



## **Crucell and Genexine Announce Agreement for Hepatitis B Vaccine**

**Leiden, The Netherlands, July 3, 2002** - Dutch antibody and vaccine company Crucell N.V. (NASDAQ, Euronext: CRXL) and Genexine Co. Ltd., a Korean drug development company, today announced that they have entered into a licensing agreement wherein Crucell's PER.C6<sup>TM</sup> cell line will be used by Genexine for the research, development and manufacture of a recombinant therapeutic vaccine against Hepatitis B.

Under the terms of the agreement, Genexine obtains a worldwide non-exclusive license for the use of Crucell's PER.C6<sup>TM</sup> cell line to research and develop a therapeutic vaccine against Hepatitis B. Furthermore, the agreement includes the option for a commercial license. Crucell will receive upfront and annual payments; further financial details were not disclosed.

"400 million individuals world-wide are Hepatitis B virus (HBV) carriers running the risk of developing cirrhosis and eventually liver cancer. It has recently been shown in an animal model that a vector-based vaccine may be able to reduce the HBV viremia<sup>1</sup>. This makes the current agreement with Genexine, for the development of an adenovector based vaccine produced on PER.C6<sup>TM</sup> cells, very valuable for Crucell", comments Jaap Goudsmit, Chief Medical Officer of Crucell. "Crucell launched PER.C6<sup>TM</sup> as a vaccine platform through a licensing agreement with Merck & Co. for its HIV vaccine. We are now expanding our PER.C6<sup>TM</sup> business in the field of vaccines. The contract with Genexine, together with an agreement signed earlier this year with Rhein Biotech for a Japanese Encephalitis vaccine, endorses our strategy."

"Hepatitis B is one of the major infectious diseases affecting people throughout Asia. The need for an effective vaccine that can treat, as well as prevent, Hepatitis B infections is paramount", says Prof. Sung, Chief Technology Officer of Genexine. "Crucell's PER.C6<sup>TM</sup> human cell line provides the perfect platform for the research and development of a therapeutic, adenovirus DNA vaccine."

### **About Crucell**

Crucell discovers and develops biopharmaceuticals that use the human immune system to combat cancers, infectious diseases and other conditions. Crucell's patented technology platforms, MAbstract<sup>TM</sup>, AdVac<sup>TM</sup>, and PER.C6<sup>TM</sup>, allow the discovery, development and production of antibodies and vaccines. Crucell offers its platforms to the pharmaceutical and biotechnology industry as well as using them to

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<sup>1</sup> Pancholi et al, Hepatology 2001:448-453



create its own product pipeline. Partners include Merck & Co. for the HIV vaccine, the National Institutes of Health (NIH) for the Ebola vaccine, and Centocor, a Johnson & Johnson company, for the CD46 antibody for treatment of various types of cancer. In addition, Crucell has over 20 licensees for its PER.C6<sup>TM</sup> technology. These include Novartis, GSK, Aventis and Schering AG. With headquarters based in Leiden, The Netherlands, the company currently employs 200 people. Crucell is listed on Euronext and NASDAQ (ticker symbol CRXL). For more information visit [www.crucell.com](http://www.crucell.com).

#### **About Genexine**

Genexine is a biotechnology company founded in 1999 with a research and development focus on virology. Genexine develops both DNA and recombinant adenovirus vaccines for the treatment and prevention of infectious diseases such as Hepatitis B, Hepatitis C and AIDS. The Company is based in Seoul, Korea with laboratory facilities located in the Department of Life Sciences at Pohang University of Science and Technology.

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### **Notes to editors**

Hepatitis B is the most common sexually transmitted disease and causes 60% to 80% of the world's primary liver cancer. With around 400 million people chronically infected and over one million people dying annually of Hepatitis B induced liver cancer, a great need and large market exists for a good therapeutic vaccine to cure Hepatitis B infection.

Hepatitis B virus (HBV) can cause lifelong Hepatitis B infection, cirrhosis (scarring) of the liver, liver cancer, liver failure, and death. The virus is transmitted through contact with blood or bodily fluids containing blood. HBV can spread through direct blood-to-blood contact, unprotected sex, illicit drug use, and from an infected woman to her baby during birth.

A prophylactic Hepatitis B vaccine is available for all ages to prevent Hepatitis B infection. It is a three shot vaccine series, delivered over a six-month period. Currently there are no therapeutic vaccines available.