

EU Commission inquires

Generica Conspiracy?

There's trouble on the horizon for pill makers: After obvious indications for marketing arrangements between pharmaceutical companies, the EU Commission disclosed at the turn of the year that it "will take further action in investigating if there have been deals to keep generic drugs off the market". For this anti-trust investigation, the Commission requested that certain pharmaceutical companies submit copies of patent settlement agreements.

The market guardians from Brussels, headed by the Dutch Commissioner Neelie Kroes, are looking for settlements "where the original developer and patent holder on a drug has paid generic competitors to delay the launch of a generic drug once the patent has expired". The agency also disclosed that findings of an inquiry into the pharmaceutical sector from July 2009 had raised enough suspicions to now take a sharper look into the industry's filing cabinets. Kroes underlined that the Commission primarily wants to understand the patent settlements better.

At the same time, the Commission has already initiated concrete anti-trust investi-



EU Commissioner
Neelie Kroes

Photo: EU

gations, such as the one against Lundbeck (Copenhagen). The Danish company is suspected to delay the market entry of generic drugs for its antidepressant drug Citalopram. If this is the case, Lundbeck could be punished with a fine of up to 10% of one year's revenues.

-WK-

Sweden's Bioinvent seeking share issue

Fresh Cash Soon?

Bioinvent from Lund, Sweden, plans to raise €15 million from a share issue. This measure would increase the lifetime of the research-based pharmaceutical company for an additional two years. Bioinvent employs

100 people who develop antibody drugs for the treatment of cancer, thrombosis, atherosclerosis and inflammatory diseases.

Svein Mathisen, Bioinvent's President and CEO, told journalists that his company plans to add new drug development programmes to its pipeline with the new funds. Until now, the Swedes have raised about €70 million since their foundation in 1997. Currently, Bioinvest is developing four key compounds, with the thrombosis-counteracting antibody TB-402 as its most advanced candidate in clinical phase 2. The Swedish company that went public in 2001 doubled its stock price in 2009 from €1.3 per share to €2.6 per share, and is continuing to rise in early 2010.

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Photo: IJEE

Graduation ceremony of students at Lund University, Sweden. Lund, one of Europe's oldest university cities, has also a multifaceted life science environment, with numerous biotech and pharmaceutical companies.

Galapagos nabs contract with Roche

New Wind for Smoker's Lung

Belgium's Galapagos (Mechelen) and Switzerland's Roche (Basel) have got a multi-million cooperation running. The mega-deal could yield up to €406 million for Galapagos, as well as lucrative new compounds to treat chronic obstructive pulmonary disease (COPD) for Roche.

Onno van de Stolpe, CEO of Galapagos, said that, "the collaboration will focus on both antibodies and small molecules as potential drugs", adding that, "the Roche deal will not be Galapagos' last of 2010". As recently as mid-October, Galapagos and Merck & Co. (USA) had also nailed another deal to develop treatments for hardening of the arteries, potentially worth over €400 million.

To begin with, the deal starts off small with an upfront payment of €6 million for Galapagos. The rest of the €400 million will be paid piece by piece as of performance-related milestones.

COPD affects about 210 million people worldwide. The primary causes are tobacco smoking and air pollution, which result in chronic bronchitis, emphysema and eventually the long-term destruction of lung tissue. Worldwide, the disease belongs to the top five causes of death. It is estimated that COPD causes an economic burden of €30 billion in health care costs and lost productivity in the USA annually. Currently, there is no cure for COPD.

With its drug discovery platform, some of Galapagos' 500 employees are intending to identify potential COPD targets, in order to develop molecule candidates against them. Roche will shoulder the entrepreneurial more risky part: The Swiss pharmaceutical giant's scientists will have the tricky

task of selecting the appropriate candidates they want to develop further.

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Photo: wtk

An extremely effective low cost treatment already exists to medicate COPD: It's called JSS ("Just Stop Smoking").

Qiagen acquires Manchester's DxS

Going on Growing

With the acquisition of the United Kingdom's DxS Ltd. (Manchester) this September, Germany's Qiagen has become one of the world's largest providers of technologies in molecular diagnostics for personalised healthcare (PHC). In 2009, the Hilden-based company expects revenues of over €305 million in its diagnostics division, feeling like a "leader in molecular diagnostics, excluding viral load testing and blood screening". Qiagen's CEO Peer Schatz has worked hard for this goal, initiating several takeovers year after year (the largest one so far was the €1.1 billion Digene acquisition in 2007).

