

July 22, 2009

THE WORK-UP

Costly Drugs Known as Biologics Prompt Exclusivity Debate

By ANDREW POLLACK

A bitter Congressional fight over the cost of superexpensive biotechnology drugs has come down to a single, hotly debated number: How many years should makers of those drugs be exempt from generic competition?

But what few people in Washington seem to recognize — or publicly acknowledge, anyway — is that this magic number may ultimately not matter as much as the most vitriolic debaters insist.

At issue are such drugs as Biogen Idec's Avonex, for multiple sclerosis, which can cost more than \$20,000 a year; Genentech's Avastin for cancer, which can cost more than \$50,000; and several Genzyme drugs for rare diseases that can cost \$200,000 a year or more. Typically, such drugs are given by injection or intravenous infusions.

These drugs, known as biologics, are complex proteins made in vats of living cells. Because they are hard to copy exactly, they have not been subject to the generic competition that eventually knocks down the price of drugs like Lipitor and Prozac. Pills like Lipitor, known in the industry as small-molecule drugs, are made from simple chemicals whose recipes are easy to reproduce.

But now Congress, as a cost-cutting piece of the overall health care effort, is preparing legislation to enable the Food and Drug Administration to approve copycat versions of biologic drugs. That could save consumers, insurers and the government billions of dollars in the coming years.

The trick is to allow competition without undermining the financial incentives the pharmaceutical industry needs to undertake the risky job of developing the next drugs for cancer and other diseases. That is where the magic year number comes in. Trade groups for the big pharmaceutical and biotechnology companies say that to recoup their investments, they need an exclusivity period free of generic competition that would last 12 to 14 years from the time the F.D.A. approves a drug for sale.

But consumer groups, insurers, employers and generic drug companies say anything more than five years — the exclusivity period now given to small-molecule drugs like Lipitor — would eviscerate any potential savings from the new competition.

So far, the biotechnology industry appears to be winning. The Senate's health committee, for

example, has agreed to 12 years of exclusivity. In the House, a bill that provides at least 12 years of exclusivity has many more co-sponsors than one that would provide five years. The Obama administration has said that seven years would be a “generous compromise.”

But in reality, neither the threats to innovation nor the potential savings from generic competition are as great as claimed.

For starters, whatever the exclusivity period, biologic drugs would also continue to be protected from copycats by patents. And in many cases, the patent protection would last longer than the exclusivity period, making the Congressionally mandated exclusivity a moot point.

Genentech’s Avastin, for instance, has patent protection until 2019 — 15 years after the drug’s 2004 approval by the F.D.A. The company’s breast cancer drug, Herceptin, has patents that extend 21 years from its 1998 approval.

Where the exclusivity period might matter most would be in the cases of drugs whose patents were nearing expiration by the time the developer succeeded in winning F.D.A. approval. But that seldom happens.

“I can’t think of a biotech drug that’s been on the market that doesn’t have more than 7 to 14 years of patent protection,” said Eric Schmidt, biotechnology analyst at Cowen & Company.

Still, it is probably not true, as the other side claims, that the legislation would be virtually worthless if it granted a long exclusivity period. There are plenty of blockbuster biologics, like Epogen and Neupogen from Amgen, that have been on the market more than 12 or 14 years and thus would get no extra protection from even an exclusivity period at the long end of the ranges now being discussed.

As for cost savings, the Congressional Budget Office has estimated that generic biologics might save the government only about \$10 billion in the next 10 years. That is a relative drop in the bucket when it comes to paying for health care reform, which is expected to cost about \$1 trillion over 10 years.

One reason for limited savings in the first decade is that it would probably take a few years for copycat biologics to reach the market after the law was enacted. Another factor is that biologics accounted for only 16 percent — about \$46 billion — of total prescription drug spending last year, according to the market researchers IMS Health. And pharmaceuticals represent only about 10 percent of the nation’s overall health care spending.

The real savings might come more than 10 years out, as new biologic drugs appeared and as biologics represented an increasingly greater part of overall spending on drugs. That ramp-up is already evident: Express Scripts, a pharmacy benefits manager, says its spending on biologics grew 10 percent last year, compared with 2.5 percent for other drugs.

But anyone expecting the price wars that ensue when generic pills come on the market — when prices often drop by more than 60 percent — might be disappointed by the way competition plays out in biologic drugs.

Because it is harder and costlier to make biologic drugs than it is to copy pills, fewer generic competitors are likely to enter the fray. Many experts, including the Federal Trade Commission, expect price declines of more like 10 to 40 percent in biologics.

Even that would be a substantial savings for the overall health care system. But for many individuals, a \$35,000 copycat version of a \$50,000 cancer drug would still be unaffordable.

Another factor is that generic biologics are likely to undergo greater regulatory scrutiny than generic pills require.

It is difficult or impossible to verify that a copy of a biologic is exactly the same as the original — which is why the drugs are often called “biosimilars” rather than generic biologics. Because even small changes might affect the drug’s safety or activity, it is likely that makers of biosimilars will have to conduct at least some clinical trials to win F.D.A. approval of their drugs, which makers of generic small-molecule pills are not required to do. Such trials can cost a lot of money.

Since biosimilars will not be exact replicas, generic makers will probably need sales forces to persuade doctors to prescribe their drugs and pharmacists to dispense them. All of that costs money, too.

In Europe, which has approved biosimilar versions of three biologic drugs, companies generally price their biosimilar drugs about 20 to 30 percent lower than the originals. The impact in Europe has been limited so far, but in Germany the biosimilars have captured about 30 percent of the market for anemia drugs and forced the brand-name manufacturers to lower their prices.

The likelihood that biosimilar competition might be somewhat muted means that sales and profits of the originals may not necessarily dry up.

Kevin W. Sharer, Amgen’s chief executive, told investors in May that he hoped biotechnology companies would retain 30 to 50 percent of the cash flow from their drugs even after biosimilars reached the market. That, he said, “is a dramatically different outcome than we see in the small-molecule companies.” That is also one reason the Federal Trade Commission, in a report last month, said that no exclusivity period at all was needed. At the very least, because biologic drugs do not require appreciably more time or money to bring to market than small-molecule drugs, it is reasonable to ask why they should deserve longer protection from competition than the five years that small-molecule drugs now receive.

The reason, biotechnology executives say, is that patents may offer less protection for biologics than for small-molecule drugs. Because a biosimilar is not an exact knock-off of the original, a

competitor might persuasively claim that it is not infringing the patents on the original drug.

So far biologic patents have held up well in court cases. Amgen, for example, has won legal victories preventing competitors from introducing anemia drugs that are slightly different from its own Epogen.

But generic makers and their supporters, sensing that many of the biologic patents may not withstand court challenges, are lobbying for the shortest possible exclusivity period.

“If your patents are strong, let your patents stand for themselves,” said Katie Huffard, executive director of the Coalition for a Competitive Pharmaceutical Market, a group of employers, insurers, pharmacies and generic makers lobbying for easier access to biosimilars. “That’s what every other industry has to do.”