

Australia

Australian Biotech Firms Face Financing Crisis

Australian biotech companies are facing a financing drought that will force many to merge or die, according to industry watchers.

Analysts said that biotechnology firms worldwide are running out of cash because their high-risk profile makes raising fresh equity impossible.

They predict rationalization with the merging of single-technology, drug and device developers into larger Australian companies with critical mass and the ability to secure access to capital markets.

According to Mr. Garry Redlich, chief executive officer of Brisbane-based cancer drug researcher Peplin Biotech, the coming months will see several local biotech companies fall into receivership or administration as they run out of cash.

So far this year in Australia, the ASX 200 Pharmaceutical and Biotechnology Index has fallen 49.6 percent as investors bailed out of the industry.

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Mr. Redlich said, "It will take a round of collapses before people release they must put their board and CEO egos aside in order to save their technology and shareholder base. For some companies it is starting to dawn on them, but for many of them it is too late. They are down to a couple of months of cash, have no plans on how to raise the rest, and they have not realized the party is over."

ABN AMRO Morgans research director Mr. Scott Power said that the fragmented Australian biotech sector was set for a shake-up.

Mr. Power said, "There are about 50 or so listed drug discovery and biotechnology companies in Australia and a number of these have limited cash reserves and the opportunity will present itself over the next six months to merge a number of these companies."

He said, "A number of them will simply run out of money and they will fold or be sold off to someone with money. That is a trend that has been seen overseas and I am sure it will flow on here."

Mr. Redlich said that the current financing drought had developed because investors had lost their appetite for high-risk companies in the wake of September 11, and recent corporate collapses.

He said, "If you have got a brilliant piece of technology or bunch of genes, but cannot show how you can turn that into a drug or therapy, then you are being heavily marked down by the market at the moment."

Next GM Cotton Variety Promises Greater Pesticide Reductions

Cotton growers in Australia have halved their insecticide use after six years of growing GM cotton, and are looking forward to the next GM variety and further reductions in chemical use.

Mr. Bruce Pyke, from the Cotton Research and Development Corporation, said that results from the 2000/01 season found that while conventional cotton, on average, received 9.9 sprays, Ingard or Bt cotton received an average of 4.6.

Mr. Pyke said that use of GM cotton has reduced the need to spray one of the cotton industry's most troubling pesticides, endosulphan, which contaminated beef several years ago, and has been linked to fish kills.

Furthermore, he said that there has been a very rapid acceptance of integrated pest management among growers in the last three or four years and Ingard has allowed that to happen more quickly.

Integrated pest management reduces the reliance on chemicals, concentrating instead on natural predators and parasites. Mr. Pyke said that growers using Ingard have seen that "natural enemies can survive in a relatively less sprayed cropping situation and can provide good control and they have been able to translate some of that into their conventional crop management."

A two-Bt gene cotton, Bollgard 11, is currently being trialed. Dr. Greg Constable, the program leader of the Commonwealth Scientific and Industrial Research

Organization's (CSIRO) cotton research unit said that the two-Bt gene cotton, though developed because of the need for better resistance management, will need even fewer sprays.

Dr. Constable said, "The single-gene product saved up to 60 percent of the sprays. The higher efficacy of the two-gene product will again potentially halve the number of Helicoverpa sprays as well."

While Ingard and Bollgard 11 will be marketed by Monsanto, they will use varieties bred by the CSIRO, which is responsible for most of the cotton varieties grown in Australia.

Dr. Constable said, "CSIRO research is on two levels, one at the breeding level, and secondly at the research level to generate the resistance management strategies to maintain the safety of the technology."

Monsanto has applied to the regulators for permission to release the two-Bt gene variety. ●

China

Processing Industry Fueling China's Agricultural Development

Chinese officials have recently pinpointed the agricultural processing industry as the engine fueling the development of Chinese agriculture and filling farmers' wallets.

During the last five years of the 20th century, the importance of agricultural processing in the national economy has been steadily rising.

According to statistics of China's National Bureau of Statistics, the farm products processing industry has become the most dynamic industry in the last ten years with an average annual growth rate of 9.2 percent, topping all other industries in the national economy. The value-added by this industry hit 84.6 percent, up 5.8 points compare with 1995.

Mr. Ou Xinqian, vice-minister of the State Economic and Trade Commission, said that the fast growth of the agricultural processing industry had boosted the market for Chinese agricultural products, and promoted the upgrade of agriculture generally. The huge leaps in the industry created the power to propel the national economy, he said.

