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Medicine men

By Philip B. Sheibley

By adopting a narrow therapeutic focus and responding to specific customer needs, two companies have achieved high performance in this otherwise beleaguered industry.

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These are tough times for the world's prescription drug makers. After a spate of well-publicized product safety scares, public trust in the industry has plummeted and regulators are becoming more cautious about approving medicines. Physicians, too, are getting harder to please. They complain that industry reps are more interested in sales figures than medicine, and that fewer than half of the companies offer them anything new.

That's hardly surprising. Despite a tripling in R&D spending over the past decade, the productivity of the industry's labs is declining rapidly as diseases become more complex and government oversight tightens. So rapidly, that the output of new medicines is clearly insufficient to compensate for the accelerating pace of patent expiration on big, blockbuster medicines like Lipitor, Pfizer's cholesterol treatment, which has been generating annual sales of more than \$12 billion for its maker.

As sales slump, prices are also falling. In emerging markets (one of the few opportunities for overall growth in the industry), mounting pressure for separate pricing arrangements is having a significant effect on the drug makers' profits. Brazilians, for example, can buy Abbott Laboratories' HIV drug, Kaletra, for one-eighth of what it costs in the United States. Meanwhile, imports of branded drugs and cheaper generic interlopers are gaining popularity with both physicians and their patients. In fact, generics now threaten more than three-quarters of products in the drug makers' portfolios—a significant increase from five years ago, when more than one-third of their products were safe from expiring patents and generic competition (see chart, page 4).

Meanwhile, increasingly impatient investors consistently discount the industry's growth prospects. With the exception of a recent

narrowing—due to the credit crisis and recession—the gap between the biopharmaceutical companies' performance and leading market indices has continued to widen since 2003 (see chart, page 3).

For a few companies, however, the performance picture looks very different. Two companies emerged as high-performance businesses from our recent analysis of 17 of the industry's largest drug makers. Neither is an industry giant. Yet both returned far more, in percentage terms, to shareholders than their larger competitors over the seven years covered by our research. In fact, they beat their peers, by a wide margin, on practically every measure of our High Performance Business methodology (see sidebar, page 6).

These players are clearly masters of the building blocks that sustain high performance in all the industries Accenture has studied—market focus and position, distinctive capabilities and performance anatomy. We believe, furthermore, that by successfully pricing their highly differentiated products on the basis of the value they deliver, these companies are showing one of the ways forward as the industry struggles to build new business models in the post-patent era (see sidebar, page 5).

