December 3, 2024

BrightPath to Update the Preclinical Data of BP1210 in Blood Cancer at JSI 2024

Tokyo, Japan - December 3, 2024/ -- BrightPath Biotherapeutics (TSE Growth 4954, "BrightPath"), a clinical-stage biopharmaceutical company focused on developing novel immunotherapeutics, today announced data presentations from its immuno-oncology pipeline at the 53rd Annual Meeting of the Japanese Society for Immunology (JSI 2024, December 3-5, Nagasaki). The preclinical data on its anti-TIM-3 antibody (BP1210) will be shared in a poster viewing session.

BrightPath has developed a TIM-3 targeting biparatopic antibody BP1210, designed to simultaneously block both phosphatidylserine (PS) and galectin-9 (Gal-9), which bind to distinct domains of TIM-3.

"Conventional anti-TIM-3 monoclonal antibodies have primarily focused on inhibiting PS binding, as only PS-binding antibodies have demonstrated the ability to activate T cells. The inability to effectively block Gal-9 has limited recognition of the importance of Gal-9 inhibition, largely because these monoclonal antibodies cannot engage both distinct ligand binding sites of TIM-3." commented Kenichi Nagai, CEO of BrightPath.

Notably, Gal-9 interaction with TIM-3 on Leukemic Stem Cells (LSCs) has been identified as key driver of LSC proliferation. However, no clinical-stage TIM-3 antibody has demonstrated the ability to fully block Gal-9 binding.

"Through our latest preclinical study using clinical samples from Acute Myeloid Leukemia (AML) patients, BP1210 has potently inhibited LSC proliferation. We are excited to share these findings at JSI 2024." Kenichi Nagai further noted, "Additionally, BP1210 promotes enhanced internalization of TIM-3 on LSC—one of the hallmarks of biparatopic antibodies—which opens the door to further therapeutic potential through additional antibody engineering."

Details of the presentation are as follows:
Title: A novel biparatopic TIM-3 antibody induces superior antitumor effects through multi-ligand blockade
Poster Number: WS03-03-P
Date & Time: December 3, 2024 (9:00 a.m. – 6:20 p.m. JST)

More detailed results are available on the websites of BrightPath.

About BP1210:
BP1210 is a humanized, anti-TIM-3 antibody that is designed to bind simultaneously to two distinct domains of TIM-3 protein. TIM-3 has multiple ligands including phosphatidylserine

(PS) and galectin-9 (Gal-9), which bind to different regions on TIM-3 and distinctively deactivate the function of immune cells involved in tumor immunity. Anti-TIM-3 antibodies so far in clinical development, however, had the capacity to interfere with PS binding, but not Gal-9 binding. BP1210 is an biparatopic antibody designed to block the interaction of the multiple ligands to TIM-3. Bivalent binding to a single molecule of TIM-3 also confers high affinity and specificity to the antibody's target, thereby allowing BP1210 to effectively abrogate the suppression of T cell cytotoxicity. BP1210 in combination with other suppressive immune pathways such as PD-1/PD-L1, is a key strategy to enhance the anti-tumor cytotoxic potential of immunotherapy.

About BrightPath:

BrightPath is a clinical stage biopharmaceutical company focused on the development of novel cancer therapeutics to transform cancer treatment for refractory or progressive cancers that cannot be treated with conventional standard therapies. BrightPath is actively involved in developing cell therapies currently in clinical trials, immunomodulatory antibodies and new drug targeted at cancer specific neoantigens.

For more information, visit www.brightpathbio.com

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