Gilead's deal of a lifetime

Gilead Sciences' ascent to the upper echelon of biotech centered around one very savvy acquisition that launched an HIV franchise.

Shortly after the turn of the century, Gilead Sciences took a hard look at itself. It had recently purchased NeXstar Pharmaceuticals for about $550 million and had several programs in oncology. In early 2001, it had also in-licensed European rights to Cidecin, an injectable anti-infective from Cubist Pharmaceuticals in Lexington, Massachusetts. But what Gilead really needed, management was beginning to think, was a one-pill combination HIV drug.

After all, some patients were taking as many as 20 pills a day and Gilead had a highly regarded nucleoside analog HIV-1 reverse transcriptase inhibitor (NRTI), Viread (tenofovir disoproxil fumarate), that was well suited for co-formulation. If Viread, which would be launched in the last quarter of 2001, could be combined with another NRTI—well, given the problems with patient compliance and drug resistance, the upside was huge.

So Gilead refocused and began streamlining. In 2001, it offloaded its remaining oncology assets and a facility in Boulder, Colorado, to OSI Pharmaceuticals of Melville, New York, for $200 million in cash and stock. A year later, it returned Cidecin (daptomycin) rights to Cubist and then went hunting for a complementary HIV product, settling on Coviracil (emtricitabine), a one-pill, once-daily nucleoside analog therapy with a nonoverlapping resistance profile with Viread, developed by cash-strapped biotech Triangle Pharmaceuticals. After failing to secure a partnership, Gilead bought the company outright for $525.2 million.

When the acquisition went through, Gilead renamed Coviracil Emtriva and launched it as a stand-alone product in July 2003. Though sales were modest (**Table 1**), Emtriva added layers to Gilead's HIV portfolio. The combined-dose pill of Emtriva and Viread, launched as Truvada in third-quarter 2004, brought in $68 million that year, then sales exploded (**Table 1**). In 2008, Truvada brought in $2.1 billion.

Gilead didn't stop there. It approached New York-based Bristol-Myers Squibb (BMS) and leveraged Emtriva to launch Atripla—a combination of Truvada and BMS's Sustiva (efavirenz)—in July 2006. That 3-in-1 pill brought Gilead nearly $1.6 billion in 2008.

The Triangle acquisition, then, made possible 79% of Gilead's $5.08 billion overall revenue in 2008. And, in hindsight, $525.2 million is a paltry sum compared with what Gilead has since reaped.

The Gilead case contrasts with many other mergers in the biotech and pharmaceutical sectors. Studies of mergers of $500 million or more, involving small or large firms, have found little evidence that acquisition improves firm performance[1]. And, all too often, returns are less than expected, to shareholders' chagrin[2].

For example, MedImmune, of Gaithersburg, Maryland, bought Aviron for about $1.5 billion (at the time of purchase) in 2002. The attraction was Aviron's FluMist, a live, attenuated, cold-adapted influenza vaccine delivered by nasal mist. MedImmune claimed the buyout would "diversify and expand" its revenue base—the opposite strategy from Gilead's complementary purchase. But FluMist never paid off. Launched in September 2003, FluMist brought MedImmune just $111 million in sales revenue through 2006. (MedImmune was acquired by AstraZeneca in 2007.)

Table 1 Gilead's stable of thoroughbred products

	Drug sales ($ millions)				
Drug	2004	2005	2006	2007	2008
Emtriva[a]	58	47	36	31.5	31.1
Truvada (Viread/Covaricil formulation)	88	568	1,200	1,600	2,100
Atripla[b] (Viread/Covaricil/efavirenz formulation)	N/A	N/A	205	903.4	1,570

[a]Emtriva launched July 2003. [b]Atripla was launched in July 2006. N/A, not applicable.

Genzyme's $600 million bid for Sangstat in 2003 fared better. The crown jewel here was the antibody Thymoglobulin (anti-thymocyte globulin) for acute rejection in patients with a renal transplant, although Sangstat also had a second approved transplant product, Lymphoglobuline (equine anti-thymocyte globulin). But Sangstat also provided a pipeline of immune-suppression and immunology products, which meshed well with Genzyme's research in immune-mediated diseases.

Genzyme has expanded Thymoglobulin nicely: it recorded sales of about $30 million from its transplant products in 2003, and increased that to $192 million in 2008. With those numbers, the acquisition has paid for itself, and thus can been seen as a success. But at heart, this was a company buying a revenue stream. And although that's one clear way of attempting growth, Gilead's decision to go for synergy with an existing product has paid greater dividends.

Gilead's Triangle purchase was a calculated move to improve and optimize its existing technology and portfolio, and it brought Gilead face to face with incumbents GlaxoSmithKline, Merck and Roche in the HIV space. That battle for mindshare with big pharma translated into significant market share. It's estimated that close to 60% of people with HIV in the US or Europe use at least one of Gilead's four HIV drugs. For new patients, that number may reach 80%.

The increased sales have subsequently given Gilead the muscle to diversify through acquisition. It purchased in 2006 Corus Pharma and its inhaled antibiotic, aztreonam lysine, for $365 million, and then Myogen for $2.5 billion, bringing aboard ambrisentan, an endothelin receptor antagonist for pulmonary arterial hypertension. Financially strong, Gilead is a new type of specialized biotech company, and pound for pound, more productive than most big pharmas.

ACKNOWLEDGMENTS
We are grateful to Jeff Bird, Mark Schoenebaum, Sharon Seiler and Jason Zhang for insights in drafting this article.

Brady Huggett is Business Editor & Christopher Scott is Contributing Editor

1. Danzona, P.M. *et al. Manage. Decis. Econ.* **28**, 307–328 (2007).
2. Lim, T.M. *The Impact of Mergers and Acquisitions on Shareholder Value: A Study within Biotechnology and Pharmaceuticals Industries in the United States in the Long Run.* Msc. Thesis (Cranfield University, School of Management, 2006).