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# GCC-Targeted CAR-T Cell Therapy for Metastatic Gastric Cancer

Amanda Lisby, MS

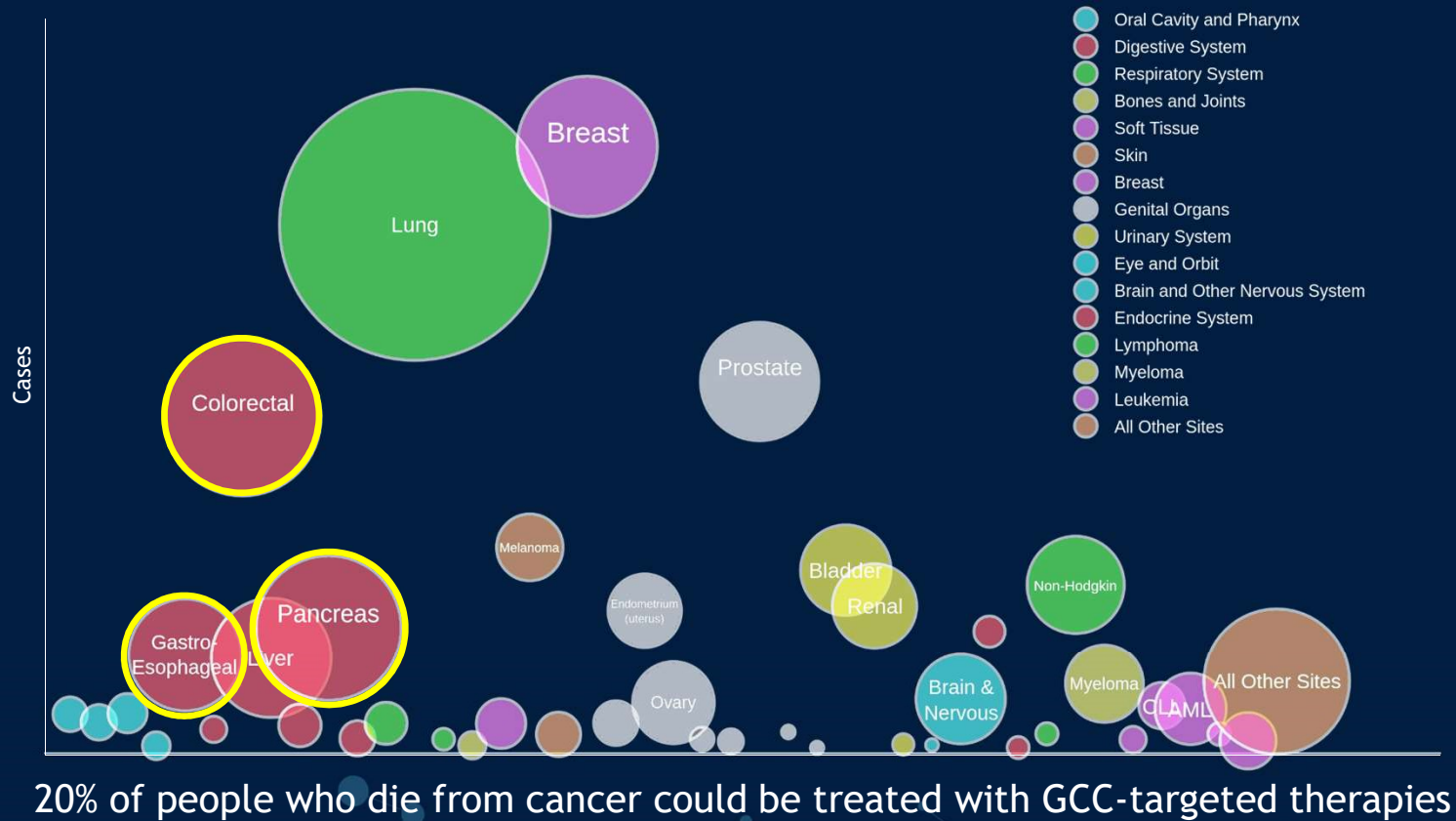
