

## PubMed

U.S. National Library of Medicine  
National Institutes of Health



Display Settings: Abstract

[World J Clin Oncol](#). 2010 Nov 10;1(1):3-11.

### Cytotoxic T-cells as imaging probes for detecting glioma.

Arbab AS.

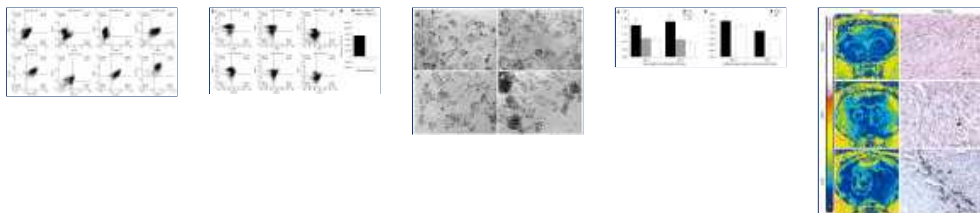
Ali Syed Arbab, Cellular and Molecular Imaging Laboratory, Department of Radiology, Henry Ford Hospital, Detroit, MI 48202, United States.

#### Abstract

Tumor vaccination using tumor-associated antigen-primed dendritic cells (DCs) is in clinical trials. Investigators are using patients' own immune systems to activate T-cells against recurrent or metastatic tumors. Following vaccination of DCs or attenuated tumor cells, clinical as well as radiological improvements have been noted due to migration and accumulation of cytotoxic T-cells (CTLs). CTLs mediated tumor cell killing resulted in extended survival in clinical trails and in preclinical models. Besides administration of primed DCs or attenuated or killed tumors cells to initiate the generation of CTLs, investigators have started making genetically altered T-cells (CTLs) to target specific tumors and showed in vivo migration and accumulation in the implanted or recurrent tumors using different imaging modalities. Our groups have also showed the utilization of both in vivo and in vitro techniques to make CTLs against glioma and used them as imaging probes to determine the sites of tumors. In this short review, the current status of vaccination therapy against glioma and utilization of CTLs as in vivo imaging probes to determine the sites of tumors and differentiate recurrent glioma from radiation necrosis will be discussed.

PMID: 21603304 [PubMed - in process] PMCID: PMC3095453 [Free PMC Article](#)

**Images from this publication.** [See all images \(5\)](#) [Free text](#)



**Grant Support**

**LinkOut - more resources**