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Human Leukocyte Antigen G as a Novel Target for Switch-based Chimeric Antigen Receptor Natural Killer Cell Therapy of Solid Cancer

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Abstract:Challenges present with chimeric antigen receptors (CARs) adoptive cell therapy against solid tumors have been lacking a ubiquitous tumor-associated antigen across different tumor types, tumor antigen expression heterogeneity, and the immunosuppressive nonphysical tumor microenvironment. Thus, we developed a switch anti human leukocyte antigen (HLA)-G CAR that binds to HLA-G1~G7 isoforms with inducible caspase9 suicide gene



Biography – My research has focused on understanding the molecular and cellular mechanisms of gliomagenesis and, on interactions between glioma cells and the brain microenvironment. By targeting glial progenitor cells in the adult brain, my laboratory has developed genetically engineered mouse models that recapitulate the histological and molecular features of human glioma. We are applying a variety of cutting edge techniques to characterize cellular alterations that accumulate in these mouse models and in

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