Adam Snook Laboratory

Department of Pharmacology and Experimental Therapeutics

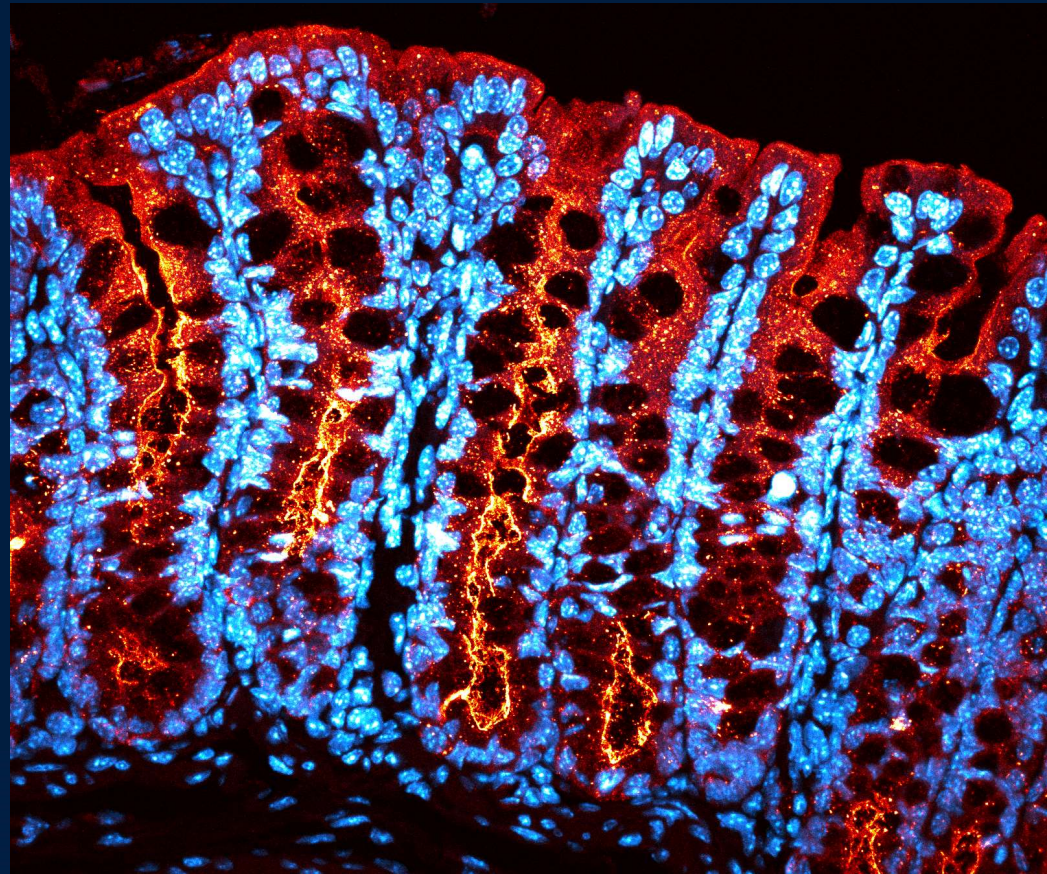
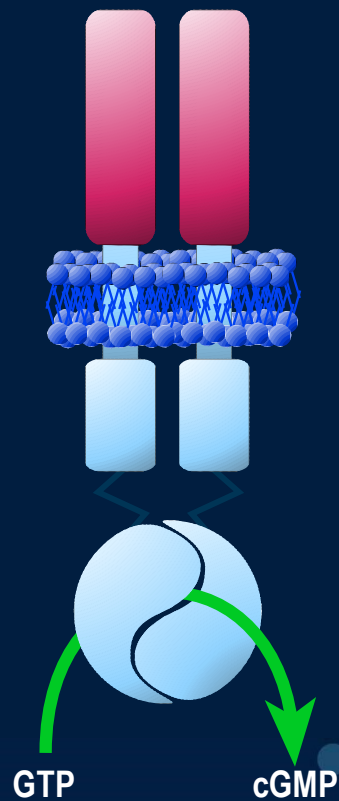
# Disclosures