Segment focus

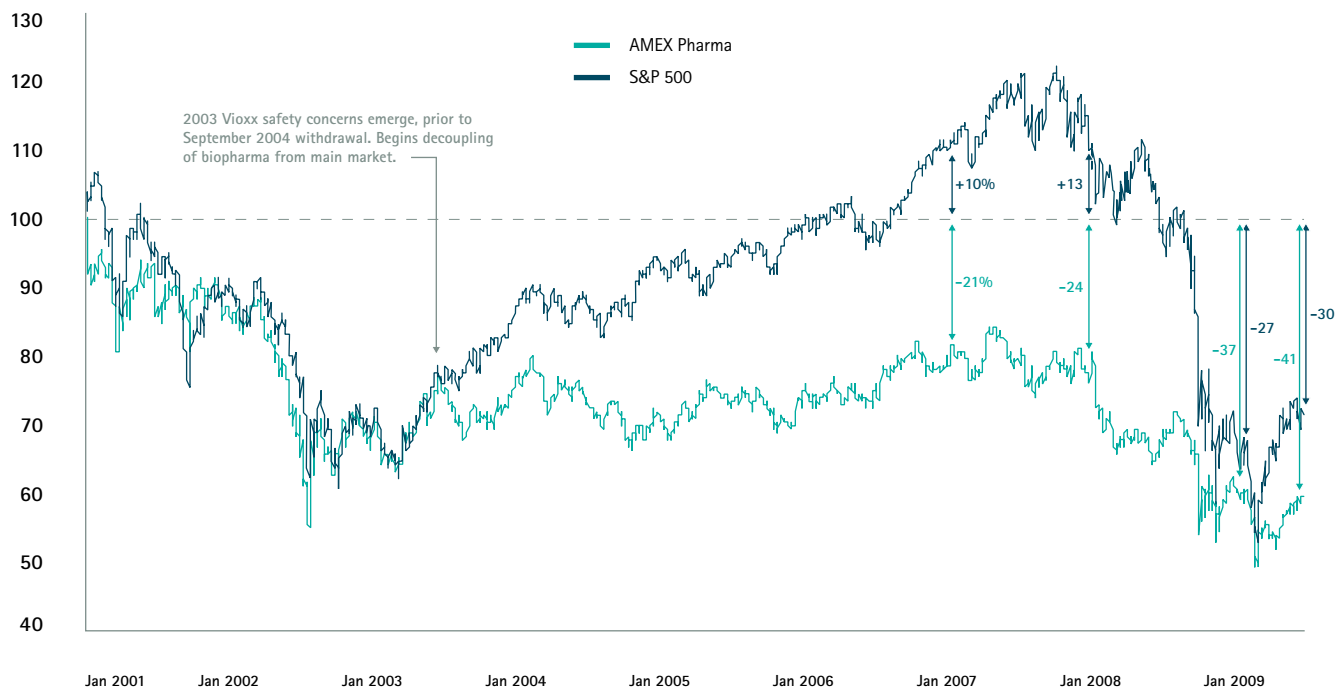
When we took a closer look at what distinguishes the market focus and positioning of these two high performers, we found that their positioning in very specific segments of the prescription drug market has played a significant role in their success—largely because it has allowed them to take advantage of the most compelling opportunities these markets offer.

Each company focuses on a different therapeutic area. South San Francisco-based Genentech is an oncology

Performance gap

The biopharmaceutical industry has underperformed the S&P 500 since 2003, when safety concerns about Vioxx first emerged. The gap in performance continued to widen until the credit crisis, when the industry did not experience as significant a fall as other sectors. However, investors continue to discount growth prospects for the industry.

AMEX Pharma index versus S&P 500, January 2001 to January 2009
Indexed share performance: rebased to January 2001



Source: Accenture analysis

specialist. Nearly three-quarters of Genentech's sales come from just four oncology drugs—Herceptin, which treats breast cancer; Rituxan, a treatment for non-Hodgkin's lymphoma; Tarceva, which tackles non-small cell lung cancer; and Avastin, which is for both lung and colorectal cancer. By concentrating on developing truly differentiated treatments for these common forms of cancer, the company has been able to justify its premium pricing.

The other high performer, Novo Nordisk, focuses on the treatment of diabetes, a higher-volume and lower-value area of primary health care. Like Genentech, however, it has met specific customer needs

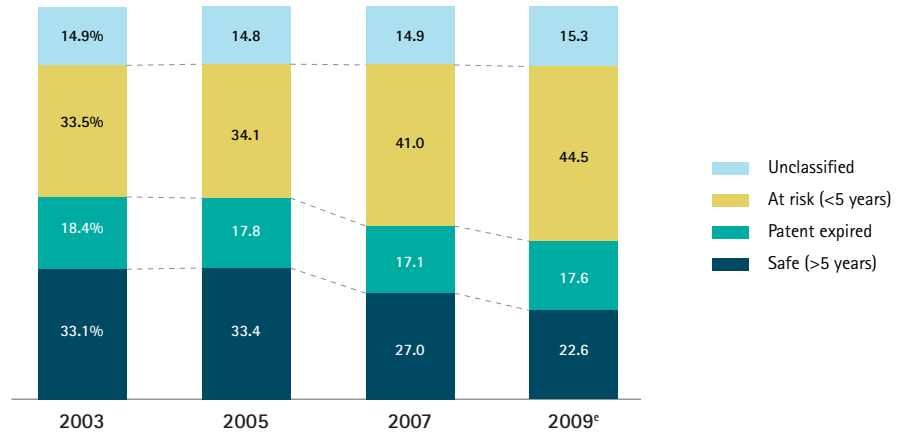
by developing drug formulations and delivery methods that provide exactly what physicians and their patients want: a convenient, cost-effective and constantly expanding range of diabetes care.

The Danish company has also been swift to exploit growth opportunities in support of this goal. Novo Nordisk was one of the first biopharmaceutical companies to invest in China, for example, recognizing in 1994 that opening labs there would not only help cut costs—Chinese, as well as Brazilian facilities now contribute significantly to the company's healthy margins—but could also yield new and innovative ideas.

At risk

More than 44 percent of the industry's products are at risk of having their patents expire or facing generic competition.

Analysis of industry product portfolio, 2003–2007 and estimated 2009



Source: EvaluatePharma, 2007; Accenture analysis

Revolutionary technology

Both companies are successful innovators. Genentech was the first biopharmaceutical company to leverage recombinant DNA technology and develop so-called biologic drugs, the therapeutics derived from naturally occurring sources like proteins that are revolutionizing medicine and the treatment of once-killer diseases.

Biologic drugs, indeed, are changing the nature of the industry. Because they are more complex and require advanced technology to produce, they are harder to replicate than the chemical compounds that form the basis of traditional pharmaceutical products—hence the fact that some pharmaceutical companies are now biopharmaceutical companies and that most now include, or seek to include, biologic drugs in their portfolios. (Earlier this year, for example, Switzerland's F. Hoffmann-La Roche bought the 44 percent of Genentech

stock that it did not already own, citing the need to make biologics a more prominent part of its product pipeline.)

Genentech was also the first biotechnology company to scale up protein production, leveraging its manufacturing excellence to turn the very small amounts required for research into the industrial quantities needed for clinical trials. The company has also made use of these breakthroughs in its successes in oncology, immunology and tissue repair. Its scientists have made great strides in the treatment of a form of age-related macular degeneration in the eye, for example.

Novo Nordisk, by contrast, puts more emphasis on incremental innovation than breakthroughs (see sidebar, page 8). But it, too, boasts the highly efficient manu-

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The great business model dilemma

Time was when a prescription drug maker could sustain growth and generate huge profits by putting lots of money into the research and development of new, blockbuster medicines. No longer. In an era of more targeted treatments and rapidly fragmenting disease markets, the drug makers' ability to solve medicine's biggest problems by creating major new medicines is plainly past its peak. But what is to replace this high-risk, high-margin business model in the post-patent era?

For some companies, the answer has been more of the same—though with limited success. Such “innovative medicines” players need the world-class drug discovery capabilities of our biopharmaceutical high performers to create truly differentiated products in challenging, high-risk areas of medicine like oncology (see story). And since few can boast such capabilities, more have opted to compete as “diversified pharmaceuticals” players, staying in their legacy, low-risk, primary care therapeutic areas but making limited moves into new, higher-risk and thus more profitable areas as well.

All players confront the same challenge: how to price products on the basis of the economic value, or the integrated health solutions, they actually deliver. That's what customers will increasingly seek as cheap generic alternatives continue to proliferate, and advances in health care IT empower physicians, patients and payers to demand it.

Accommodating their demands won't be easy. But Accenture believes that by balancing the requirements of innovation and operational efficiency in a variety of combinations, most players will be able to respond—and a few will actually achieve high performance.

When Accenture assessed the financial structure of 36 drug makers from 1997 to 2008, we detected the tentative emergence of one new business model, called the “integrated health solutions” model. There are, as yet, no pure-play examples of companies that have adopted this evidence-based approach, which most directly addresses the industry's new value proposition, though we do see evidence that some traditional innovators are increasingly attracted to its less risky approach. But we also found other examples of companies aggressively pursuing the higher-risk “innovative medicines” model in the hope that they will be able to compete with smaller and more innovative rivals.

