Health Canada's Approach for Innovative Therapeutic Products that Challenge Regulatory Frameworks

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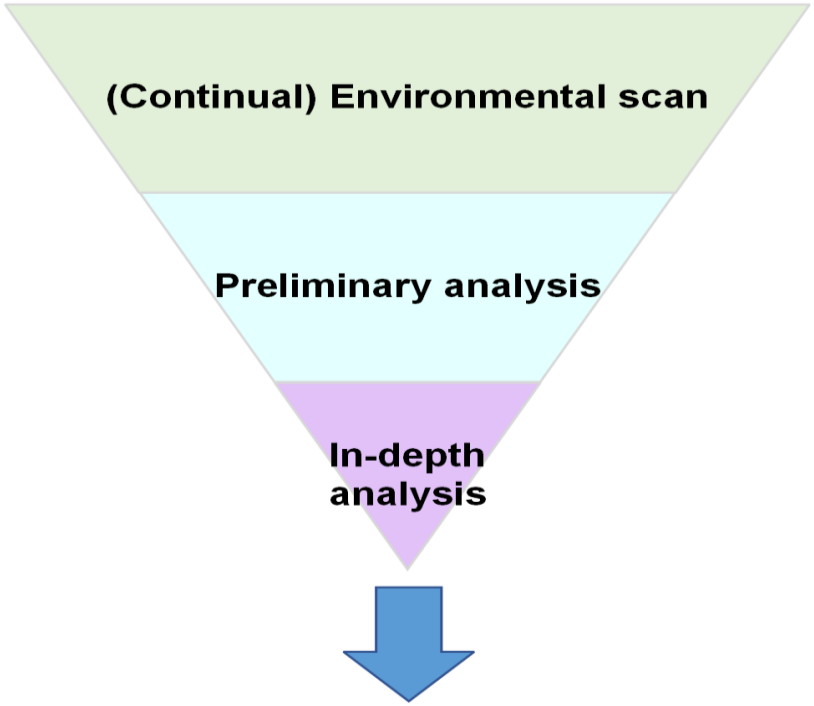
The ability to authorize ATPs in a flexible and risk-based manner

The Advanced Therapeutic Products (ATPs) authorities were added to the *Food and Drugs Act* in 2019 (section 21.9).

- **Purpose:** Introduce a market access pathway for advanced therapeutic products designed to enable regulatory flexibility through the use of regulatory “sandboxes” while supporting the best of patient safety
- The ATP framework allows the Minister to classify a product, or class of products, as an ATP by adding it to Schedule G after considering specified factors, including:
    - how much is known about the risks and benefits of the therapeutic product or class;
    - how those risks could be managed and controlled;
    - how different those therapeutic products are from similar ones that may have already been authorized under the regulations;
    - the extent to which existing legal frameworks (federal, provincial, territorial) are adequate to prevent injury to health or prevent deception.
- **Benefits:** Supports access to new innovative products in Canada
- A collaborative and iterative approach with a wide variety of stakeholders, both upfront and throughout, is used for the implementation of tailored ATP pathways.

The identification and selection of ATP candidates



- To identify therapeutic products using various sources that are novel and/or do not fit in our current regulatory framework(s).

- To confirm whether these therapeutic products face a regulatory barrier.

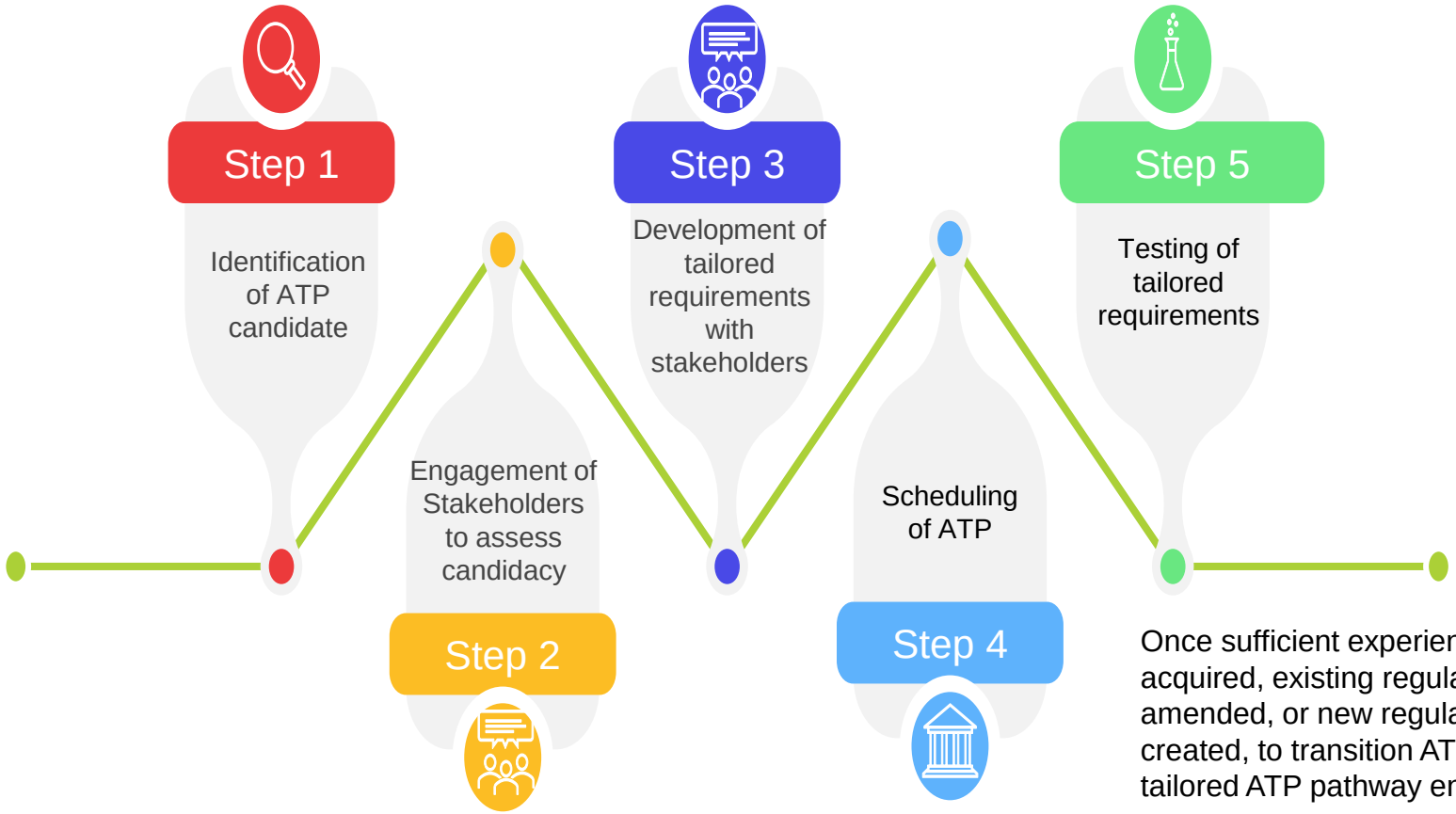
- To conduct deeper, more comprehensive analysis to determine the needs of each product / product class and their suitability for Schedule G.

