

Celsion Corporation Highlights Progress in its DNA-based Vaccine Program

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PLACCINE DNA-based Vaccine Demonstrates Robust Response in Murine Model

LAWRENCEVILLE, N.J., Sept. 01, 2022 (GLOBE NEWSWIRE) -- Celsion Corporation (NASDAQ: CLSN), a clinical-stage company focused on DNA-based immunotherapy and next-generation vaccines, today provided an update on the progress made in the development of a DNA-based vaccine using its PLACCINE platform technology. Additional data from its completed proof-of-concept mouse challenge study confirms that a PLACCINE vaccine can produce robust levels of IgG, neutralizing antibodies, and T-cell responses.

The Company previously reported evidence of IgG, neutralizing antibody, and T-cell responses to its SARS-CoV-2 PLACCINE vaccines in normal mice. The additional data from its now completed mouse challenge study demonstrates the ability of the Company's PLACCINE vaccine to protect a SARS-CoV-2 mouse model in a live viral challenge. In the study, mice were vaccinated with a PLACCINE vaccine expressing the SARS-CoV-2 spike antigen from the D614G variant or the Delta variant, or a combination vaccine expressing both the D614G and Delta spike variants. The vaccination was administered by intramuscular injection on Day 0 and Day 14, followed by challenge with live SARS-CoV-2 virus on Day 42. All three vaccines, including the single and dual antigen vaccines, were found to be safe and elicited IgG responses and inhibited the viral load by 90-95%. The dual antigen vaccine was equally effective against both variants of the SARS CoV-2 virus.

"These challenge studies demonstrate that our PLACCINE vaccines are highly effective in protecting against the SARS-CoV-2 infection and represent a new class of vaccines that are highly effective and do not require a viral vector, a device or lipid nanoparticles for immunization," said Dr. Khursheed Anwer, executive vice president and chief science officer of Celsion.

Dr. Corinne Le Goff, president and chief executive officer of Celsion added, "These results are very encouraging, and I believe that the versatility of our multicistronic formulated plasmid DNA platform could allow the development of new vaccines of the future, combining efficacy and convenience. We look forward to additional data from this program in non-human primates in the second half of this year."

About PLACCINE

PLACCINE is a first in class DNA vaccine platform that can target multiple antigens and be administered with a standard intramuscular injection. PLACCINE was derived from the Company's proprietary TheraPlas platform.

About Celsion Corporation

Celsion is a fully integrated, clinical-stage biotechnology company focused on advancing a portfolio of innovative cancer treatments, including immunotherapies and DNA-based therapies, and a platform for the development of nucleic acid vaccines currently focused on SARS-CoV-2. The company's product pipeline includes GEN-1, a DNA-based immunotherapy for the localized treatment of ovarian cancer. Celsion also has two feasibility-stage platform technologies for the development of novel nucleic acid-based immunotherapies and other anticancer DNA or RNA therapies. Both are novel synthetic, non-viral vectors with demonstrated capability in nucleic acid cellular transfection. For more information on Celsion, visit www.celsion.com.

Forward-Looking Statements

Celsion wishes to inform readers that forward-looking statements in this release are made pursuant to the "safe harbor" provisions of the Private Securities Litigation Reform Act of 1995. Readers are cautioned that such forward-looking statements involve risks and uncertainties including, without limitation, unforeseen changes in the course of research and development activities and in clinical trials; the uncertainties of and difficulties in analyzing interim clinical data; the significant expense, time, and risk of failure of conducting clinical trials; the need for Celsion to evaluate its future development plans; possible acquisitions or licenses of other technologies, assets or businesses; possible actions by customers, suppliers, competitors, regulatory authorities; and other risks detailed from time to time in Celsion's periodic reports and prospectuses filed with the Securities and Exchange Commission. Celsion assumes no obligation to update or supplement forward-looking statements that become untrue because of subsequent events, new information or otherwise.

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