BioCanRx
Canada's Immunotherapy Network
Le réseau canadien d'immunothérapie

Enabling Studies Program

Establishing a Canadian Platform for Cell Therapy Release Testing

Project duration: 2025-4-1 to 2028-3-31

Targeted cancer type:

Various cancers

This enabling study will establish made-in-Canada rigorous quality control tests for for three Canadian CAR T cell clinical trials currently underway.

1
BioCanRx Funded Core Facility

The Ottawa Hospital's Biotherapeutics Manufacturing Centre

Biotherapeutic:
Adoptive cell therapy

Project value:

$1,665,915

BioCanRx Contribution:
$730,000

2
Partners

The Ottawa Hospital Research Institute | L'Hôpital d'Ottawa Institut de recherche

Arnie Charbonneau Cancer Institute
The Riddell Centre for Cancer Immunotherapy

Key Investigator:

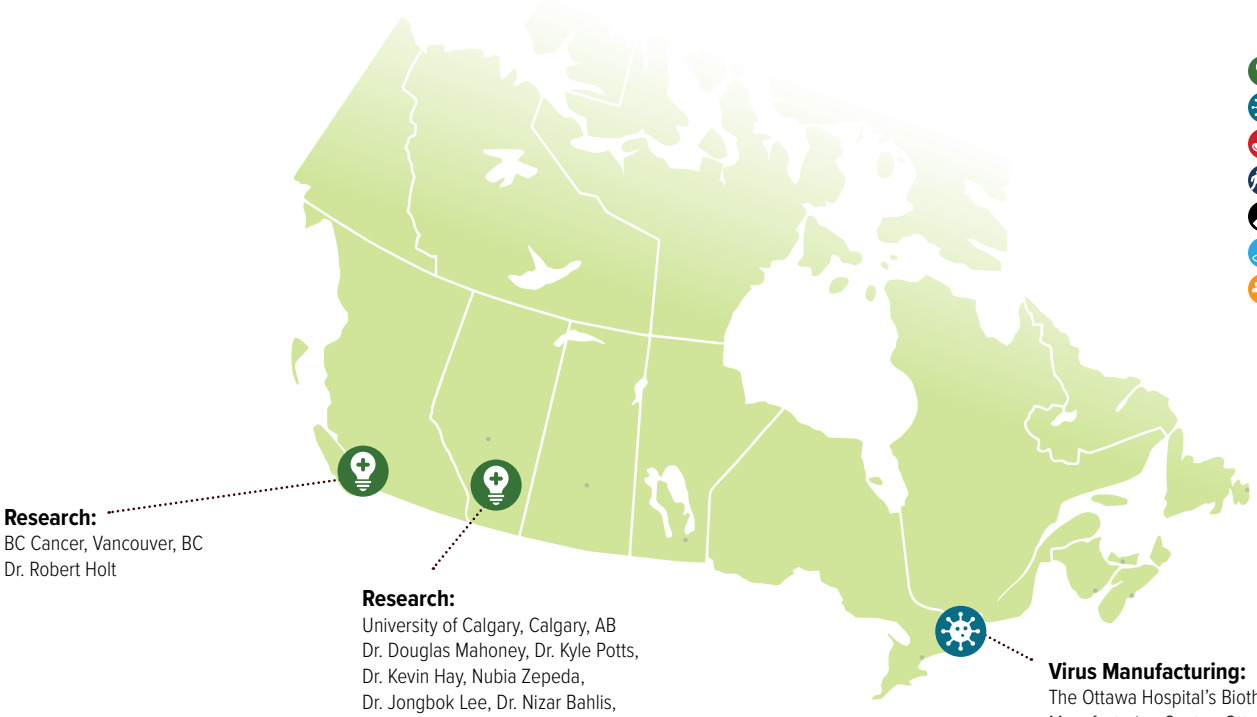
Project Lead:

Dr. Douglas Mahoney

UNIVERSITY OF CALGARY

About the project:

The research team plans to establish a Canadian quality control (QC) platform for CAR T cells and other cell-based therapies, which harness the immune system to fight cancer. These therapies require rigorous QC testing to ensure safety, efficacy, and regulatory compliance. Currently, critical tests are often outsourced internationally, leading to delays, high costs, and logistical challenges. This project will develop and implement critical QC assays in-house to support three clinical trials – GCAR1 (CAR T therapy for solid tumors), BCAR1 (BCMA-CAR T therapy for multiple myeloma), and DNT1 (allogeneic T cell therapy for AML). By building adaptable protocols for emerging therapies and collaborating with Canadian partners, they will create a harmonized, scalable QC network to ensure inter-laboratory consistency and seamless assay transfer. Aligned with BioCanRx's mandate to advance biotherapeutics, this initiative will reduce barriers for researchers, lower costs, and accelerate the clinical translation of innovative cancer treatments. By strengthening local capacity, this project positions Canada as a leader in cell and gene therapy, delivering life-saving therapies to patients faster.



Partners:

The Ottawa Hospital's Biotherapeutics Manufacturing Centre

Riddell Centre for Cancer Immunotherapy

Total Pledged Partner Contribution: $935,915

Total Pledged Matched Contribution: $813,140

Total Leveraged Partner Contributions: $122,775

Key Deliverables

1. Quality Control assays to support lead clinical trials
2. Transfer and verification of analytical methods
3. Performing Release Testing for Clinical Trials

The power to kill cancer lies within us. Let's tell our bodies how.

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