

GIST professor's startup company 'PeLeMed' was selected as a finalist for the 'Baby Unicorn 200 Promotion Project' by the Ministry of SMEs and Startups

- Innovative new drug development start-up... Highly evaluated for pipeline 'innovativeness' such as hepatitis B treatment candidates
- Received up to 300 million won in market development funds... "Clinical momentum for innovative new drugs such as intractable diseases"



▲ GIST School of Life Sciences Professor Yong-Chul Kim founded 'PeLeMed,' a global innovative drug development company

GIST (Gwangju Institute of Science and Technology, President Kiseon Kim) School of Life Sciences Professor Yong-Chul Kim founded 'PeLeMed,' (CEO Yong-Chul Kim and Su-yeon Jang) a global innovative drug development company, which was selected as a finalist for the 'Baby Unicorn 200 Promotion Project' by the Ministry of SMEs and Startups.

Founded in May 2019, PeLeMed is based on the precision drug design platform PeLeSeLect* and the artificial intelligence platform AHEDD (AI-Applied High Efficiency Drug Discovery) to treat lung cancer-resistant and is developing innovative new drug pipelines for a total of eight anticancer and antiviral fields, including acute myeloid leukemia, new immunotherapy drugs, and hepatitis B cures.

* **PeLeSeLect:** PeLeMed's own new drug platform, which is the core of PeLeMed's technology to develop refractory and resistant cancer treatment, is a precision drug design platform that predicts the structure of kinases activated by mutation and designs drugs with a low risk of mutation.

The 'Baby Unicorn 200 Promotion Project' is a program supported by the Ministry of SMEs and Startups to discover promising start-ups with innovative business models and proven growth potential and nurture them as preliminary unicorn companies (enterprise value of over 100 billion won).

The Baby Unicorn 200 Promotion Project provides up to KRW 300 million in market development funds by discovering 60 promising startups with less than seven years of experience that have attracted more than KRW 2 billion in investment.

This year, a total of 284 SMEs applied, recording a competition ratio of 4.7:1. On the 25th of last month, a total of 50 professional judges and 70 national judges participated, and the final support target companies were selected through a presentation evaluation.

PeLeMed said, "The selection for this baby unicorn 200 fostering project was mainly due to the high innovativeness of the major pipelines that entered clinical and non-clinical trials."

Currently, the pipeline leading PeLemed's R&D is ① a hepatitis B cure candidate and ② a third-generation acute myeloid leukemia target anticancer drug candidate.

① PLM-401, a candidate for hepatitis B treatment, treats hepatitis B through a novel mechanism that blocks the assembly of the hepatitis B virus capsid protein. In particular, the innovativeness of PLM-401 is drawing attention as there is no curative treatment in the existing hepatitis B virus treatment market. PLM-401 received an IND approval from the Ministry of Food and Drug Safety in March 2022 and is currently recruiting patient groups. It plans to conduct phase 1 clinical trials at Seoul National University Hospital in the second half of this year.

② PLM-102, a 3rd-generation acute myeloid leukemia (AML) target anticancer drug candidate, and it has a distinct strength differentiated from existing treatments in that it even targets resistance mutations against existing inhibitors. Acute myeloid leukemia is a type of blood cancer in which tumor cells appear in the blood or bone marrow. FLT3 mutations are observed in about 30% of acute myeloid leukemia patients. PLM-102 is expected to occupy a superior position in next-generation inhibitors through a differentiated mechanism.

PeLemed presented an abstract of PLM-102 at the American Society of Clinical Oncology (ASCO) held in early June this year. Part of the PLM-102 nonclinical results will be presented at the American Society of Hematology (ASH 2022) later this year.

In addition, R&D is underway with the goal of submitting an IND for PLM-102 to the Ministry of Food and Drug Safety and the US Food and Drug Administration (FDA) by next year. Compared to second-generation drugs, it is expected to establish itself as a third-generation treatment by securing overwhelming activity including mutation expression and low toxicity for elderly patients with acute myeloid leukemia.

PeLeMed CEO Yong-Chul Kim said, "Based on PeLeSelect, an anti-cancer drug design platform with minimal mutation resistance, PeLeMed is developing innovative new drugs to treat intractable cancers and incurable diseases that have no competing treatments with mutations and acquired resistance to existing anticancer drugs. It is expected that being selected as a baby unicorn company will give more momentum to the clinical trials of various pipelines PeLeMed is building."