

## **Bharat Bio files patent for HIMAX Tech**

Aug 24, 2001

**Hyderabad, August 23, 2001:** Bharat Biotech International Ltd (BBIL), the Hyderabad-based player in biotechnology-based pharmaceuticals and therapeutics, has filed patent for the novel manufacturing process for the recombinant Hepatitis B vaccine which was developed in-house, according to its Chairman and Managing Director, Dr Krishna M. Ella.

"This process has replaced the conventional ultra centrifugation step, which has several inherent shortcomings, the major one being the use of toxic Cesium Chloride (CsCl). We have developed this process known as Himax technology for purification of recombinant protein which totally eliminates the use of toxic metals and increases the recovery of the Hepatitis B surface antigen to the tune of 85 per cent, the highest anywhere in the world," Dr Ella told visiting presspersons at the company's plant and R&D; centre located at Turkapally near here.

The company has also filed patents for a number of drugs such as Lysostaphin, a drug for curing the post-operational infections, Staphylokinase, a cardiovascular molecule, malaria vaccine, Rotavirus vaccine, typhoid vaccine, EGF and Hepatitis A vaccine.

"While the patents for various drugs were at different stages of evaluation, we have already received the patent for Lysostaphin," Dr Ella said.

On the technology in pipeline, Dr Ella said: "The expertise that has been acquired in manipulating recombinant micro organisms is being further applied in developing a vascular endothelial growth factor (VEGF) that stimulates new blood vessel formulation in tissue deficient in normal arterial blood flow, thereby bypassing the blockage and resulting in improved organ function."

According to Dr Ella, the project was technologically challenging and was of tremendous national significance with the increasing number of coronary deaths being accounting for from the Indian subcontinent. The sequencing of this gene has been successfully carried, he said.

The products in pipeline include VEGF-Gene Therapy in collaboration with the Centre for Biochemical Technology and funded by the Department of Science and Technology, Steptokinase, Rabies, development of HIV and HIV 2 kits in technical collaboration with the Jawaharlal Nehru Centre for Advance Scientific Research, the third generation Hepatitis B vaccine, Rotavirus in collaboration with the Atlanta-based CDC, malarial vaccine, Lysostaphin, Staphylokinase, typhoid vaccine and insulin in collaboration with the Centre for Biochemical Technology.

"Of this, we expect to launch three products - typhoid vaccine, Hepatitis A and EGF - within next 12 months period," Dr Ella said.

BBIL has embarked upon a Rs 30-crore expansion programme for setting up multi-product manufacturing facility adjacent to the existing plant and R&D; centre for the production of products in the pipeline.

Of the company's Rs 9.35-crore paid-up equity capital, the Industrial Development Bank of India (IDBI) currently holds a 21 per cent stake.

Pic.: Mr Krishna M. Ella, Chairman and Managing Director, Bharat Biotech International Ltd.