- There are no relevant disclosures to the presentation

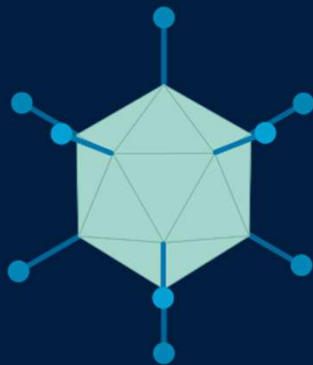
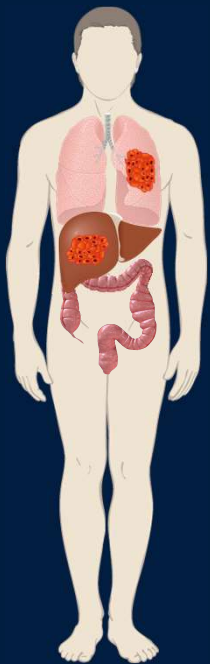
# Impact



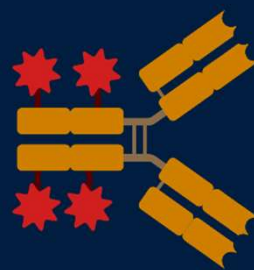
# Guanylyl Cyclase C (GCC)



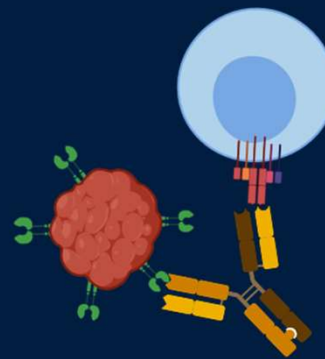
# GCC Immunotherapy



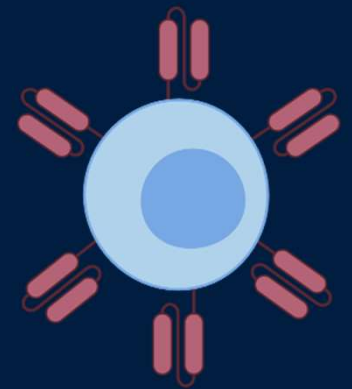
