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**Jennerex Announces *Nature Medicine* Publication  
Highlighting Randomized Overall Survival Benefit of Lead Product Candidate,  
Pexa-Vec (JX-594) in Patients with Advanced Hepatocellular Carcinoma (HCC)**

*-- High-Dose Pexa-Vec Associated with Statistically Significant Improvement in Median Survival Versus Low-Dose Pexa-Vec (14.1 months vs. 6.7 months) --*

**San Francisco, Calif. -- February 10, 2013** — Jennerex, Inc., a private, clinical-stage biotherapeutics company focused on the development and commercialization of best-in-class targeted oncolytic immunotherapies for solid tumors, today announced the publication of research demonstrating the ability of its lead product-candidate, Pexa-Vec (JX-594) to significantly prolong survival in advanced hepatocellular carcinoma (HCC) patients in a randomized dose comparison clinical trial. This research, published in Volume 19, Issue 2 of *Nature Medicine*, showed a statistically significant dose-dependent overall survival benefit with 14.1 months median overall survival for the high-dose group compared to 6.7 months for the low-dose group (p-value = 0.02). This is the first randomized clinical trial of an oncolytic immunotherapy demonstrating significantly prolonged overall survival.

Pexa-Vec is an oncolytic immunotherapy designed to 1) rapidly de-bulk tumors via tumor cell lysis, 2) activate an antivascular effect with rapid tumor vascular knockout, and 3) induce a durable immune response against tumors. Pexa-Vec was engineered from vaccinia, which has been used for decades as a vaccine in healthy individuals. Pexa-Vec has been safely administered to over 200 patients and is currently in Phase 2b clinical development for the treatment of advanced HCC and is also being evaluated in other solid tumors.

“The treatment options for advanced HCC are limited, with few promising agents currently in development. This *Nature Medicine* publication highlights the unique possibility of a meaningful survival benefit combined with short-term, transient and manageable side effects” said Tony Reid, M.D., Ph.D., professor of Medicine at University of California, San Diego and co-lead author of the paper. “The findings also showed Pexa-Vec’s ability to induce anti-tumor immunity and reduce blood flow to tumors which supports Pexa-Vec’s multi-pronged approach to attacking cancer.”

The data presented in the *Nature Medicine* publication showed that Pexa-Vec had clear local anti-cancer response at both the low and high doses. Thirty subjects were randomized into the low and high dose groups and received three Pexa-Vec treatments over the course of four weeks. The results demonstrated that Pexa-Vec treatment at both doses resulted in a reduction in tumor size and decreased blood flow in tumors. The data further demonstrates that Pexa-Vec treatment induced an immune response against the tumor, evidenced by antibody-mediated tumor cell toxicity. Pexa-Vec was well-tolerated at both high and low doses with the most frequent adverse events consisting of fever lasting less than 24 hours.

“This *Nature Medicine* publication validates our clinical data and the scientific rationale for our approach to treating cancer with oncolytic immunotherapy as well as the continued development of Pexa-Vec for the treatment of HCC and other solid tumors,” said Laurent Fischer, M.D., president and chief executive officer of Jennerex. “The opportunity to rapidly de-bulk tumors and provide a long-term immune effect is a significant advance in the treatment of HCC. We are currently enrolling patients in multiple mid and late-stage trials with Pexa-Vec with the goal of bringing this groundbreaking therapy to market.”

### **Pexa-Vec Clinical Development Program and SOLVE Platform**

Pexa-Vec (JX-594) is currently being evaluated in an international, randomized Phase 2b clinical trial (TRAVERSE) in patients with advanced primary liver cancer who have failed sorafenib therapy. It is also being tested in HCC patients in combination with sorafenib. In addition, Pexa-Vec is being evaluated in a Phase 1-2 clinical trial in patients with treatment-refractory colorectal cancer as monotherapy and in combination with irinotecan.

