

April 13, 2022

## BrightPath Presents Preclinical Data on a CD73 antagonist antibody at AACR 2022

- New data from pre-clinical development of CD73 antagonist antibody, BP1200 that ameliorates tumor microenvironment.

**Tokyo, Japan - April 13, 2022**/ -- BrightPath Biotherapeutics (TSE Growth: 4594), a clinicalstage biotech company dedicated to the discovery and development of novel immunotherapies today announced data presentations from its immuno-oncology pipeline at the American Association for Cancer Research Annual Meeting ("AACR 2022") on April 8-13. The abstract featuring data on a CD73 antagonist therapeutic antibody, BP1200 will be shared in a virtual poster viewing session.

BrightPath's abstract is as follows:

# Title: A novel therapeutic antibody against CD73 that ameliorates the tumor microenvironment and improves the efficacy of cancer immunotherapy (987P)

Noriko Matsumoto, Yuji Mishima, at BrightPath Biotherapeutics

The abstract for this presentation is available on the websites of the AACR and BrightPath.

\* BP1200 completely regressed colon-adenocarcinoma cells transplanted in mouse in combination with PD-1 antibody. Tumor cells re-challenged to the mice were completely rejected, suggesting the enhancement and establishment of tumorspecific immunity by BP1200.

\* BP1200 induces internalization of the cell surface CD73, thereby down-regulates the expression level of CD73 as well as inhibiting the enzyme activity.

\* BP1200 induces proliferation, cytokine production, and cytotoxic activity of T cells even in the immunosuppressive condition, suggesting that BP1200 enhances the T cell immunity in tumor micro-environment (TME).

\* BP1200 shows preferable PK/TK profiles without remarkable organ toxicity in rodents and primates.

\*The novel anti-human CD73 antibody, BP1200, ameliorates immunosuppressive TME caused by adenosine and enhances antitumor immune responses. The combination of



BP1200 and immune-checkpoint inhibitors for cancer treatment will be a promising therapeutic option in clinical practice.

BP1200 is a humanized antibody that is a potentially best-in-class immune checkpoint inhibitor targeting CD73 expressed on tumor and immune cells. CD73 is a cell surface enzyme that is expressed on tumor cells and converts extracellular adenosine monophosphate (AMP) into immunosuppressive adenosine. Adenosine production inhibits T cell and NK cell cytotoxicity, cytokine production, and proliferation as well as suppression of antigen presenting cells and macrophage M2 polarization, which enables tumor growth and disease progression. BP1200 ameliorates the suppressive tumor microenvironment by attenuating adenosine production and reestablishes a broad anti-tumor response mediated by tumor infiltrating T cells which includes enhancement of proliferation, cytokine production, and cytotoxicity of T cells. BP1200 in combination with other complementary immune pathways such as PD-1/PD-L1, is a key strategy to enhance the anti-tumor cytotoxic potential of immunotherapy.

#### 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 iPSC (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 bestin-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 <u>www.brightpathbio.com</u>.

#### 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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