New study confirms EpCAM as promising target for cancer immunotherapy

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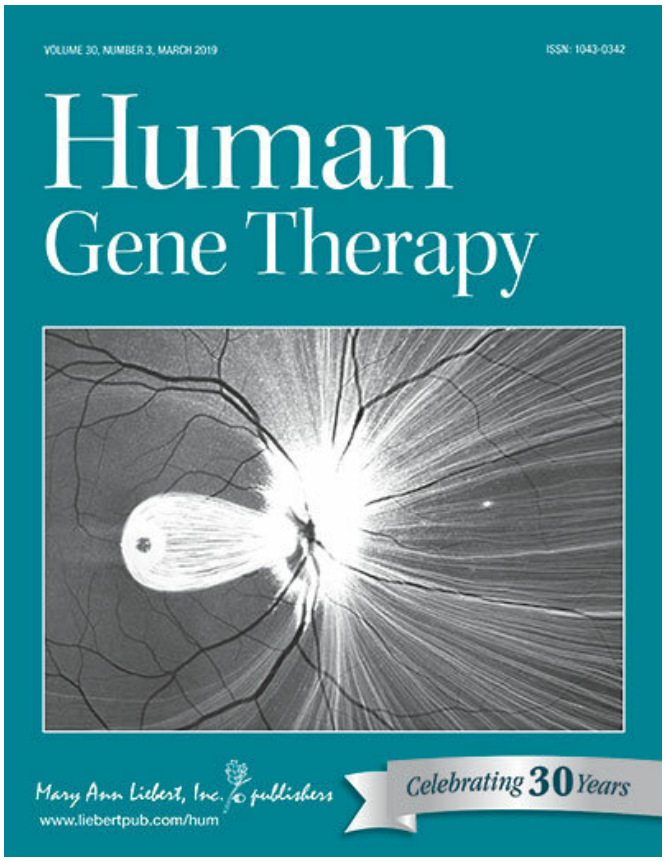

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Researchers have shown that cancer immunotherapy targeting the tumor biomarker epithelial cell adhesion molecule (EpCAM) is safe and non-toxic in mice and can significantly delay tumor formation and growth. EpCAM is over-expressed in various tumor types, circulating tumor cells, and tumor stem cells, giving these findings broad implications. The study design and results are published in a Special Issue on Immune Gene Therapy in *Human Gene Therapy*.

Adi Barzel, Ph.D., Tel-Aviv University and President of The Israeli Society of Gene and Cell Therapy is Guest Editor of the Special Issue. The full issue will be published in April 2019.

The article entitled "Preclinical Evaluation of Chimeric Antigen Receptor-Modified T Cells Specific to EpCAM for Treating Colorectal Cancer" was coauthored by Wei Wang and a team of researchers from West China Hospital, Sichuan University and Collabora-tive Innovation Center for Biotherapy (Chengdu, China) and First Affiliated Hospital of Chongqing Medical University (China). The researchers produced third generation chi-meric antigen receptor-modified T (CAR-T) cells. They used a lentiviral vector to target the cells specifically to EpCAM.

"CAR-T cell technology represents a breakthrough therapy for patients with B cell leu-kemias and lymphomas, but progress with solid tumors has, unfortunately, been much slower," says Editor-in-Chief Terence R. Flotte, MD, Celia and Isaac Haidak Professor of Medical Education and Dean, Provost, and Executive Deputy Chancellor, University of Massachusetts Medical School, Worcester, MA. "This pivotal study in patients with colorectal cancer demonstrates that targeted cancer immunotherapy could indeed have a role in this very common malignancy."

More information: Bing-Lan Zhang et al, Preclinical Evaluation of Chimeric Antigen Receptor–Modified T Cells Specific to Epithelial Cell Adhesion Molecule for Treating Colorectal Cancer, *Human Gene Therapy* (2019). DOI: 10.1089/hum.2018.229

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