Furthermore, several other business models continue to serve as diversification vehicles.

By developing differentiated products like vaccines, for instance, “preventive health outcomes” players could pursue innovation, albeit at lower margins than a blockbuster would generate. And “value pharmaceuticals”—generic and branded generic drugs or undifferentiated patented products—might constitute an offshoot for either traditional “innovative medicines” players or companies pursuing the newer, “integrated health solutions” model that also want to manage the lifecycle of their products.

Meanwhile, a “consumer pharmaceuticals” business model requires relatively little investment in R&D, and although it offers low margins, it holds promise as a stand-alone entity—while a purely “lifestyle pharmaceuticals” model, based on high-priced products that claim to enhance the quality of life rather than cure disease and that are not fully reimbursed by managed care, is sometimes an offshoot of “innovative medicines” players.

About the research

We applied the five key metrics of Accenture's High Performance Business research methodology—profitability, growth, positioning for the future, longevity and consistency—to 17 pure-play biopharmaceutical players, representing the industry's largest competitors.

The two high performers demonstrated significantly stronger revenue growth over the course of our seven-year study. Genentech's revenues grew by more than 32 percent a year during that time, compared with the peer group mean of 9 percent, and Novo Nordisk's were up by more than 10 percent. Notably, moreover, this growth was fueled organically, by products, rather than as a result of M&A activity.

The high performers also excelled on longevity. Genentech returned 16 percent annually to shareholders over seven

years, against a peer-group average of just 0.2 percent. Novo Nordisk did well too, with a 9.9 percent return.

On economic profitability—measured as return on invested capital (ROIC) against weighted average cost of capital—they did less well, scoring at or even below average. However, they also invest more capital than their peers, which depresses ROIC but results in more attractive cash flows. And when we tracked the numbers in terms of earnings before interest, tax and amortization (EBITA), the high performers registered year-on-year advances.

Most important, both companies displayed the highest positive consistency over time across all measures—though they shared this achievement with a couple of other companies in the peer group.

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facturing facilities that help sustain a rigorous R&D process. And since superior R&D management skills probably constitute the industry's most distinctive capability, the high performers' prowess in this regard bestows considerable competitive advantage on both of them.

Disciplined R&D

Genentech, for example, manages to deliver novel cancer medicines with fewer late-stage development failures than the industry average. Moreover, thanks to the combination of its highly disciplined approach to R&D planning—the CEO and senior executives meet regularly with scientists to discuss proposals, challenge assumptions and set goals—and its manufacturing excellence, Genentech today has more FDA-approved capacity for the manufacture of biotech medicines than any other company.

When it comes to performance anatomy, both Genentech and Novo Nordisk have maximized the engagement of all the elements that enable high performance in this industry—leadership,

culture and workforce. Genentech is outstanding at talent acquisition and management (see sidebar, page 7).

Novo Nordisk, meanwhile, maintains a broad cultural commitment to balancing social and environmental responsibility with profitability. The company was named one of the 100 most sustainable corporations in the world in 2009 by Innovest Strategic Value Advisors and *Corporate Knights* magazine, which rank businesses according to how holistically they manage their relationships with stakeholders. Novo Nordisk's diabetes care model provides its insulin products to developing countries at no more than 20 percent of developed-world average prices. And the Novo Nordisk Foundation, which controls more than 70 percent of the company's stock, provides financing for scientific, humanitarian and social objectives, including diabetes prevention and education.

Their strengths in biologic drugs and their exceptionally keen customer focus will give the high

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Genentech: Hiring—and keeping—the very best

It's not just the free cappuccinos, made-to-order sushi, concierge services and Friday night parties that keep Genentech's employees smiling. They also know they are working to improve peoples' lives—"In Business for Life," as the company's motto puts it. And that collective passion and the sense of being members of an exclusive and dedicated team clearly sustains Genentech's regular ranking in *Fortune* and other publications as one of the best places to work in the United States.