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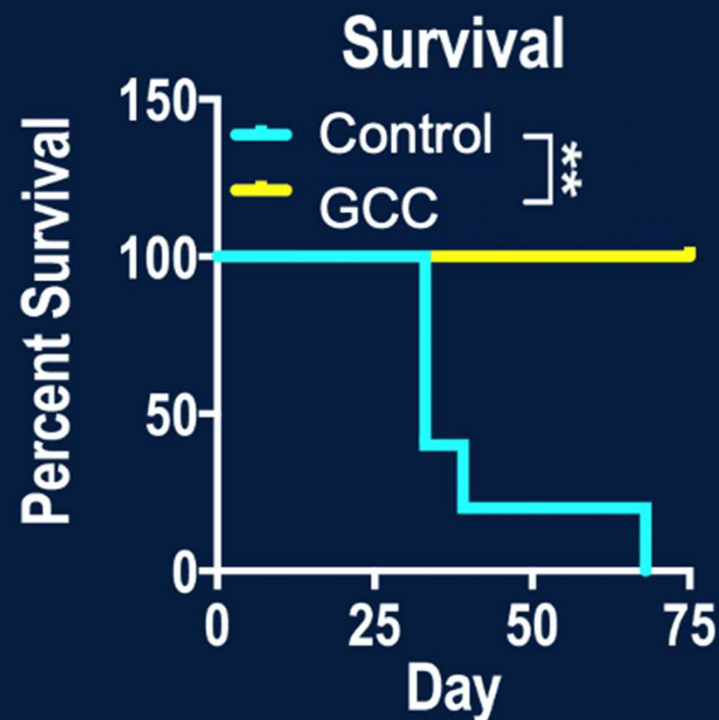
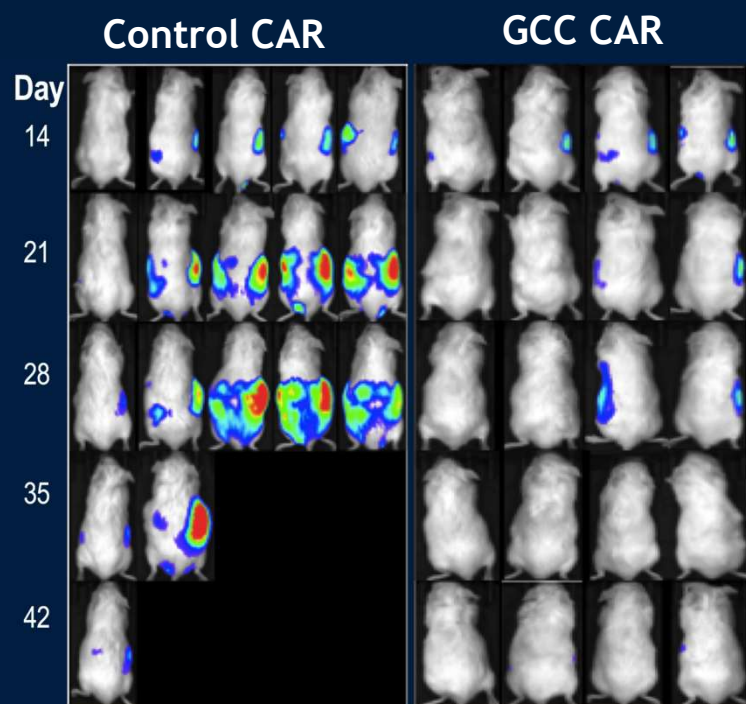
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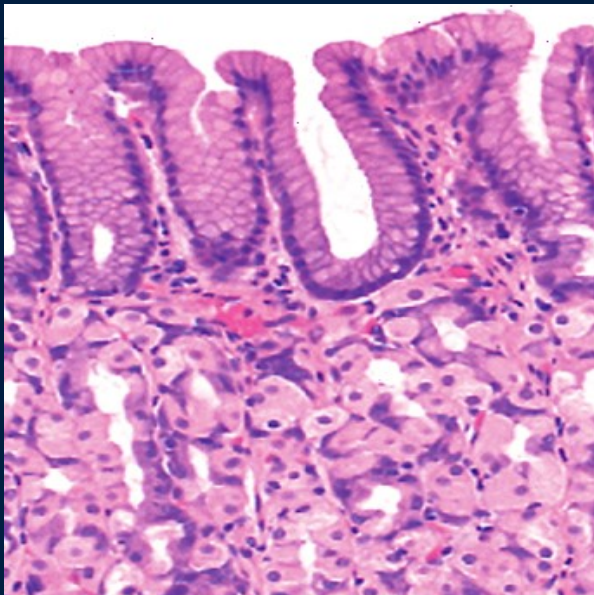
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# GCC CAR-T Cells in Colorectal Cancer

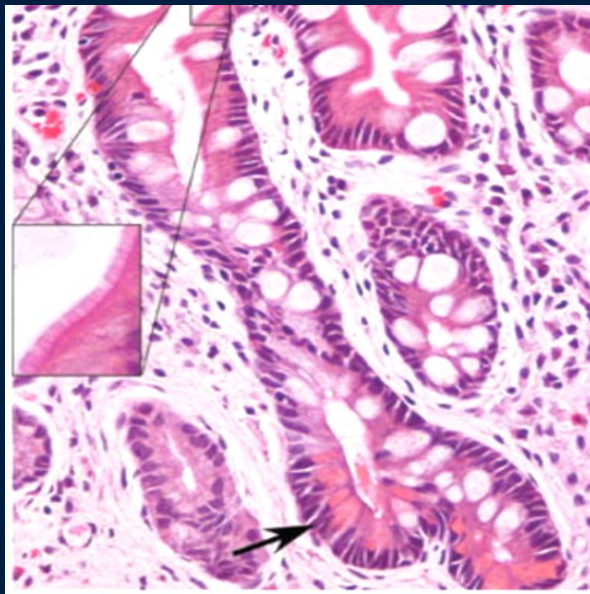


Magee et al. Cancer Immunol Res 2018; 6(5): 509-516.

