November 1, 2022

BrightPath Exercised the Option to Obtain Exclusive Development, Manufacturing and Marketing License for iPS-NKT from RIKEN

Tokyo, Japan - November 1, 2022/ -- BrightPath Biotherapeutics (TSE Growth 4954), a clinical-stage biopharmaceutical company focused on developing novel cancer immunotherapeutics, today announced its decision to exercise the option right to obtain a worldwide exclusive license to develop, manufacture and market induced pluripotent stem cell (iPSC)-derived NKT cell (iPS-NKT) from Institute of Physical and Chemical Research (RIKEN).

iPS-NKT is novel allogeneic cell that uses natural killer T (NKT) cells[1] differentiated from iPSC for cancer treatment. At present, an investigator-initiated Phase 1 trial of iPS-NKT in patients with head and neck cancers is underway at Chiba University as the world's first clinical application of iPSC-derived NKT cells for cellular therapy.

Since the acquisition of the option to license iPS-NKT from RIKEN in March 2018, BrightPath has been supporting the Phase 1 study started in June 2020 and working toward the improvement of the manufacturing process for the subsequent clinical development and commercialization.

The Phase 1 trial stays on track in general while the patient enrollment is slightly behind the original schedule. The clinical safety assessment is primary focus as the first-in-human administration of iPS cell-derived NKT cells and up until now, no safety issues have been reported.

Over these years autologous CAR-T cell therapy has demonstrated remarkable clinical outcomes in patients suffering from blood cancers and subsequently, allogeneic CAR-T has been developed to overcome the hurdles of autologous CAR-T's manufacturing instability, the turnaround time from blood sampling to administration, and manufacturing costs. iPS cell-derived immune cells are expected to be a key next-generation platform of allogeneic cell therapy that allows for the manufacturing of unprecedentedly homogeneous and large-quantity cells. Global big pharma have recently inked partnering[2] with cellular immunotherapy ventures that have an iPS cell-derived NK cell platform to develop CAR-iPS-NK.

BrightPath's option exercise is intended to facilitate its effort to build an iPS-NKT platform that consists of: (i) the basic patent, (ii) the master iPS cell bank (MCB) and (iii) the manufacturing process from iPS cell to accurately differentiated NKT cell. The (i) patent in Japan, the US, and the EU allows BrightPath to stand as the only player licensed to use iPSC-derived NKT cells for allogeneic cell therapy. The (ii) MCB enables BrightPath alone to access the iPSC-derived reproducibility of which clinical safety is being evaluated in the ongoing Phase 1 trial. The (iii) manufacturing process ensures that BrightPath is the sole company having a process capable of differentiating iPS cells into properly functioning NKT cells at high yield and high purity in compliance with the industry regulations.

The (i) and (ii) can be achieved through exercising the option right and (iii) has been achieved as a development milestone through BrightPath's continuous improvement efforts since its participation in the iPS-NKT project in 2018 and will be completed by putting it into the format

for clinical settings.

BrightPath is exploring franchising the iPS-NKT platform to CAR iPS-NKT. BrightPath will be reporting the prototype CAR iPS-NKT's first non-clinical data at the 37th Annual Meeting of Society for Immunotherapy of Cancer (SITC 2022) held in Boston, United States on November 8 to 12, 2022.
BrightPath's option exercise signifies its achievement of one of the development milestones in the manufacturing process and BrightPath will accelerate the iPS-NKT project as the company's key clinical trial pipeline.

The information disclosed in the announcement has no impact on the earnings forecast for the fiscal year ending March 2023 announced on May 12, 2022.

1. NKT cells
   NKT cells have both properties of a part of NK cells and T cells and bridge innate immunity and adaptive immunity. NKT cells exhibit a wide variety of antitumor effects that can kill cancer cells directly or indirectly. Since NKT cells make up less than 1% of the lymphocytes, the conventional manufacturing process has room for improvement in proliferating properly functioning NKT cells, necessary for the administration to the patient. One of the effective solutions to overcome the hurdle of clinical-scale manufacturing from such a rare subset of T cells is iPS technology to reprogram NKT cells into iPS cells and proliferate the iPS cells and then re-differentiate iPS cells into NKT cells.

2. Partnering
   Fate, Century and Shoreline have CAR-iPSNK platforms and they entered into development collaborations with Johnson & Johnson, Bristol Myers Squibb, and Gilead, respectively. Fate commenced a Phase 1 trial of CAR-untransduced iPS-NK cells in 2018 and entered an alliance with Johnson & Johnson in 2020.

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.

Investor and Media Contact:
+81-3-5840-7697
irpr@brightpathbio.com
www.brightpathbio.com/english/index.html