



## **CAR-T Cell in Human Cancers: Combinations, Gene-Editing, Payload Delivery, Autonomous Control and Synthetic Biology**

Guest Editors:

**Dr. Avery D. Posey**

Department of Systems  
Pharmacology and Translational  
Therapeutics and Parker Institute  
for Cancer Immunotherapy,  
Perelman School of Medicine,  
University of Pennsylvania,  
Philadelphia, PA 19104, USA

**Dr. Kole T. Roybal**

Department of Microbiology and  
Immunology, Parker Institute for  
Cancer Immunotherapy, Chan  
Zuckerberg Biohub, Helen Diller  
Family Comprehensive Cancer  
Center, University of California,  
San Francisco, San Francisco, CA  
94143, USA

Deadline for manuscript  
submissions:  
**closed (30 April 2020)**

### **Message from the Guest Editors**

Dear Colleagues,

Chimeric antigen receptor T (CAR-T) cell therapies are having an unprecedented impact on the treatment of multiple malignancies. However, the limits of CARs as single-agent effectors, especially in the context of solid tumor treatment, are also crystalizing. The future of engineered cell therapeutics for cancer and beyond includes reprogramming cells with precise therapeutic circuits via synthetic biology, combinational treatment with immune checkpoint blockade and other immune modulators, and strategies to overcome T cell dysfunction/exhaustion and tumor exclusion. This Special Issue will highlight the platforms and approaches that are improving and advancing CAR-T cell development and ushering in the next generation of cell-based immunotherapies.

Dr. Avery D. Posey  
Dr. Kole T. Roybal  
*Guest Editors*





an Open Access Journal by MDPI

## Editor-in-Chief

### Prof. Dr. Samuel C. Mok

Department of Gynecologic  
Oncology and Reproductive  
Medicine, The University of Texas  
MD Anderson Cancer Center,  
Houston, TX 77030, USA

## Message from the Editor-in-Chief

*Cancers* (ISSN 2072-6694) is an international, online journal addressing both clinical and basic science issues related to cancer research. The journal will continue its open access format, which will certainly evolve to ensure that the journal takes full advantage of the rapidly changing world of information and knowledge dissemination. It publishes high-quality clinical, translational, and basic science research on cancer prevention, initiation, progression, and treatment, as well as other related topics, particularly to capture the most seminal studies in the rapidly growing area of immunology, immunotherapy, and tumor microenvironment.

## Author Benefits

**Open Access:** free for readers, with article processing charges (APC) paid by authors or their institutions.

**High Visibility:** indexed within Scopus, SCIE (Web of Science), PubMed, PMC, Embase, CAPlus / SciFinder, and other databases.

**Journal Rank:** JCR - Q2 (Oncology) / CiteScore - Q1 (Oncology)

## Contact Us

---

*Cancers* Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland

Tel: +41 61 683 77 34  
[www.mdpi.com](http://www.mdpi.com)

[mdpi.com/journal/cancers](http://mdpi.com/journal/cancers)  
[cancers@mdpi.com](mailto:cancers@mdpi.com)  
[X@Cancers\\_MDPI](https://twitter.com/Cancers_MDPI)