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

Enabling Studies Program

Hospital-Based TIL Manufacturing to Provide Standard of Care Immunotherapy for Melanoma

Project duration: 2025-3-9 to 2028-3-31

Targeted cancer type:

Melanoma

This team aims to develop a point-of-care TIL product for melanoma that will enable a clinical study to support development of manufacturing processes and adoption of TIL as standard of care.

Key Investigators:

Project lead:

Dr. Simon Turcotte

CHUM
Centre hospitalier de l'Université de Montréal

Dr. Jennifer Quizi

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

1
BioCanRx funded Core Facility

The Ottawa Hospital's Biotherapeutics Manufacturing Centre

Biotherapeutic:
Adoptive cell therapy

Project value:

$1,870,000

BioCanRx Contribution:
$730,000

5
Partners

CHUM FONDATION | Agir plus vite que la maladie

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

ScaleReady.

About the project:

Melanoma, a severe skin cancer, often resists current treatments. In the U.S. and parts of Europe, Tumor Infiltrating Lymphocyte (TIL) immunotherapy is reimbursed as standard care, with up to 50% of refractory melanoma patients responding and 20% achieving long-term remission.

Canada urgently needs sustainable access to TIL therapy. Commercial TIL products from the U.S. cost over half a million dollars each, making them unsustainable for Canada's public health care system. However, European countries have shown that hospital-based point-of-care manufacturing can produce safe, effective TIL at reduced costs. This model improves access, controls expenses, creates high-quality jobs, and supports research to enhance TIL efficacy.

The teams' project will leverage existing cellular laboratories at the Ottawa Hospital and the Centre hospitalier de l'Université de Montréal to develop an affordable, point-of-care TIL product. This will enable the conduct of a clinical study to gather data to support TIL as part of standard care and create a transferable manufacturing process for other Canadian sites.

Research:
Centre hospitalier universitaire de Sherbrooke, Sherbrooke, QC
Dr. Patrick Vermette

Cell Manufacturing:
The Ottawa Hospital's Biotherapeutics Manufacturing Centre, Ottawa, ON
Dr. Jennifer Quizi,
Dr. Mathieu Crupi,
Lee Timms

Research:
Héma-Québec, Quebec City, QC
Dr. Patrick Trepanier

Research:
Centre hospitalier universitaire vaudois and Ludwig Cancer Research, Lausanne, Switzerland
Dr. George Coukos

Research:
National Center for Cancer Immune Therapy, Copenhagen University Hospital, Herlev, Denmark
Dr. Inge Marie Svane

Research:
Moffitt Cancer Center, TIL Development Lab, Tampa, Florida
Dr. Shari Pilon-Thomas

Research:
Ottawa Hospital Research Institute, Ottawa, ON
Dr. Rebecca Auer,
Dr. Natasha Kekre

Cell Manufacturing and Research:
l'unité de production cellulaire du Centre Hospitalier de l'université de Montréal
Dr. Simon Turcot, Dr. Sandy Pelletier, Dr. Mathieu Gigoux

Non-profit, Government, Patient, End-User Group:
Coalition priorité cancer au Québec, Montreal, QC
Eva Villalba

Research:
Université Laval, Quebec City, QC
Dr. Jason R. Guertin

Partners:

Centre de recherche du CHUM

Ottawa Hospital Research Institute

Fondation du CHUM

ScaleReady

Fondation J-Louis Lévesque

Total Pledged Partner Contributions: $1,140,000

Total Pledged Matched Contributions: $1,140,000

Key Deliverables

1. Canadian cGMP melanoma TIL (canTILme) development plan reflecting clinically validated standards, with a cost-reduction strategy and confirmed freedom to operate.
2. Validated canTILme manufacturing process and compendial release assays
3. Pre-CTA meeting supporting the early phase trial design
4. Data generated from pilot and engineering runs confirming harmonized TIL manufacturing at two sites
5. Better defined path for integrating hospital-based manufactured TIL therapy into Canada's public health care system

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

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