GigaGen Announces Presentation of Preclinical Data for Recombinant Intravenous Immunoglobulin (IVIG) at the European Society for Immunodeficiencies (ESID) Meeting

Presentation will cover initial results of preclinical safety and efficacy data for recombinant IVIG

South San Francisco, CA (PRWEB) September 23, 2016 -- GigaGen Inc., a biotechnology company with patented technology for discovery of T cell receptor (TCR) and antibody therapeutics from human immune repertoires, today announces that it will be presenting initial preclinical safety and efficacy data for the world’s first true recombinant IVIG therapy. GigaGen’s work was selected from hundreds of abstracts for an oral scientific presentation at the 17th biennial meeting of the European Society for Immunodeficiencies (“ESID”) in Barcelona, Spain.

The presentation titled “Manufacturing and Preclinical Validation of Recombinant Intravenous Immunoglobulin for Primary Immunodeficiency” will be given by Dave Johnson, PhD, GigaGen’s CEO, at 13:35 in the Immunoglobulin and Immunomodulatory Therapy session on September 23, 2016.

Plasma derived IVIG is used to treat B cell immunodeficiency and many other diseases. However, conventional plasma IVIG suffers several shortcomings that include:
• Risk of contamination by blood-borne pathogens such as viruses, and other blood artifacts such as clotting factors or IgA.
• Supply is constrained by availability of plasma donors.
• Potency is relatively, requiring many grams per infusion in order to confer protection against common pathogens.

GigaGen is developing the first true recombinant IVIG to address each of these drawbacks of IVIG harvested from human plasma.

Dr. Johnson will present validation results from the application of GigaGen’s B cell sequencing and expression technology to isolate immunoglobulin G (IgG) sequences from millions of antibody-expressing cells from fifty human donors, generate DNA libraries, and use the libraries to express IgG proteins as recombinant IVIG.

Results highlights:
• Recombinant IVIG expressed >95% of the millions of antibodies present in the original input cells.
• Expression was stable and quantitatively consistent across three weeks of culture.
• HPLC revealed 99% pure IgG monomer.
• ELISA showed activity against six pathogens.
• Injection of 5mg of recombinant IVIG into mice indicated no overt signs of toxicity and a pharmacokinetic profile similar to plasma IVIG.

Dr. Johnson will be available for questions following the presentation.

About GigaGen
GigaGen is a biopharmaceutical company developing novel antibody and T cell therapies derived from immune repertoires. GigaGen’s technology platform captures the genetic make-up of the entire human immune
repertoire, capturing and genetically analyzing B and T cells at a rate of millions per hour, while simultaneously identifying their antigen and protein binders. Therapies derived from natural immune repertoires mimic the body's natural immune system - they can be more effective, can have fewer side effects, and can have faster development timelines than those developed from traditional methods. GigaGen has drug discovery projects with several pharmaceutical companies in addition to its own pipeline for development of the first recombinant intravenous immunoglobulin (IVIg) and immuno-oncology therapies. For more information, visit www.gigagen.com.
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