

02 Genentech

1 DNA Way, South San Francisco, CA 94080
Tel: (650) 225-1000 Fax: (650) 225-6000
www.gene.com

HEADCOUNT	10,553
YEAR ESTABLISHED	1976
BIOPHARMA REVENUES	\$7,640 +39%
TOTAL REVENUES	\$9,284 +40%
ROYALTY REVENUES	\$1,354 +45%
NET INCOME	\$2,113 +65%
R&D BUDGET	\$1,773 +40%

DRUGS APPROVED/LAUNCHED

Drug	Indication
avastin with chemotherapy	first-line non-small cell lung cancer, second line metastatic colorectal cancer
rituxan	first-line CD20-positive, B-cell non-Hodgkin's lymphoma, low-grade NHL, rheumatoid arthritis
lucentis	neovascular wet AMD

DRUGS PENDING APPROVAL

Drug	Indication
herceptin	adjuvant HER2-positive breast cancer
avastin with chemotherapy	first line metastatic breast cancer

DRUGS IN PHASE IIB AND BEYOND

Drug	Indication
2nd generation anti-CD20	lupus nephritis, rheumatoid arthritis, systemic lupus erythematosus
altu-238	adult growth hormone deficiency
avastin	multiple cancer indications
avastin +/- tarceva	first line metastatic, non-squamous, NSCLC
herceptin +/- avastin	first line HER2+ metastatic breast cancer
herceptin +/- pertuzumab	HER2-positive metastatic breast cancer
lucentis	diabetic macular edema, retinal vein occlusion
rituxan	follicular NHL, relapsed CLL
rituxan	ANCA-associated vasculitis
tarceva	adjuvant non-small cell lung cancer, first line metastatic NSCLC
TNKase	catheter clearance
xolair	pediatric asthma

EARLY RESEARCH PROJECTS

Drug	Indication
3rd generation anti-CD20	hematologic malignancies
anti-CD40	chronic lymphocytic leukemia
anti-IFN alpha	systemic lupus erythematosus
apo2L/TRAIL	solid tumors and hematologic malignancies
apomab	solid tumors and hematologic malignancies
br3-Fc	rheumatoid arthritis
iap antagonist	cancer therapy
mek inhibitor	cancer therapy
metMab	cancer therapy
parp inhibitor	malignant melanoma
systemic hedgehog antagonist	solid tumors
trastuzumab-DM1	HER2-positive metastatic breast cancer

TOP SELLING DRUGS

Drug	Indication	\$	(+/- %)
rituxan	lymphoma, rheumatoid arthritis	\$2,071	13%
avastin	colorectal cancer	\$1,746	54%
herceptin	breast cancer	\$1,234	65%
xolair	asthma	\$425	33%
tarceva	lung cancer	\$402	46%
lucentis	wet age-related macular degeneration	\$380	n/a
nutropin/protropin	growth hormone	\$378	2%
activase/TNKase	thrombolytics	\$243	11%

Account for 90% of total biopharma sales, up from 89% in 2005.

DO THE EYES HAVE IT? In June 2006, Genentech gained approval for Lucentis, a VEGF-inhibiting treatment for wet age-related macular degeneration, and quickly racked up \$380 million in sales. Not shabby, for an injection into the eyeball (I'm sorry, but if it's going to creep me out, I feel that it should creep my readers out, too). Lucentis sales continued to climb with \$211 million in 1Q2007, but they may be in for a decline, even though the drug is very effective and Genentech charges \$2,000 per injection (into the eyeball).

Since Lucentis is a tailored formulation of Genentech's other VEGF inhibitor, cancer drug Avastin, it seems some doctors have concluded that it would be cheaper to use small doses of Avastin in place of Lucentis. About \$1,950 cheaper, per injection. The National Institutes of Health (NIH) plans to

run a head-to-head trial of the drugs, but Genentech has refused to fund any of it and will not provide drug product for the trial.

