

Phase 2 IND approval of high purity immune cell therapy(CBT101) of frozen formulation for recurrent glioblastoma, improved through process advancement

Disease Area	Oncology
Product Type	Autologous NK cells
Indication	Recurrent GBM
Target	
Mechanism of Action	<p>CBT101 is autologous killer cells that can be used as cancer immunotherapy to suppress cancer recurrence and metastasis by enhancing immunity in immunocompromised patients.</p> <p>Natural killer (NK) cells are innate immune cells that show strong cytolytic function against physiologically stressed cells such as tumor cells and virus-infected cells. NK cells directly release lytic granules or induce death receptor-mediated apoptosis via the expression of Fas ligand or TRAIL. Also NK cells directly induce anti-tumor activity by secreting several cytokines such as IFN-γ and TNF-α, chemokines.</p>
Competitiveness	<p>CBT101 is activated immune cells with high expression of activating receptors and contain intracellular lytic granules. CBT101 is expressed in receptor for chemokine produced in glioblastoma, so it is expected to migrate toward the tumor in tumor microenvironment than other immune cell therapies and to have a high ability to infiltrate the tumor.</p> <p>In addition, CBT101 is expanded by a method that minimized the exhaustion of NK cells by using CHA biotech's culture system without feeder cells, enhancing cancer cell killing ability compared to other NK cells.</p>
Development Stage	Preclinical candidate
Route of Administration	Intravenous

*** Overall survival and progression free survival of 14 patients with recurrent GBM who received the adoptive immune cell therapy (CBT101)**

