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## 2009 TRENDS BRIEF

# 2009 Trends to Watch: Pharmaceutical Technology

IT opportunities and leading developments in the life science industry

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## DATAMONITOR VIEW

### CATALYST

Technology markets are changing fast. This brief is essential reading for you to identify and track the key forces shaping the prospects for your business. In this piece, Datamonitor's analyst specializing in technology for the life science industry will outline the changes in your market, explain which trends will have the biggest impact, and highlight who will benefit from the fast-paced developments in pharmaceutical technology.

### SUMMARY

Datamonitor's Pharmaceutical Technology research stream provides insight into technology trends in the life science industry, particularly the pharmaceutical and biotechnology markets. This brief will explore how the application of IT solutions will benefit the global life science market. Through research and analysis, Datamonitor has identified the following trends that will shape the pharmaceutical and biotechnology markets in 2009:

- Thriving in turbulent times requires streamlining operations;
- Biotech and biomedical research will play a key role in shaping the future of the industry; and
- Pharma companies turn to the emerging markets to remain competitive on a global scale.

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### **Uncertainty looms for small biotech companies amidst the current financial crisis**

The biotech industry consists primarily of small startups that rely on funding and investments from bank loans, hedge funds, venture capitalists, and private equity firms. The global economic crisis and credit crunch has cut funding significantly for small biotech companies, resulting in numerous bankruptcies and a threat to the development of breakthrough drugs. The biotechnology research field itself is relatively sheltered from the current harsh climate, but small biotech organizations are struggling to survive. According to BIO, the biotechnology trade group, 25% of the 370 US public biotech companies have less than a six-month supply of cash available, and will soon have to declare bankruptcy if investments are not made soon. Big Pharma/Biotech companies have plenty of cash and are capable of saving some biotech companies, but since larger companies have the upper hand, they choose to be extremely selective and pay bargain prices for these small organizations. In order to survive the current turbulent waters, many small biotechs are planning to cut costs and lie low by reducing the workforces to a bare minimum, as well as halt research, until new funding is available.

While small biotechs are suffering, Big Biotechs, such as Genentech, Amgen and MedImmune, are flourishing. These organizations are worth more than a billion dollars and have an abundance of money in the bank as well as promising drug candidates in the pipeline. These companies are doing so well, that unlike their pharma counterparts, Big Biotech companies are actually expanding research facilities and looking to hire hundreds of new researchers.

There is no doubt that the biotech industry will bounce back from this troublesome period, at which point it will most likely be stronger and in better shape than ever. Technology vendors serving the small and mid-size biotech industry must be patient, as investment in new IT solutions will be relatively limited for the next couple of years. Vendors should continue to target Big Biotech, who are still affected by the financial crisis and will need to streamline operations, and will turn to IT to aid in this endeavor. In addition, technology vendors should keep a close eye on the M&A scene as pharma companies will start snapping up these bargain-priced biotechs and will need IT tools to enable biological research.

### ***Pharma companies turn to the emerging markets to remain competitive on a global scale***

Over the past few years, pharma companies have seen a downturn in drug sales in the US, which accounts for close to 43% of the market. To make up for stalling sales, Big Pharma is looking to other markets, mainly Brazil, Russia, China and India – the BRIC countries. Pharma has been slow to enter these markets, primarily because developing countries have had weak intellectual property laws and low incomes that would not be able to afford the medications. But now pharma executives are now rethinking their stance on the emerging markets. Several Big Pharma companies – Pfizer, GlaxoSmithKline, AstraZeneca and Roche to name a few – are making the emerging markets a top priority for future growth. In recent years, the drug markets in the BRIC countries have seen tremendous growth and sales in these regions will continue to soar as the regions become more ‘westernized’.

As the new US administration and European government-run healthcare systems continue to negotiate for cheaper drugs, it is understandable that Big Pharma wants to push into untapped markets, such as India and China. Many companies have already begun to increase their presence in these markets by opening research facilities in key regions or by partnering with local organizations to develop and manufacture their drugs. But Big Pharma must realize that they cannot use the same recycled sales and marketing tactics that worked in the US. They must adjust their strategies to meet the demands of a poorer working class and offer discounted drugs and education that are of particular interest in these regions. Technology vendors specializing in sales and marketing solutions, such as CRM, that have experience working in the emerging

## APPENDIX

### *Definitions and Abbreviations*

**Big Pharma** – pharmaceutical companies with yearly revenue in excess of \$10 billion.

**Biologic drug or biologics** – drugs that are derived from a living source, such as human or animal tissue, rather than synthesized from a chemical source. Biologics are primarily produced using cell culture.

**Biotechnology (biotech)** – the study and manipulation of DNA, genes, proteins, cells, and tissues to develop drugs; Using biological methodologies in the development of drugs.

**Blockbuster drug** – drug that generates at least \$1 billion in sales a year.

**eDetailing** – use of technology solutions to enhance or bypass the traditional pharma sales presentation to healthcare providers.

**Generic drug or generics** – a drug that is identical to a brand name drug whose patent has expired. A generic must be equivalent in dosage form, safety, strength, route of administration, quality, performance characteristics, and intended use.

**Life science industry** – industry consisting of pharmaceutical and biotechnology companies. Datamonitor will not cover medical device companies.

**Mid Pharma / Mid-sized pharma** – pharmaceutical companies with yearly revenue between \$1 billion and \$10 billion

**Pharmaceutical (pharma)** – the use of chemistry to develop drugs.

### *Methodology*

- **Pharmaceutical Technology Business Trends Survey** – 150 interviews with IT decision-makers at pharmaceutical and biotechnology companies in France, Germany, UK, Japan, China, India, Canada and US.
- **Primary Research/Vendor Briefings** – ongoing briefings with technology vendors serving the life science industry
- **Secondary Research** – industry publications, company annual reports and press releases, and data from public databases

### *Further reading*

Business Trends: Pharmaceutical Technology – Understanding Your Life Science Customer (DPTC0046)

Global Pharmaceutical IT Spending Forecast through 2013 (IMTC0302)

In Pursuit of the Paperless Clinical Trial: A look at EDC and CTMS (DMTC2216)

Creating a Success of ePedigree and RFID in Pharma (DMTC2200)

Addressing Key Challenges in Drug Safety (DMTC2185)