Genentech, in turn, places a considerable premium on the quality of its workforce. More than 15,000 unsolicited résumés are received every month at company headquarters, a campus-style site overlooking San Francisco's iconic bay. But it can take half a dozen visits and 20 interviews to secure a job. In fact, Genentech will leave a role empty for months if it doesn't find the perfect person to fill it.

Once hired, employees are expected to perform to the highest standards. Scientists and researchers must defend their work at least once a year before a committee of 13 Ph.D.s that decides how to allot the research budget. But even if their current projects aren't up to scratch, they still usually have a say in their next assignment.

Success is always celebrated. And the informal, non-hierarchical atmosphere—there are no suits and ties, and no one is called "doctor"—has helped build remarkably good relations between workforce and management.

For Genentech, indeed, its people are key to the creative and entrepreneurial spirit that has made the company one of the world's most successful biopharmaceutical businesses (see story), and the company goes out of its way to keep them happy.

Genentech scientists, for example, are encouraged to spend 20 percent of their working week on pet projects. Rigorous talent management and leadership development programs embrace the views and feedback of the workforce at every level. And to stave off burnout, the biotech pioneer offers six-week sabbaticals every six years, as well as up to \$10,000 in educational expenses annually. Employees can also share in the success, getting to purchase stock at a 15 percent discount to market price.

Novo Nordisk: Innovation by increments

They might lack the excitement of cancer or HIV/AIDS breakthroughs. But the insulin analogs that mimic the human hormone without which the body cannot absorb glucose have been lifesavers for millions of diabetes sufferers worldwide. And for Novo Nordisk, the only biopharmaceutical company with a full range of such analogs approved in the United States, they have been an extraordinarily successful core franchise.

Novo Nordisk makes more insulin (in volume terms) than any other biopharmaceutical company in the world. In 2008, some 70 percent of its €6.1 billion sales and half its earnings came from related products and medicines. In fact, the Danish company boasts the broadest diabetes product portfolio in the industry.

But it isn't just the sheer scale of Novo Nordisk's diabetes dominance that explains the company's success. It also leads in the development and delivery of differentiated and well-designed diabetes products that answer specific patient needs.

Take the company's easy-to-use family of insulin "pens," which resemble fountain pens and provide a single-step device for safely and swiftly injecting the right dosage of

insulin. Originally developed in the 1980s, they have been steadily modified and improved.

Incremental innovations that have enhanced the pens' efficiency include adaptations for people with poor eyesight and reduced dexterity, as well as color coding for those who have to inject different insulin types. The company has also boosted the pens' efficiency by using similar components for all variations—a productivity improvement made possible, in part, by housing manufacturing facilities in the same key emerging markets that already generate almost one-fifth of the company's revenues (see story).

Novo Nordisk is reaping other rewards from these markets too. Scientists at an R&D facility that Novo Nordisk opened in 2002 in China, for example, have helped develop more productive techniques for making key components of the company's insulin products. Meanwhile, Novo Nordisk continues to invest in new insulin analogs, and it is leveraging its biologics knowledge and capabilities in new therapeutic areas, including inflammation, blood products and endocrinology.

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performers clear advantages in tackling both the challenges and the opportunities of the biopharmaceutical industry's future. Generic competition is bound to intensify, as will the pricing pressures on prescription drugs.

But because the high performers have the distinctive capabilities to deliver truly differentiated products, they should be able to continue to command premium prices for them. Their market focus will pay off, too, especially as emerging markets begin to account for a rising share of global health care expenditures. And as developments in biotech lead to new, high-specificity diagnostics and treatments that will help promote preemptive care and provide personalized medicine, these two masters of focused product innovation are well positioned to respond.

About the author

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