IN INDIA

MSD India, the fully-owned subsidiary of US-based Merck & Co, is planning to set up a research and development (R&D) centre in India in a joint venture with UK-based Wellcome Laboratories. The centre — MSD Wellcome Trust Hilleman Laboratories - will be a 50:50 joint venture and come up with a total investment of \$130 million (approximately £78 million) aimed at developing affordable vaccines for developing countries.

"Pharmaceutical research is a long-term process and it's too early to make a comment on when the centre will be

operational. It is in preliminary stage. Currently, we are in the process of recruiting staff and scientists," said MSD India managing director K G Ananthkrishnan.

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RELIANCE INDUSTRIES PLANS MAJOR INVESTMENT IN CHEMICALS BUSINESS TO TAP GROWING HEALTHCARE MARKET

According to a report in the Economic Times, Reliance Industries Limited (RIL) is drawing up ambitious plans to be a world leader in rubber, and is investing over £7 billion in the chemicals business to tap the rapidly-growing market for hygiene and healthcare products. According to Mr Mukesh Ambani, the Chairman of RIL, "We believe that hygiene will be a very big market in a rapidly prospering India where people's aspirations are rising. You look at diapers, female hygiene - most of the super absorbents come from our industry".

Reliance has the advantage of massive plants such as the world's biggest refining complex at Jamnagar that can supply feedstock used in the chemical industry. The new business would be built at existing locations. The feedstock-based units would

be at the refining hub of Jamnagar.

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GSK INTERESTED IN VACCINE DIVISION OF INDIAN COMPANY

According to newspaper reports, GlaxoSmithKline Biologicals is believed to be in talks with the Hyderabad-based Biological E Ltd (BE) to purchase its vaccines division. This division produces and markets a range of paediatric and adult vaccines and has a sizeable market share in the Indian vaccine market.

BE has three key divisions, biologics, pharma and public markets. Biologics makes paediatric and adult vaccines, while public markets is in charge of distributing all kinds of vaccines to the state and central govt and public health services. Its pharma division manufactures solid dosage forms, liquid orals, syrups and active pharmaceutical ingredients catering to both local and international markets.

Earlier, GSK was also believed to be interested in Shantha Biotech which was eventually sold to French drugmaker Sanofi's vaccine division for \$780 million in 2009.

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APOLLO HOSPITALS TO SET UP 20 MORE HOSPITALS IN 2 YEARS IN INDIA

One of India's largest private hospital companies, Apollo Hospitals Enterprise Ltd is planning to invest around £137 million over the next two years, to add 2,500 beds. The company expects the funds for the proposed expansion to come from the proceedings of the proposed Qualified Institutional Placement (QIP) and other modes. Besides, the hospital chain also plans to set up two colleges to address human resources shortages.

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At present the Chennai-based Apollo Hospitals has around 8,500 beds across the

country. The new beds will be added through 20 new hospitals, across southern and northern parts of India, and two in Mumbai.

According to Apollo, it would like to double its current infrastructure over the next few years. It feels that the constraints for expansion will not come from lack of funds, but from trained human resources. To address the human resource issue, Apollo Hospitals is planning two medical colleges over the next 12-24 months. Already, the hospital runs nursing and other training institutions.

All the activities that Apollo and other Indian private sector hospital groups like Fortis and Max are undertaking will provide significant opportunities to UK businesses. From those involved with planning and construction, through medical equipment supply, service providers, and training providers. **If you are keen to explore the various opportunities that the India market offers, please contact Prasenjit Dhar at prasenjit.dhar@ukibc.com.**

FORTIS TO SET UP STEM CELLS CLINICAL TRIAL CENTRE

According to newspaper reports, Fortis Healthcare, India's second biggest private healthcare chain, has joined hands with technology solutions provider TotipotentRX Cell Therapy Pvt Ltd, to set up centres of excellence offering cellular therapies and stem cell clinical trials, across select Fortis hospitals in India.

These centres will undertake stem cell clinical research procedures relating to diabetes, cancer, cardiovascular disease, and neurological ischemia. TotipotentRX will also set up cGMP laboratories in select hospitals, for processing stem cells before transplantation to patients. The clinical trials will focus on new regenerative therapies, using promising adult stem cell sources like cord blood, bone marrow and adipose tissue. As part of the alliance, a stem cell medical board will be created to oversee the medical research programme, ensure execution and monitor the progress

following international and Indian ethical guidelines. The board will also impart training and create awareness around the benefits of stem cell therapy across India.

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US-based Totipotent Rx is a leading technology provider to stem cell banks, hospitals, research institution and diagnostic centres that handle such therapies and clinical trials.

Apollo Hospitals has also established a cell therapy and clinical trial centre in Hyderabad.

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UK Trade & Investment can also support your company to succeed in the Indian market. For more information on the life sciences and healthcare sector in India, you may contact:

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You may also wish to read a recent report by PwC on: "**Healthcare unwired: Health Insurance and Healthcare Access in India**". You may find a copy of the report at: http://www.pwc.com/en_IN/in/assets/pdfs/publications-2011/health_report.pdf