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# BrightPath to Update the Pre-clinical Data of BP1202 at SITC 2022

**Tokyo, Japan - November 10, 2022**/ -- BrightPath Biotherapeutics (TSE Growth 4954), a clinical- stage biopharmaceutical company focused on developing novel cancer immunotherapeutics, today announced a presentation of pre-clinical data on a novel anti-CD39 antibody (BP1202) at the Society for Immunotherapy of Cancer Annual Meeting (SITC 2022, November 8-12, Boston).
The presentation is available on the websites of BrightPath

BrightPath's abstract is as follows:

Title: BP1202-NF2, a novel ADCC-enhancing CD39 antibody, induces destruction of regulatory T cells and enhances cytotoxic T lymphocytes induction
（Abstract number:1221）

The presentation describes:

- **BrightPath has developed BP1202-NF2, a novel functional antibody targeting CD39, with enhanced antibody-dependent cellular cytotoxicity (ADCC) in addition to CD39 enzyme inhibition activity**

- **CD39 was highly expressed by regulatory T cells (Treg) and exhausted T cells in tumor tissues of the patients with non-small cell lung cancer**

- **BP1202-NF2 highly promoted the induction of antigen-specific cytotoxic T cells (induction of acquired immunity) by eliminating Tregs via ADCC activity**

- **Peripheral blood lymphocytes with acquired immunity induced by BP1202-NF2 strongly suppressed the proliferation of lung cancer cells**

CD39 is an enzyme involved in extracellular adenosine triphosphate (eATP) metabolism, and adenosine produced by eATP metabolism is known to cause immunosuppressive conditions in the tumor microenvironment (TME). CD39 is highly expressed on not only tumor cells but immune cells such as exhausted T cells and regulatory T cells (Treg) in the tumor microenvironment (TME). It has been reported that high CD39 expression in the TME is associated with poor prognosis in many hematologic and solid tumors.

BP1202-NF2 is a humanized therapeutic antibody that inhibits CD39 enzymatic activity with high specificity and binding affinity to CD39 and selectively eliminates CD39-highly-expressing immunosuppressive cells through an enhanced ADCC activity. The novel tumor-immunoregulatory antibody suppresses adenosine production and simultaneously eliminates immunosuppressive cells in TME, which leads to abolish the immunosuppression of TME and enhance anti-tumor immunity. In this presentation, we experimentally demonstrated that BP1202-NF2 potently eliminates immune-suppressive Tregs and exhibits anti-tumor activity

by enhancing the cytotoxic activity of lymphocytes.

Tregs are known to suppress the immune response and tumor-infiltrating Tregs have been reported to be a poor prognostic factor in many cancers and considered to be a key target to overcome the cancer immune escape in TME. In this presentation, we have shown that BP1202-NF2 potently eliminated Tregs to abolish immunosuppression of TME, and it is expected that BP1202-NF2 will be a promising treatment option for clinical practice.

**About BrightPath:**
BrightPath is a clinical stage biopharmaceutical company focused on the development of novel cancer immuno-therapies 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/english/index.html.

**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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