Phase 1 and Phase 2 clinical trials in multiple cancer types to date have shown that Pexa-Vec, delivered either directly into tumors or intravenously, induces tumor shrinkage and/or necrosis and is well-tolerated (over 200 patients treated to date). Objective tumor responses have been demonstrated in a variety of cancers including liver, colon, kidney, lung cancer and melanoma. Pexa-Vec has had a predictable and manageable safety profile to date which includes flu-like symptoms that resolve in 24 to 48 hours.

Pexa-Vec is the lead product candidate from Jennerex' SOLVE™ platform, a groundbreaking approach offering new therapeutic options for patients with life-threatening cancers. SOLVE builds on the natural attributes of vaccinia viruses to engineer highly targeted, oncolytic immunotherapies for cancer with minimal side effects.

### **About Jennerex's Regional Partners for Pexa-Vec**

Transgene (NYSE Euronext Paris: FR0005175080), a bio-pharmaceutical company specialized in the development of immunotherapeutic products, holds an exclusive license to develop and commercialize Pexa-Vec in Europe and neighboring countries. Green Cross Corporation, a leading company in the development, manufacturing, and commercialization of viral vaccines and other biological products, holds an exclusive license to develop and commercialize Pexa-Vec in South Korea, and Lee's Pharmaceutical Ltd. holds an exclusive license to develop and commercialize Pexa-Vec in China.

**Transgene**, a member of the Institut Mérieux Group, is a publicly traded French biopharmaceutical company dedicated to the development of therapeutic vaccines and immunotherapeutic products in oncology and infectious diseases. Transgene has four compounds in phase 2 clinical development: TG4010 and Pexa-Vec (TG6006) having already completed initial phase 2 trials, TG4001 and TG4040. Transgene has concluded three strategic agreements for the development of its immunotherapy products: an option agreement with

Novartis for the development of TG4010 to treat various cancers; an in-licensing agreement with US-based Jennerex, Inc. to develop and market Pexa-Vec (TG6006), an oncolytic virus, and with the EORTC for the development of TG4001 to treat HPV induced head and neck cancers. Transgene has bio-manufacturing capacities for viral-based products. Additional information about Transgene is available at [www.transgene.fr](http://www.transgene.fr).

**Green Cross Corp.** is a publicly traded and leading Korean biopharmaceutical company specialized in development and commercialization of vaccines, plasma-derivatives, recombinant proteins and therapeutic antibodies in oncology and infectious diseases. Green Cross Corp. has been collaborating with Jennerex in Korea since 2006 to jointly conduct the Phase 1 and 2 clinical trials in patients with liver cancer. Additional information about Green Cross Corp. is available on the internet at [www.greencross.com](http://www.greencross.com).

**Lee's Pharmaceutical Holdings Limited** is a research-based biopharmaceutical company listed in Hong Kong with over 19 years operation in China's pharmaceutical industry. It is fully integrated with strong infrastructures in drug development, manufacturing, sales and marketing. It has established extensive partnership with over 20 international companies and currently has 14 products in the market place. Lee's focuses on several key disease areas such as cardiovascular, oncology, gynecology, dermatology and ophthalmology. Lee's development program is lauded with 30 products stemming from both internal R&D efforts and collaborations with US, European and Japanese companies and aspiring to combat diseases such as liver cancer and pulmonary hypertension. The mission of Lee's is to become a successful biopharmaceutical group in Asia providing innovative products to fight diseases and improve health and quality of life. Additional information about Lee's Pharmaceutical is available at [www.leespharm.com](http://www.leespharm.com).

#### **About Jennerex**

Jennerex, Inc. is a clinical-stage biotherapeutics company focused on the development and commercialization of best-in-class, breakthrough targeted oncolytic immunotherapy products for cancer. The Company is focused on two main programs, lead product candidate, Pexa-Vec (JX-594), which is in mid-stage clinical development for the treatment of advanced primary liver cancer and colorectal cancer and JX-929 which is under investigation for a variety of solid tumors. Jennerex is headquartered in San Francisco and has related research and development operations in Ottawa, Canada and Busan, South Korea. For more information about Jennerex, please visit [www.jennerex.com](http://www.jennerex.com).

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