In this case, Qiagen paid €64 million in cash for the privately-held developer and manufacturer of companion diagnostic products, DxS, plus up to an additional €24 million (depending on certain milestones). In return, it gains a handful of molecular diagnostic assays and intellectual property concerning the prediction of patients' responses to certain treatments in order to make cancer therapies more effective and safer (for example seven real-time PCR tests including a test for the mutation status of the oncogene K-RAS, which is an indicator for the successful treatment of patients suffering from colorectal cancer).

It seems that the takeover won't threaten jobs. On the contrary, if Qiagen's press release is to be believed. The Germans intend to develop DxS' headquarters in Manchester as a "Center of Excellence in Pharma Partnering". They even expect to expand it in the medium-term. -WK-

French government to invest €139 million

Supporting Biotechnology

French President Nicolas Sarkozy announced at the end of October that his government intends to invest €139 million to strengthen France's upcoming biotech industry. Using this money, a biotechnology venture fund is soon to be established. French medical industries are also eligible for support to promote their competitiveness and influence. France has about 400 biotechnology companies, employing roughly 20,000 people.

How about strengthening local industry even further, by making important local websites accessible for foreigners? The

France Biotech site (www.france-biotech.org), for example, is published exclusively in French, making it very complicated for most European companies to do business with their French colleagues. -WK-

Affimed founding Czech subsidiary

Splitting Off

Affimed Therapeutics (Heidelberg, Germany), a developer of recombinant antibodies, has founded a subsidiary company in the Czech Republic. With headquarters in Plzen, not far from the Bavarian-Czech border, Abcheck will continue Affimed's current discovery work on antibodies, as well as create customised therapeutic antibodies for external customers. The new company will be managed by Volker Lang, formerly Chief Business Officer at Affimed, and Vera Molkenthin, who will act as chief scientist and Head of Discovery.

In contrast, mother company Affimed will focus entirely on its in-house drug candidates while preparing a phase 1 study of its treatment for Hodgkin's lymphoma,



Plzen has a picturesque old town, and a recently immigrated company from Germany to create customised therapeutic antibodies.

AFM 13, expected to begin soon. AFM 13 is a tetravalent antibody that has been developed with Affimed's TandAb platform technology. TandAbs are tetravalent bispecific antibodies which have two binding sites for an activating receptor on immune effector cells and two binding sites for a target molecule on the surface of tumour cells.

According to Affimed's promises, TandAbs, "are simpler and cheaper to produce and purify than conventional antibodies; they also show better binding properties and increased stability *in vivo*". These miracle molecules are allegedly, "especially suited to tumour-targeting", so, it should only be a question of time until Affimed will have eradicated the inconvenient cancer problem. -Heidelberg, please take command! -WK-

High-performance computing

Processor Power for Peanuts?

Wouldn't it be a dream, to have unlimited access to a supercomputer such as the Cray XT5 "Jaguar" that reaches a maximum speed of 1759 teraflops, or IBM's BlueGene/L with 478 teraflops? In reality, between 20 and 30 percent of supercomputing time worldwide is dedicated to bio-science applications, used by scientists working on both basic and pharmaceutical research, searching for new molecules, drugs and treatments.

Unlimited access? Time to come back down to earth. Due to the astronomical prices of chartering these super-fast computers with thousands of central processing units (CPUs), most laboratories are forced to perform their biological research with low-end, lame and inferior PCs. So, while these brave electronic workhorses chew molecular dynamics and quantum chemistry simulation models, the researchers have to twiddle their thumbs and wait...and wait...and wait for results.

According to Nvidia, a developer of graphics processing units and chipset technologies, these exasperating times are over. Nvidia's product PR office touted that with its new "Tesla Bio Workbench" programme, scientists are able "to run complex bioscience codes in drug discovery and DNA sequencing more than 10-20 times faster". Due to the data parallel computational capabilities of its graphics processors (GPUs), a GPU-equipped workstation could replace a small computer cluster, while a moderate-sized GPU cluster could imitate a high-end supercomputer. As Nvidia's new GPU-centric workbench "is specifically designed for life science researchers", these can simulate large molecules without the need for supercomputers.

Big talk from Nvidia's marketing department; but are they still within the realms of reality? Time will tell whether they can keep their promises. Are there *Lab Times* readers that already have experience with Nvidia's (or other) GPU-based "supercomputers"? If so, please let us know: wk@lab-times.org. -WK-