According to a *Wall Street Journal* article on the tussle, Avastin was believed to be too large a molecule to penetrate the retina, so Lucentis was formulated specifically for the eye. Before Lucentis' approval, however, some ophthalmologists experimented with Avastin and got great results. So now Genentech needs to prove the value of Lucentis over Avastin, price it high enough to recoup its R&D investment, and maybe mention that repackaging Avastin might not be the most sterile proposition, especially when the drug is going to be... well, you know.

And this isn't the only pricing issue Genentech has faced.

The company has been singled out — unfairly,, I think — as a gouger on drug prices, particularly within oncology. In an interview with the *Wall Street Journal*, chairman and chief executive officer Arthur D. Levinson, Ph.D. tried to bring some perspective on the phenomenon of drug pricing:

“Look at how much society is investing in cancer. In the absence of better care, 42% of everybody out there is going to get cancer. And half of those 42% are going to die of cancer. It's the leading cause of death among Americans under age 85. So how much are we spending on drugs for cancer? We have a \$12 trillion GDP [gross domestic product]. And we're spending \$15 billion. If I do that math, 1/800th of GDP for the leading cause of death. And people say cancer drugs are bankrupting America! Give me a break.”

He added that Genentech doesn't have “Microsoft margins,” but was not ashamed to say that drugs like Avastin have to have healthy margins because of R&D attrition rates.

Look Deeper

Speaking of which, while Genentech has some powerhouse products on the market in Avastin, Herceptin and Rituxan, its pipeline of new products appears sparse. Along with new product Lucentis, the company got seven line extensions approved in 2006, and has several more on tap for 2007. These are for undeniably important indications, and it's not as though Genentech's lineup is as narrowly focused as the top company on this biopharma list, so I shouldn't be too critical of the pipeline. A lot of biopharmas (and traditional pharmas) would be happy with the growth prospects of Genentech's marketed line.

Still, the CEO confirmed that Genentech has room to improve when, in the 1Q2007 earnings call, he commented, “[W]e expect a relatively uneventful '07 in terms of new product approvals.”

Eye to Eye?

The company entered Phase III rheuma-

toid arthritis trials of its next-generation anti-CD20 drug ocrelizumab in late 2006, and plans further trials in lupus-related diseases. That drug is being developed as part of a program with Biogen Idec, as was its predecessor, Rituxan. However, BI and Genentech don't see eye-to-eye on this project and are having legal squabbles over the status of the agreement.

BI filed for a preliminary injunction in January 2007, but that was shot down in April by an arbitration panel. No final word yet from the panel, but Genentech warned that it may have to alter its clinical development plans.

And that's one of their two late-stage products. The other is a human growth hormone treatment, co-developed with Altus Pharmaceuticals.

First Buy

Genentech broke with its 30-year tradition in November 2006 by making its first acquisition. The company proposed a \$919 million buyout of Tanox, its development partner (along with Novartis) on asthma treatment Xolair. In January 2007, the FTC asked for additional documents from both firms and hadn't cleared the acquisition at press time.

The buy should bolster Genentech's pipeline while also giving it a greater share of Xolair money. Unfortunately, the acquisition was proposed before the FDA's February 2007 request that Genentech add a “black box” label to Xolair because of the risk of anaphylaxis, symptoms of which include trouble breathing, chest tightness, dizziness, fainting, itching and hives, and swelling of the mouth and throat. For an asthma treatment, that's really not good. The FDA also asked Genentech to “provide a Medication Guide for patients to strengthen the existing warning for anaphylaxis,” according to an Agency statement. Anaphylaxis was noted in Xolair's clinical trials, but occurred in only 0.1% of subjects. That proportion increased as the drug reached a broader base.

In all, Genentech's still on a great growth spurt, but it's going to need every penny it can get from Avastin, Herceptin and Rituxan to refresh its pipeline in the next few years. ■