



ICHOR MEDICAL SYSTEMS ANNOUNCES STRATEGIC COLLABORATION WITH JOHNSON & JOHNSON INNOVATION TO DEVELOP AND COMMERCIALIZE IMMUNOTHERAPIES DELIVERED WITH TRIGRID ELECTROPORATION DEVICE FOR CHRONIC HEPATITIS B

SAN DIEGO, APRIL 13, 2015 -- Ichor Medical Systems, Inc. (Ichor) announced today that it has entered into a product development collaboration and worldwide license agreement with Janssen Pharmaceuticals, Inc. (Janssen). Under the agreement, which was facilitated by Johnson & Johnson Innovation, the parties will work together to develop and commercialize DNA-based vaccine products for the treatment of chronic hepatitis B using Ichor's TriGrid™ electroporation technology for clinical administration. Ichor will receive an upfront payment, R&D support, and development and sales milestone payments up to a potential total of approximately \$85 million USD, as well as royalty payments on any future licensed product sales. Janssen will assume responsibility for certain development costs and all commercialization costs associated with the program, including manufacturing and distribution expense for Ichor's TriGrid Delivery System.

Hepatitis B is a potentially life-threatening liver infection caused by the hepatitis B virus (HBV). More than two billion people alive today have been infected with HBV. Presently, there are over 240 million people worldwide that carry the virus and remain chronically infected. Current treatments seldom eliminate the virus and are often associated with severe adverse reactions.

DNA vaccines are an emerging vaccine platform that are able to generate antigen-specific antibodies and T cells, the latter being crucial for long-term resolution of HBV infection. However, the efficacy of DNA vaccines delivered by conventional injection has been hindered by poor delivery efficiency, resulting in suboptimal immune responses in clinical trials.

Electroporation is a potent delivery method that uses brief electrical pulses to transiently alter cell membranes, facilitating entry of DNA into cells. Ichor's patented TriGrid Delivery System, which is currently being tested in clinical trials in four continents, is the first integrated and fully automated device for electroporation-mediated DNA administration in humans. Previous clinical studies have shown the TriGrid to significantly enhance immune responses to the delivered vaccines compared to conventional injection, leading to positive clinical outcomes in diseased populations.

Robert Bernard, Ichor Founder and CEO, stated, "Janssen's decision to couple our clinically validated TriGrid electroporation technology with their DNA vaccine for HBV is extraordinarily exciting for Ichor. Our scientists and engineers look forward to this opportunity to collaborate with Janssen in the development of immunotherapies for patients suffering from chronic hepatitis B infection".



About Ichor Medical Systems, Inc.

Ichor Medical Systems' TriGrid™ Delivery System (TriGrid) is the first integrated and fully automated device for electroporation-mediated DNA administration in humans. Ichor, a privately-held biotech company based in San Diego, CA, is collaborating with partners to provide its enabling TriGrid platform as a means for delivery of DNA drugs and vaccines in disease indications such as cancer, malaria, hepatitis B virus (HBV) infection, human papillomavirus (HPV) infection, human immunodeficiency virus (HIV) infection, and Ebola, as well as for multiple biodefense agents. Funded by the Defense Advanced Research Projects Agency (DARPA), the TriGrid platform is also being developed for DNA-based antibody delivery as a rapid countermeasure in the event of an infectious outbreak or biological weapons attack. Visit <http://www.ichorms.com>.

For Further Information

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