

SALIENT POINTS**Closing the vaccine gap**

Thailand-based BioNet-Asia, with help from a new R&D centre and research experts, has outlined a mission to bring affordable vaccines to Asean and other parts of the developing world. **Page 8**

BioNet-Asia aims to close 'vaccine gap'

BioNet-Asia Co Ltd, the only privately owned vaccine research and development company in Thailand, is seeking a major role in the drive to reduce vaccine imports and consumer costs and to meet domestic and Asean demand when the Asean Economic Community (AEC) materialises in 2015.

"Our company has many years of experience in the vaccine business, and our mission is to produce affordable vaccines, and make them available not only locally, but also to other Asean countries," said Vitoon Vonghangool, managing director of BioNet-Asia.

"We would like to stimulate all concerned to seek ways on how best to accelerate local vaccine development and production to bridge the huge vaccine gap between industrialised and developing worlds."

In 2009, BioNet-Asia invested 300 million baht to open the first research and development centre and vaccine pilot plant dedicated to the development of bacterial vaccines in Thailand. The facilities, designed and built in compliance with international and World Health Organisation (WHO) Good Manufacturing Practices (GMP), cover 2,000 square metres on a 17-rai site in the Hi-Tech Industrial Estate in Ayutthaya.

Since then, BioNet-Asia, supported by the Board of Investment, has begun to develop a new acellular pertussis vaccine using a recombinant pertussis strain cultivated from its research collaboration with Mahidol University.

"The advantage of the recombinant pertussis strain is that it produces very high yields of inactivated pertussis toxins, which in effect will make the recombinant acellular pertussis vaccine affordable to developing countries," explained Mr Vitoon.

"This will be the first time that developing countries will have access to an innovative and affordable vaccine before the industrialised world."

This year, the company plans to produce the acellular pertussis vaccine, which has been used successfully to prevent whooping cough in Western Europe,



BioNet-Asia has invested 300 million baht in its R&D centre in Ayutthaya.

North America, Japan and Korea, for pre-clinic trials.

In addition, BioNet-Asia will extend its research partnership with Mahidol University to produce protein carriers as well as open additional quality-control and viral labs in April to expand its R&D capabilities.

"Although Thailand has been producing vaccines for 80 years, the production machinery and processes adopted are outdated, and there is also a need to invest and develop human resources and management in order to expand capacity and meet international standards," said Mr Vitoon.

Thailand's population of 68 million means it is now spending 4 billion baht a year on imported vaccines, which account for 90% of all local requirements.

The government has responded to the challenge by establishing the National Vaccine Institute in December 2010 to support the development of common vaccines such as for dengue fever, whooping cough, Hepatitis B and tuberculosis, said Prof Emeritus Dr Pornchai Matangkasombut, executive board chairman of the Thailand Center of Excellence for Life Sciences.

Dr Ratchanee Wattanawisitporn, director of Investment Promotion Group 6 with the BoI, said the agency was trying to encourage more companies to invest in vaccine development.

"As it is a highly technical and specialised industry, the BoI is ready to support investors by providing attractive incentives such as exemption of import duties on machinery, waiving of corporate tax for eight years and deduction of transport and utility costs," she said.