

Development of peptide vaccine against the glioblastoma with CMV pp65

NA Vaccine Institute



ONCOLOGY	Preclinical
Product Type	Peptide vaccine (Peptide + Adjuvants)
Indication	CMV-positive glioblastoma (HLA-A*02:01 and/or A*24:02 patients)
Target	CMV-positive cancer cells
MoA (Mechanism of Action)	Induction of CMV pp65-specific cytotoxic T lymphocytes, which eliminates CMV-positive cancer cells
Competitiveness	Currently, there is no effective treatment for glioblastoma. Recent research has established a link between glioblastoma and CMV. CMV-targeting treatments, such as valganciclovir, DC vaccines, and CAR-T therapy, are actively being tested clinically against glioblastoma, with positive outcomes reported. Despite these improvements, each treatment has limitations. Valganciclovir is associated with relatively severe side effects and short-lasting efficacy. Cell therapies such as DC vaccines and CAR-T cell therapy face challenges, including the cultivation and acquisition of immune cells from patients, high costs, and long manufacturing lead times. The novel peptide vaccine, NexaVac would offer improved anticancer efficacy compared to existing treatments and lowers treatment costs due to higher productivity.
Development Stage	Pre-clinical stage
Route of Administration	Intramuscular route