Pharmaceuticals

Are Drugs Samsung's Next Big Thing?

- ► The Korean conglomerate looks to biologics for growth
- ► Its contract manufacturing unit has "already spent \$3 billion"

On a piece of reclaimed land along the western coast of South Korea, a **Samsung** group unit is building a \$740 million factory that will give it the capacity to become the No. 1 producer by volume of some of the world's most sought-after products. No, not chips or smartphones or flatscreen TVs, but a class of drugs called biologics, many of which are derived from mammal cells.

Samsung, which diversified into pharmaceuticals in 2011, is mobilizing its expertise in engineering and operating superclean semiconductor facilities to mass-produce biologics more efficiently for Big Pharma companies. Being a force in biologics is crucial to the company, whose Galaxy smartphones and consumer electronics face intense competition from Apple Inc. and Chinese brands. The chaebol is also grappling with the arrest of de facto leader Jay Y. Lee in a scandal that brought down South Korea's former president and put a spotlight on Lee's efforts to take his biologics unit public.

If the past 40 years of global economic growth were fueled by the info tech industry, says TH Kim, chief executive officer of contract manufacturing unit **Samsung BioLogics Co.**, the next phase will be fueled by techdriven advances in health care and biotechnology. The Samsung board gave Kim \$2 billion to start the business six years ago. Thanks to growing demand

for biologics and the success of the business, he says, "I've already spent \$3 billion." The company is in negotiations with drugmakers for more than 15 new contracts.

The factory being built an hour outside Seoul is Samsung's third drugmaking facility. Its five floors are roughly the height of a typical 12-story building, providing room for custommade vats that can be several stories tall. Because biologic drugs are grown from cells, they require a complex manufacturing process, but they're more effective and more capable of targeting certain diseases than chemical pills. Building large-scale facilities to manufacture them makes sense, because only a small volume of medicine is produced from even a massive vat of biological medium.

Samsung BioLogics already is a contract manufacturer for some

pharma giants, including
Roche Holding AG
and BristolMyers Squibb Co.
That business

won (\$95.4 million) in sales in the first quarter. But it has plenty of competitors that also are expanding. Switzerland's **Lonza Group** and Germany's **Boehringer Ingelheim** have long histories in biologics contract manufacturing, and Japan's **Fujifilm Holdings** has entered the business.

generated 107.6 billion

Globally, the drug industry produces 4 million liters of biologic medicines a year, and that's projected to double by 2030, Kim says. With its new plant, Samsung BioLogics is positioning itself to double its share of the market for the manufacturing of biologics under contract to others and hopes to

The World's Best-Selling Medicines

Harvoni Hepatitis C	mali a le laboratoro	
Humira Arthritis	???????	
Lantus Diabetes >>>>>>>>>>		
Enbrel Chronic inflammatory co	onditions	
Crestor High cholesterol		
Remicade Crohn's disease	Six of 2015's	
Seretide aka Advair Asthma	top 10 drugs were biologics	
Sovaldi Hepatitis C	ra mala principal	

MabThera aka Rituximab Rheumatoid arthritis

\$10b

Avastin Cancer

\$5b

\$15b

have half of the contract manufacturing market in the next decade.

Increased pressure on Big Pharma to cut costs is one reason drugmakers might outsource to a company such as Samsung BioLogics rather than manufacture medicines in-house, Kim says. Biologics are increasingly used in place of chemical treatments. In 2015 six of the world's 10 best-selling drugs were biologics, including Johnson & Johnson's drug for arthritis and Crohn's disease Remicade and Sanofi's Lantus for diabetes, according to researcher QuintilesIMS.

A decade ago, it took Kim three years to convince the Samsung group's board that the growth prospects of health care would make a pivot into making drugs worthwhile. One big supporter was Samsung leader Lee, who remains in detention. While ongoing projects haven't been affected by his detention, some long-term strategic ones were put on hold, Kim says.

One accusation against Lee is that he sought the help of Park Geun-hye, the country's former president, in restructuring Samsung affiliates and getting Samsung BioLogics listed on the Korean exchange last year. Lee, Park, and the company deny the allegations. Adding to the pressures, the country's Financial Supervisory Service is auditing Samsung BioLogics. Kim says he's confident in the company's bookkeeping standards.

The CEO says he championed drug manufacturing to his superiors based on the long-term trajectory of the semiconductor industry. His benchmark was **Taiwan Semiconductor Manufacturing Co.**, which entered the

contract manufacturing market in the 1980s, when hardly anyone was outsourcing production. Today the company is the largest chipset maker for iPhones.

"We want to be a global top player in whatever industry we enter," Kim says. "By 2030, we would like to be regarded as one of the global leaders in biopharmaceuticals." —Natasha Khan, with Sam Kim

The bottom line Samsung has plenty of competition in chips, smartphones, and electronics, so it's expanding into drug manufacturing.