

ASX Announcement and Media Release

Thursday 5 December 2002

SciGen Limited - ASX Code: SIE

SCI GEN LAUNCHES NEW HEPATITIS B VACCINE IN VIETNAM

SciGen Limited ("SciGen") today announced the launch of **Sci-B-Vac**TM its new 3rd generation mammalian cell-derived Hepatitis B vaccine in Vietnam. This new Hepatitis B vaccine aims to control the spread of the Hepatitis B disease in Vietnam, and thereby reduce its associated morbidity and mortality. Chronic Hepatitis B infection can cause liver cirrhosis and liver cancer.

Mr Mark Compton, Managing Director and CEO of SciGen said that "**Sci-B-Vac**TM is the principal product in SciGen's portfolio and Vietnam is the first country in which we have launched the product, representing a major milestone for the company just 2 weeks after listing. It clearly demonstrates that not only is **Sci-B-Vac**TM in commercialization phase but also is a further endorsement of SciGen's business model of licensing-in and co-developing products then bringing them to market."

"The company will continue to roll out **Sci-B-Vac**TM across the region. Health authority registration has been gained in the Philippines with launch anticipated in the 4th week of January 2003. Other registrations in the Asia Pacific region are expected in 2H FY03. **Sci-B-Vac**TM is a major driver of the company's revenue going forward" Mr Compton said.

The incidence of Hepatitis B in Vietnam is high, at 8-10% (compared with about 1% in developed countries), which could be due to the high level of transmission from mother to baby. Vaccinations of newborns will result in a significant reduction in the infection rate. Prevention through vaccination is the only effective medical measure available to control the spread of Hepatitis B. An active private market for Hepatitis B vaccine exists in Vietnam estimated to be in the order of US\$2M p.a.. However, the potential public (government) market is much larger. Funding for this market comes from the Vietnamese Government in addition to the World Health Organisation and other key bodies such as the Gates Foundation. SciGen will continue to negotiate a position in the public market with its new, innovative Hepatitis B vaccine. The estimated market for Hepatitis B vaccines in South East Asia is US\$350 million.

Mr Compton went on to comment that "introducing **Sci-B-Vac**TM in Vietnam was a natural choice for us due to Vietnam's growing population and the high incidence of hepatitis B. We look forward to working with the relevant Vietnamese and international health authorities, to ensure the introduction of the vaccine nation wide."

Registrations for other products such as recombinant human insulin are in train in a number of other countries in the region. SciGen already generates sales from its recombinant human growth hormone (**SciTropin™**) in five countries in the Asia Pacific region using its own sales and marketing infrastructure. SciGen has offices and sales teams in Singapore, Australia, Philippines, Hong Kong, Korea and Vietnam with strategic partners in India.

About SciGen

SciGen Ltd is a progressive biotechnology/biopharmaceutical company involved in co-developing and marketing genetically engineered biopharmaceutical products for human healthcare. SciGen focuses in the areas of gastroenterology, endocrinology and immunology. Its product portfolio includes vaccines and therapeutics.

SciGen has acquired the rights to manufacture, distribute and market biopharmaceutical products under exclusive licensing arrangements. SciGen's portfolio currently includes proprietary biotechnology-derived products, and biogeneric products, which allows for faster entry into the market, as the biogeneric products have undergone much of the clinical development and trials required to bring new drugs to market. This minimises the risks associated with early stage product development. SciGen currently undertakes R&D activities in collaboration with strategic partners and institutions.

SciGen's major strength lies in its ability to recognise the potential of new products in their early stages of development. Through joint collaboration with its strategic partners, SciGen uses its extensive expertise in regulatory and clinical environments, in conjunction with marketing and promotional infrastructure, to bring to market products which will have significant long-term benefit.

SciGen's business was established in 1988. SciGen is a Singaporean biotechnology company, publicly listed on the Australian Stock Exchange (ASX code SIE). SciGen's headquarters is in Singapore and it also has offices in Australia, USA, Korea, Vietnam, Hong Kong and Philippines.

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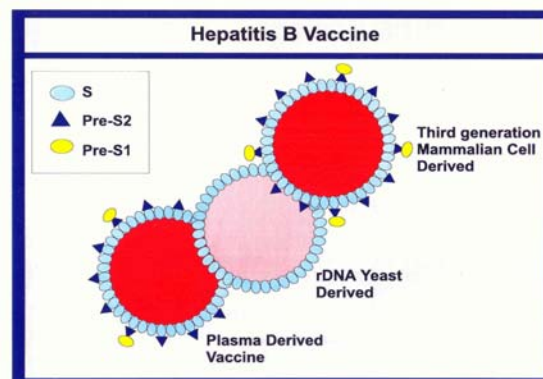
Web: www.scigen.com.au

How Sci-B-Vac™ works

Sci-B-Vac™ is a third generation vaccine, derived by genetically modifying the Chinese hamster ovary cells with DNA sequences coding for the three surface proteins of the Hepatitis B virus (HBV). These contain the S, pre-S₁ and pre-S₂ epitopes, which act as markers on the surface of the HBV. Therefore **Sci-B-Vac™** resembles the authentic virus, without containing the infective DNA. When the vaccine is injected into a patient, the patient's immune system recognises the S, pre-S₁ and pre-S₂ epitopes and produces antibodies specific for the HBV. These antibodies remain in the body, and immunise the patient against future infections by the virus.

Sci-B-Vac™ is superior to other Hepatitis B vaccines. The commonly used yeast-derived vaccine has only the S epitope. In comparison **Sci-B-Vac™** has the S, pre-S₁ and pre-S₂ epitopes. Research shows that the presence of these three epitopes in a vaccine will stimulate a high cellular response and increase the antibody levels. These antibodies promote viral clearance and prevent hepatocyte (liver cell) binding. The overall result is a vaccine that is more immunogenic and efficient.

In addition, as **Sci-B-Vac™** contains all three epitopes, it will overcome cases where patients' immune systems may not respond to the S antigen alone. Another commonly used vaccine is the



plasma-derived vaccine. While this type of vaccine contains the three epitopes, it also contains disease-causing DNA viral material, which may compromise the vaccine's safety. As **Sci-B-Vac**TM is not derived from plasma, it does not have this problem.

Clinical Benefits of Sci-B-VacTM

Sci-B-VacTM has a number of clinical advantages over current Hepatitis B vaccines, including:

- Faster onset of action - **Sci-B-Vac**TM shows earlier seroconversion (presence of antibodies in the patient) and seroprotection (having sufficient antibodies present to protect the patient from the disease)
- Higher level of Hepatitis B antibodies
- Highly immunogenic and effective at low doses
- Offers protection to neonates (newborns) whose mothers are HBV carriers

With these superior characteristics, **Sci-B-Vac**TM is set to make a positive impact upon the prevention of the Hepatitis B in the Asia Pacific region.