

NEW APPROACH FOR THE TREATMENT OF BRAIN CANCERS

Chheda, Milan, Curiel, David, Diamond, Michael, Li, Yuping

Poranki, Deepika

T-021004

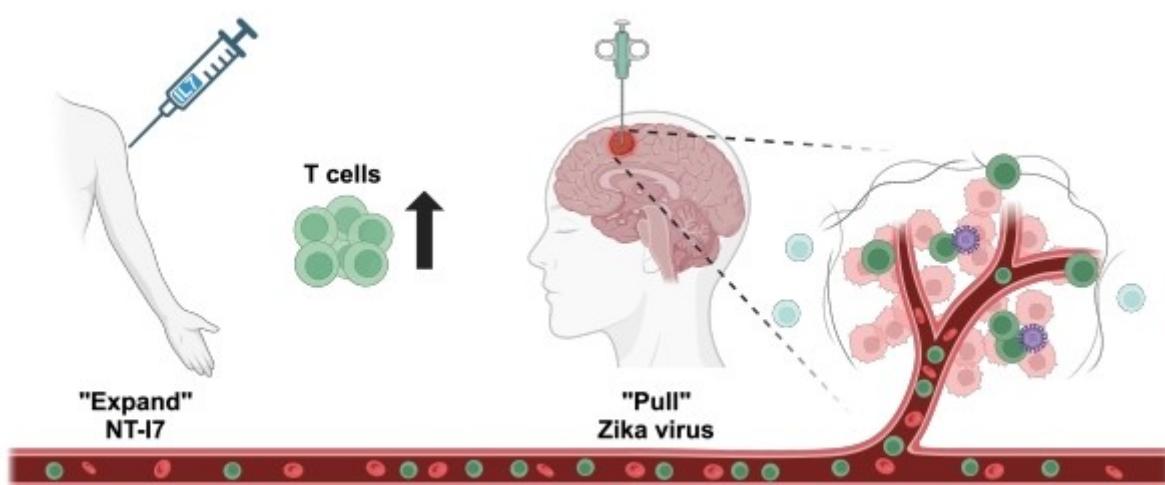
Published Date: 12/20/2024

Value Proposition: Treats brain tumors by combining a hematopoietic growth protein and cancer therapeutics to increase survival rates.

Technology Description

Researchers at Washington University in St. Louis have developed a new way to treat brain cancers by combining interleukin 7 and the oncolytic virus (Zika virus or delta 24 RGD). Brain tumors do not often respond to immunotherapy, likely due to the paucity of immune cells in the tumor microenvironment.

This invention addresses this challenge by increasing systemic T cell abundance, improving tumor infiltration, and expanding the peripheral immune cell population, then luring it into the tumor to increase survival rates.



Expand and Pull"

approach for the treatment of highly immunosuppressive tumors such as glioblastoma: priming the systemic immune system with recombinant IL-7 (efineptakin alfa, NT-17), followed by an oncolytic stimulus to draw them into the tumor microenvironment to engage and clear tumor cells.

Stage of Research

Proof of concept – Tested in mouse population

Applications

- Brain cancer treatment

Key Advantages

- Increases survival rates
- Directly kills cancer stem cells
- Increases amount of T cells

Patents

Patent application filed

Related Web Links – [Milan Chheda profile](#)