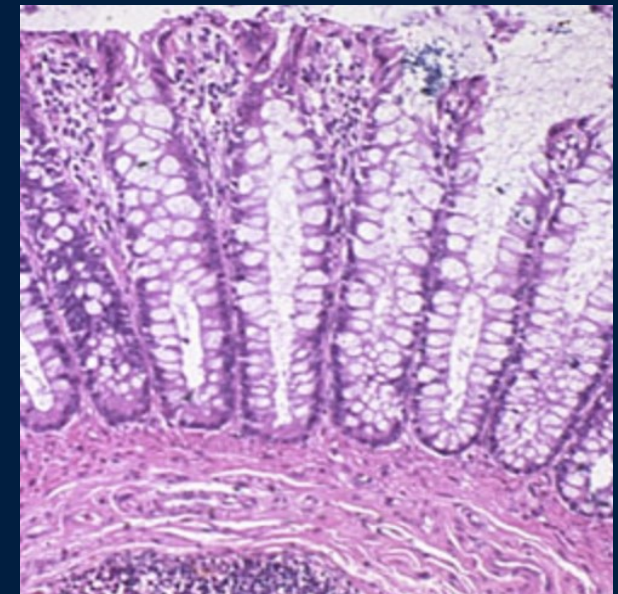
# Intestinal-Type Gastric Cancer



**Normal Stomach**

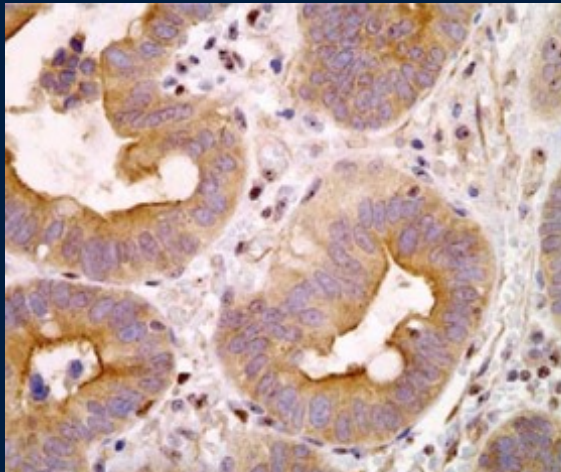


**Intestinal-Type Gastric Cancer**

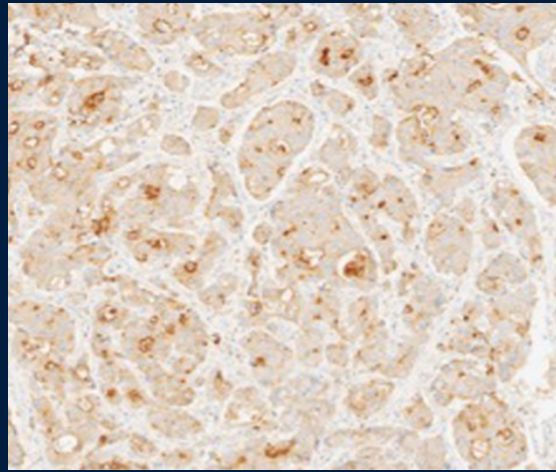


**Normal Intestine**

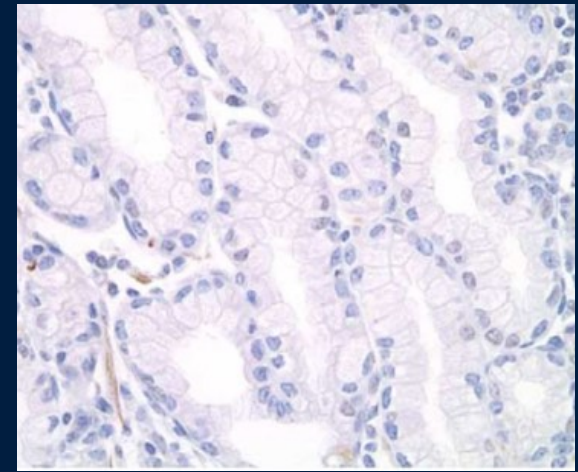
# GCC and Gastric Cancer



**Primary Cancer**



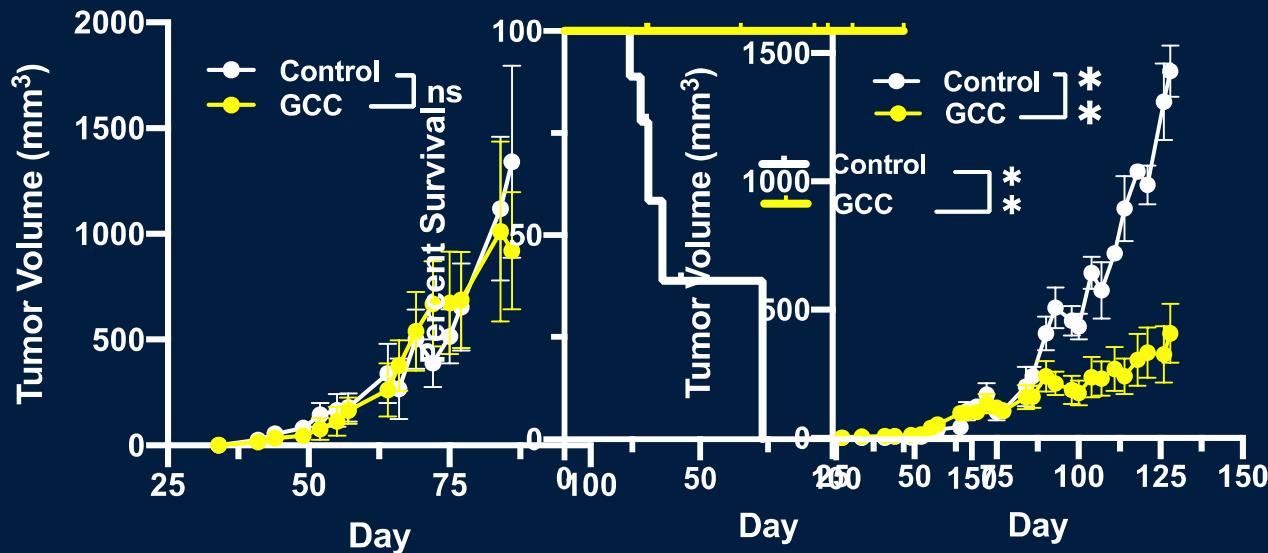
**Metastatic Cancer**



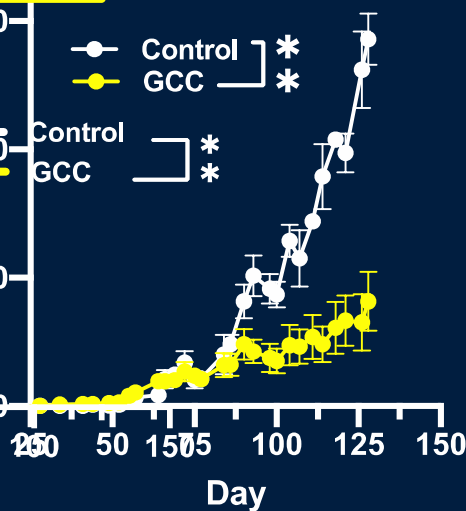
**Normal Mucosae**

# GCC CAR-T Cell Efficacy in Gastric Cancer

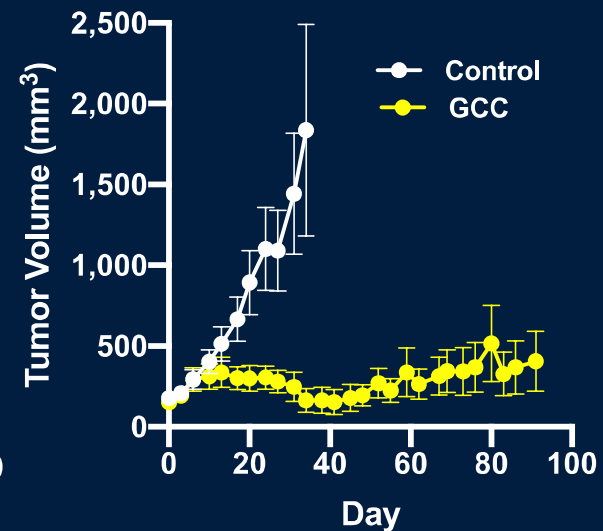
GCC Negative Tumor  
(SW480)



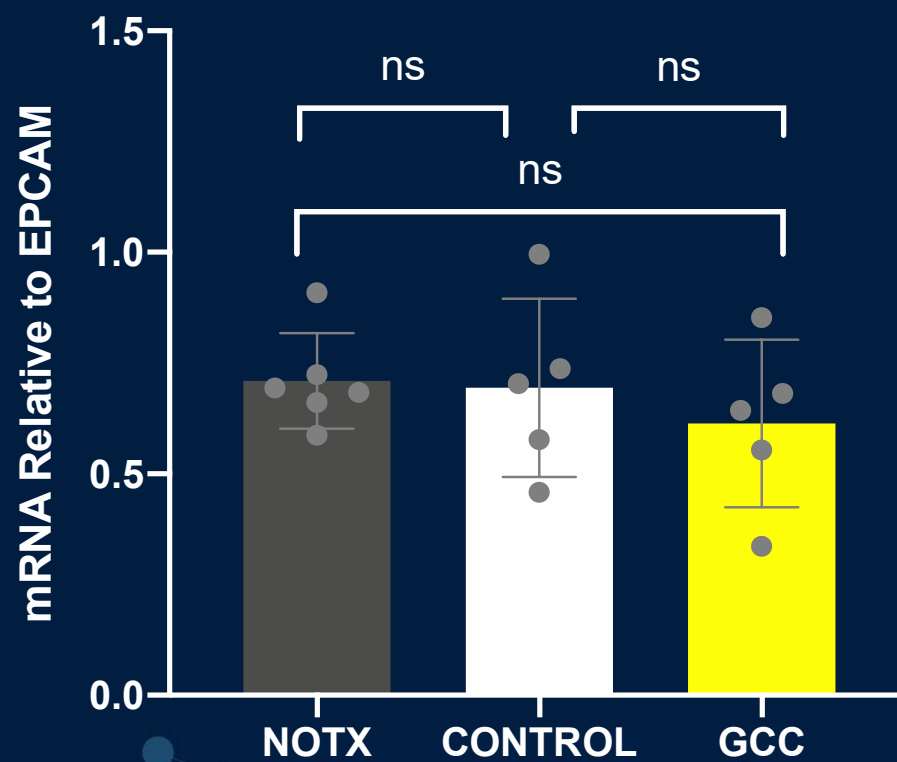
Survival GCC Positive Tumor  
(T84)



Gastric PDX

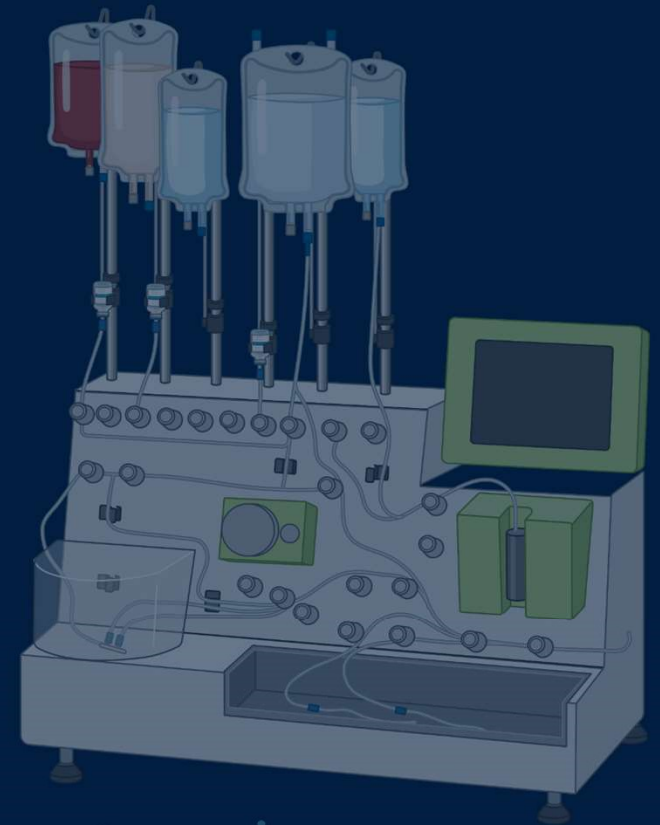


# Treated Tumors Maintain GCC Antigen Expression



# Summary

- GCC-CAR T Cells are safe and effective in Human CRC Models
- GCC-CAR T Cells are *effective* in Human Gastric Cancer Models
- GCC-CAR T Cells may not be affected by common tumor escape-mechanisms
- Opportunity for GMP translation to treatment in the clinic



# Contributors

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- Aleksandra Snyder, PhD
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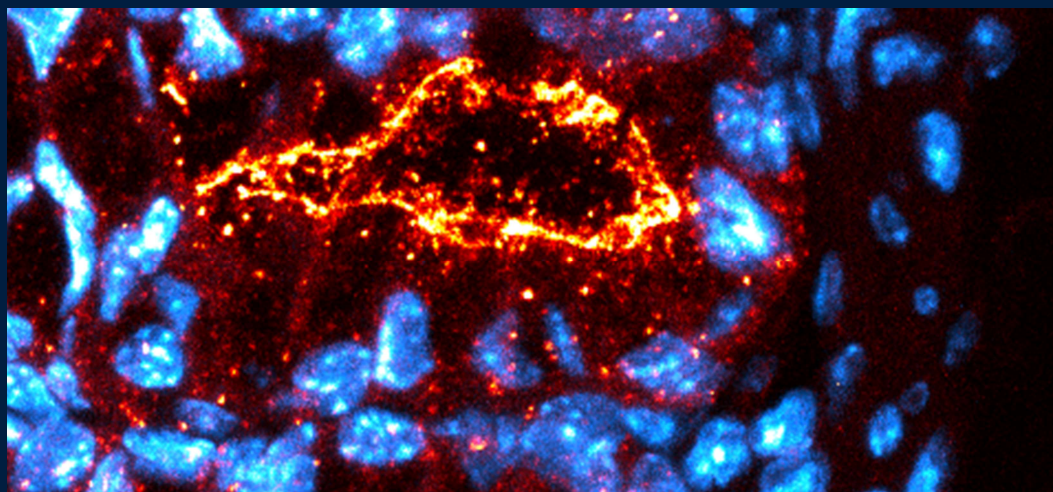
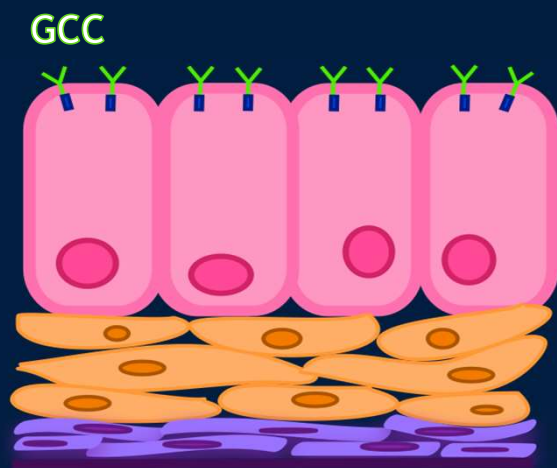




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# GCC Compartmentalization



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