Processing farm products also brings Chinese farmers better incomes. More and more township enterprises are forging a relationship that shares benefits with local farmers, which ensures business profits and at same time also cuts risks for agricultural producers.

So far, the agricultural processing industry has created more than 15 million job opportunities for Chinese farmers throughout the country. The industry is also speeding up the restructuring of Chinese agriculture.

Mr. Du Qinglin, minister of Agriculture, revealed that several systems, such as system of secure farm products supply, system of processing industries, system of quality control and safety, system of technical innovations and system of policy support will be set up by the Chinese government to conform with World Trade Organization (WTO) rules.

He said that China has to rely on these five systems to broaden agricultural reforms and economic restructuring in rural areas.

Mr. Liu Zengsheng, director of the Bureau of Township Enterprises of the Ministry of Agriculture, said that setting up the above five systems would gradually help change the severe situation of Chinese agriculture industry after the WTO entry and will increase the competitiveness of Chinese farm products. ●

New Zealand

Moratorium on GE Products Hurts NZ's Biotech Sector

The New Zealand government's plans not to extend the two-year moratorium on commercial release of GE products beyond October 2002. However, Wrightson Group managing director and an outspoken advocate of genetic engineering, Mr. Allan Freeth said that the ban is still hurting the biotechnology industry.

Pastoral agriculture company Wrightson has halted investment in genetic research. It spent NZ\$2.5 million (US\$1.16 million) in the past two years on gene research, and this year only NZ\$600 000-800 000 (US\$280 000-370 000) would be spent and all would be on protecting and strengthening the patents it already held.

Mr. Freeth explained that the company has a number of science plans that it is to take the developments further. However, the company has decided not to invest in those developments and to simply focus on expenditure required to secure its intellectual property position.

The suspended research is on developing better grasses through GE or looking at the potential for transferring genetic traits between species, like frost and disease resistance.

Mr. Freeth said that some of the gene systems the company has found have a possibility of going into maizes or wheat or rice. However, since there is an uncertainty whether those can be commercialized in New Zealand, the company has decided not to invest in those areas.

The flow-on effect would be significant to both Wrightson's other research activities and half-owned Genesis Research and Development. But some research would continue, like unlocking the genetic systems involved in its animal-friendly grasses.

Patent News

Australia

Starpharma Obtains Another US Nanotech Patent

Starpharma Pooled Development Ltd. has recently been issued US Patent Number 6426067 from the Patent and Trademark Office. The patent is exclusively licensed by the Biomolecular Research Institute Ltd. to Starpharma Ltd., a wholly owned subsidiary of Starpharma Pooled Development Ltd.

The granting of this patent titled "Angiogenic Inhibitory Compounds" provides Starpharma with broad patent rights related to dendrimer-based products that inhibit angiogenesis (blood vessel growth), a key process in cancer tumor growth and spread (metastasis).

Starpharma's dendrimers are synthetic nanoscale compounds that have been shown to inhibit angiogenesis in cell-based assays and in animal models of cancer.

Angiogenic inhibitory compounds such as Starpharma's dendrimers are targeted at both the treatment of existing cancer and the prevention of cancer metastasis.

According to industry estimates, angiogenesis is one of the most heavily funded areas of medical research. The market potential of angiogenesis inhibitor drugs is indicated by the market value of all cancer drugs, which in 2000 was approximately US\$8 billion, growing at a rate of 10 percent per annum.

Starpharma Ltd. is developing dendrimers for a range of pharmaceutical applications, including angiogenesis inhibition. Its lead product in development is a topical microbicide gel targeting the prevention of the transmission of sexually transmitted diseases such as HIV/AIDS and herpes in women.

China

Patent for "Hearing Teeth" Developed by Chinese Inventor

An amateur Chinese inventor has recently received a China state patent for turning teeth into ears for the hearing-impaired.

Mr. Meng Shengde, of Xi'an in China's Shaanxi province, has produced a device capable of transmitting voice fluctuations through the jawbone to the inner aural nerves. It will enable the teeth to "hear" sounds emitted by television sets, CD players, computers, mobile phones and many other audio devices.

The device is about 5 cm long, the size of a cigarette holder. With one end held between teeth and the other connected to audio devices, the device enables people to hear.

The inventor claims that over 100 hearing-impaired people have tried the device.

Formerly a schoolteacher, he quit his job in the mid-1980s to repair household appliances. Shortly after that, he began to devote himself to the study of inner sensors for hearing-impaired people.

Scientists in many countries have been working to eliminate the problem. They have used methods that include the much more expensive implantation of artificial cochleae.