T cell Receptor cDNAs to Treat Gliomas

Tech ID: 32238 / UC Case 2019-158-0

TECHNOLOGY DESCRIPTION

Gliomas are the most common primary brain tumors. Therapies remain very challenging given the paucity of targetable molecules since not all cells within a tumor can be targeted in the same way, and not all tumors express the same targets. Research at UCSF has led to the identification of the tumor-specific isoform RAD54B, a DNA repair and recombination protein, which is uniformly expressed at high levels in a vast majority of malignant gliomas. T cells expressing RAD54B-specific TCRs were generated and initial proof of concept studies have shown promise. This invention has the potential to improve the effectiveness of immunotherapy for glioma in clinical populations.

ADVANTAGES

- This new TCR can specifically recognize RAD54B
- RAD54B reliably targets the vast majority of malignant gliomas, with homogeneous expression within individual tumors, thereby making it an attractive immunotherapy
- Potentially better than peptide vaccine-based therapies which can have poor immunogenicity in the absence of an adjuvant and be susceptible to enzymatic degradation

PATENT STATUS

Patent Pending

CONTACT

Gemma E. Rooney
Gemma.Rooney@ucsf.edu
tel: 415-625-9093.

OTHER INFORMATION

KEYWORDS

Glioma, T Cell Receptor, Immunotherapy, RAD54B

CATEGORIZED AS

- Medical
  - Disease: Cancer
  - Therapeutics

RELATED CASES

2019-158-0

ADDRESS

UCSF

Innovation Ventures

600 16th St, Genentech Hall, S-272,

San Francisco,CA 94158

CONTACT

Tel:

innovation@ucsf.edu

https://innovation.ucsf.edu

Fax: