

BIOC 462/491 Internship Position in Industry

Fall 2024

Restrictions

Open only to Honours Students enrolled in BIOC 462/491 during the fall 2024 semester

Company



Cura Therapeutics
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Title

Multifunctional immunotherapy CT101 for the treatment of metastatic cancer-biomarker study.

Project Description

With the biomarker project, we aim to identify molecular and cellular biomarkers in immune cells from metastatic cancer patients. For these experiments, we plan to include 40-50 commercially available PBMCs from metastatic cancer patients that will be treated ex vivo with CT101. Cancer patients' PBMCs will be cultured with equimolar concentrations of CT101 or controls to capture the immune cell's transcriptomic profile with NGS. The transcriptomic data will be analyzed by leveraging public datasets and AI software for protein and signaling pathway interactions to identify biomarkers as predictors of CT101-mediated immune response. The identified biomarkers will be validated with in vitro functional immunoassays and molecular biology techniques.

These experiments will allow us to identify the patient population that will get the most therapeutic benefits and give us more insights into CT101's mechanism of action and the signaling pathways involved in the cascade of immunological reactions induced upon CT101 treatment.

Contact Information

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