

Dr Weidong Yin: Leading Sinovac's vaccine initiative

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In the 1980s, a lot of people in China suffered due to the outbreak of hepatitis A. There was no effective method to conduct accurate diagnosis, let alone the development of a preventive vaccine for the disease. This prompted Dr Weidong Yin, a young medical graduate from the Tangshan Medical School to take steps in order to reduce China's dependency on imported vaccines.

Dr Yin, who started his career as a doctor at the China Center for Disease Control and Prevention in Tangshan City, Hebei Province, decided to focus on hepatitis research. He along with his team worked for over 20 years at the Tangshan Yian Biological Engineering, which led to the successful development of an inactivated hepatitis A vaccine (Healive) in 1999, the first-of-its-kind developed by scientists in China.

He was honored with the BioSpectrum Asia Pacific Bioscience Industry Entrepreneur of the Year Award for 2011.

Sinovac was established in 2001 with a mission of supplying vaccines to eliminate human diseases. Dr Yin has been the chairman, president and CEO of Sinovac since 2003 and is also the general manager of the company's subsidiary, Sinovac Biotech (also known as Sinovac Beijing).

While recalling the early stage of Sinovac, Dr Yin says, "Severe acute respiratory syndrome (SARS) development project (in 2002 when China was hit by SARS) has changed my life. This project was closely connected with stability of the country and society with our company's vaccine development project under severe pressure. Sinovac has been known worldwide ever since the SARS attack. Hence forth, we have enhanced our communication with the global public organizations, research institutions and enterprise in the world, and have established a good image among local government, customers and the public."

"In the early stage, no one knew our company, so it was very difficult for us to take bank loans to support the company's development; the vaccine production line was under construction and no product has been launched into the market at the beginning," says Dr Yin.

Dr Yin managed to get the funding from the Zhongguancun Science and Technology Guarantee Corporation when Sinovac was facing monetary constraints. He also got support from the National Development and Reform Commission during the production of hepatitis A vaccine, which was listed in the National high-tech industrialization demonstration projects. Dr Yin also got the firm listed on the American Stock Exchange in 2004. Sinovac's prime objective is to provide Chinese children with vaccines of international standard and similarly, providing Chinese vaccines to the children of other countries.

Sinovac Biotech produced the Influenza A H1N1 vaccine during swine flu epidemic and marketed it in just 87 days. In 2009, Sinovac was the first company to receive approval for its H1N1 influenza vaccine, PANFLU.1 and has received orders for the production of 12.49 million doses from the Chinese Central Government.

The share price of Sinovac on the American Stock Exchange (AMEX) has more than tripled in 2009, from around \$2. Utilizing the opportunity, Dr Yin stepped into the global market by getting the company listed on the NASDAQ Global Market in 2009 in a bid to raise more funds and become a leading vaccine producer.

"The successful R&D experience on SARS and H5N1 vaccine, quick decision and involvement of advantageous resources, government support, active participation of volunteers played a very important role in achieving this milestone. Right from Prime Minister, ministers, down to every researcher, clinical trial volunteers, China has the consensus. My personal feeling is that government, enterprises, and experts have never had such a high consensus like this," says Dr Yin.

In the past two decades, the team led by Dr Yin has developed and commercialized five vaccines of human use and advanced its R&D pipeline. Sinovac's product pipeline include Healive (R) (hepatitis A), Bilive (R) (combined hepatitis A & B), and Anflu (R) (influenza) Panflu (R) and Panflu.1 (TM), Sinovac's pandemic influenza vaccine (H5N1) and H1N1 vaccine, have already been approved for government stockpiling. Of the five vaccines, developing the H1N1 influenza vaccine was the most challenging for Sinovac. Dr Yin Says, "We had a tight deadline. China has a population of 1.3 billion people. If there was no vaccine when the pandemic influenza broke out, the consequence would be disastrous. The earlier the H1N1 vaccine was launched into market, the more people would be protected."

Sinovac continues to work on developing vaccines for a number of different infectious diseases including pneumococcal conjugate, enterovirus 71 (EV71), Japanese encephalitis, animal and human rabies, Haemophilus influenzae type B (HIB) and epidemic meningitis, chickenpox, mumps and rubella. Its wholly-owned subsidiary, Tangshan Yian, is focusing on the research, development, manufacturing and commercialization of animal vaccines and has completed the field trials for an independently developed inactivated animal rabies vaccine that is anticipated to be launched in 2011.

Over the years, Sinovac has expanded its fully-integrated platform with state-of-the-art research facilities, GMP-certified manufacturing facilities and a sales team that spread across China. Sinovac's sales revenue clocked \$32 million in 2010.

Dr Yin has been appointed as the principle investigator for many key governmental R&D programs at the Chinese Ministry of Science and Technology, including Inactivated hepatitis A vaccine R&D, Inactivated SARS vaccine R&D and New human influenza vaccine (H5N1) R&D. "Currently, we are facing the challenge of having a single market and limited products portfolio. Realizing the challenges, we have already increased investment in R&D to develop more new vaccines. We are expanding our domestic marketing team and also looking for international opportunities as well."

Sinovac under the leadership of Dr Weidong Yin, has sufficient cash flow to support its R&D activities, capacity expansion, potential M&A and international collaborations that will drive towards promising future.