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BrightPath Presents New Data on Personalized Neoantigen Vaccine Platform at ESMO 2021

 New data highlighting scientific advancements in immune-checkpoint antibody-directed personalized neoantigen vaccine, BP1209.

Tokyo, Japan - September 16, 2021/ -- BrightPath Biotherapeutics (TSE Mothers: 4594.T, "**BrightPath**"), a clinical-stage biotech company dedicated to the discovery and development of novel immunotherapies, today announced data presentations from its immuno-oncology pipeline at the European Society for Medical Oncology (ESMO) 2021 Congress, Sept. 16-21, 2021. The abstract featuring data on a new platform for personalized neoantigen vaccine, BP1209 will be shared in a virtual poster viewing session.

BrightPath's abstract is as follows:

Title: A new platform of personalized neoantigen cancer vaccines directed by checkpoint inhibitor antibodies to improve cancer immunity. (1005P)

Yuji Mishima, Ph.D., Principal Scientist, Discovery Pharmacology at BrightPath Biotherapeutics

The abstract for this presentation is available on the **ESMO** website.

BP1209 is a proprietary, advanced cancer vaccine which targets tumor-specific neoantigens for the personalized treatment of cancer patients. The BP1209 vaccine is delivered as a molecular complex of patient-specific neoantigen peptides and immune-checkpoint inhibitor antibody such as anti-PD-L1 and anti-CD40 antibodies. The antibody directs the vaccine complex to dendritic cells (DCs), and enhances the cellular uptake of vaccine as well as the antigen-specific T cell priming by suppressing PD-1/PD-L1 signaling or CD40 activation. The neoantigen peptides consists of three modules: HLA-class I and -class II neoantigen epitopes, and an IgG-binding motif. The peptides non-covalently bind Fc domain of IgG, and self-assemble the antibody-vaccine complex without any chemical reaction which enables individual synthesis and manufacturing fully personalized neoantigen vaccine. In this poster, authors demonstrate BP1209 strongly enhances antigen-specific immune responses and improves antitumor efficacy using cancer neoantigen. BrightPath has developed in-house bioinformatic algorithms to identify highly immunogenic neoantigens from cancer patients. The new vaccine platform of BP1209 in combination with BrightPath's algorism to identify high quality neoantigens provides an ideal option to improve neoantigen vaccine therapy.

Kenichi Nagai, CEO of BrightPath, said: "To date, we have developed new platform for personalized neoantigen vaccine that is potentially best-in-class immunotherapy agent. We are very encouraged by these preclinical results that confirms our hypothesis that BP1209 vaccine, which effectively induces potent T cell responses, synergizes with immune-checkpoint inhibitors such as anti-PD-L1. The concept of the new vaccine platform is realized by our unique



technology to bind an off-the-shelf antibody and fully personalized vaccines."

More detailed results will be shared as a poster presentation once the conference begins on September 16 at 8:30 a.m. CEST.

About BrightPath:

BrightPath Biotherapeutics is an immuno-oncology focused biotech company dedicated to improving treatment and clinical outcomes for patients through cancer vaccine, therapeutic antibodies, and cell therapy that harness the immune system to fight cancer.

BrightPath's clinical-stage product, GRN-1201 is a new cancer vaccine in phase 2 trial in patients with melanoma and lung cancer in US. BP2201 in-collaboration with RIKEN, Japan is an iPS (induced pluripotent stem cell)-derived NKT therapy and the phase 1 trial is currently ongoing in Japan.

BrightPath's broad pipeline of immunotherapy includes several potentially first-in-class and best-in-class clinical and preclinical candidates in cancers with high unmet medical need.

BrightPath has been a pioneer in immunotherapy by cancer vaccine and has expanded its expertise in the tumor microenvironment and immune cell development as well as antibody engineering. This innovative approach has resulted in a diversified proprietary portfolio of cancer vaccine, therapeutic antibody, and immune-cell therapy.

Based in Tokyo, Japan, BrightPath is listed on Tokyo Stock Exchange in Japan. For more information, visit www.brightpathbio.com

Forward-Looking Statements:

This news release contains forward-looking statements that are based on the current expectations and beliefs of BrightPath. All statements, other than statements of historical fact, are statements that could be deemed forward-looking statements. BrightPath cautions that these forward-looking statements do not guarantee our future financial results but involve risks and uncertainties that could cause actual results to differ materially from those discussed in the forward-looking statements. These forward-looking statements speak only as of the date of this press release and BrightPath assumes no duty to update forward-looking statements, except as may be required by law.

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