Some of these therapeutic products may not end up being good ATP candidates after a more in-depth analysis is conducted.

Canada's approach to regulating ATPs – regulatory sandboxes

Ensures a flexible approach for innovative drugs and devices that challenge the current regulatory system

A **regulatory sandbox** is a space, crafted and controlled by a regulator, designed to allow the testing of something novel (such as tailored requirements) to be conducted under supervision prior to their full entry into the existing regulatory framework.



ATP ≠ ATMP

Once sufficient experience is acquired, existing regulations will be amended, or new regulations will be created, to transition ATPs out of the tailored ATP pathway environment.

What about ATMPs?

- Advanced therapy medicinal products (ATMPs) are medicines for human use that are based on genes, tissues or cells (EMA definition)
- Not all ATMPs face a regulatory barrier in Canada and would therefore not be ATPs
  - The *Food and Drug Regulations* have shown flexibility and robustness to be able to authorize cutting edge innovative products, such as advanced cell and gene therapies.
  - The ATP Framework is for when a regulatory barrier exists.
- Not all ATPs would meet the definition of ATMP, as an ATP can be any drug or device or any combination of drugs and devices

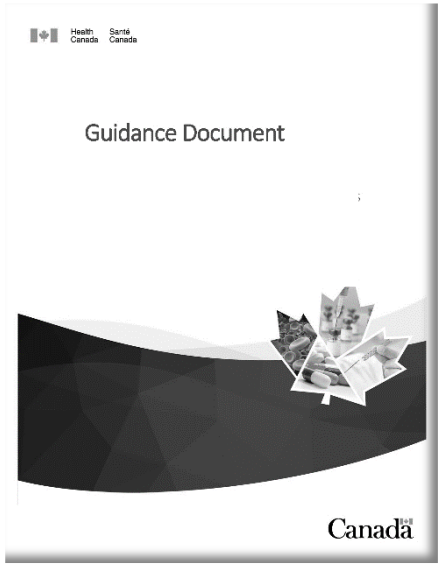
Why did we need the ATP framework?

- The ATP Framework is not a shortcut or traditional expedited pathway. Instead, it may be the fastest way to provide a stable and robust pathway to market authorization for products with an insurmountable regulatory barrier.
- This pathway can be tailored to a particular type of product and will be designed in a collaborative way, using input from external stakeholders in the development
- ATP Pathways are flexible and able to respond to changes or further innovation
  - The tailored requirements can be changed more frequently and quicker than amending regulations
- The framework provides a safe and comprehensive arena to test regulatory requirements and oversight of innovative drugs
  - All drugs and medical devices will be evaluated for safety, quality, and efficacy before being issued a license. Clinical Trials (Drugs) and Investigational Testing (Medical Devices) are still required.

The ATP Schedule (Schedule G to the *Food and Drugs Act*)

- The decision on whether a particular product qualifies as an ATP is taken well before a submission for market authorization is ready.
- Our aim is to complete the process of adding an item to the list of ATPs around the same time as the first Phase II trials take place.
- The intention is not to add individual brand names to Schedule G. The objective is to add types of products.
- A drug or medical device is officially designated as an ATP when it is added to the schedule.
  - It is not company, sponsor, or submission-specific.
  - Items added to Schedule G and the associated tailored requirements (“regulatory pathway”) are available to any potential sponsor

The ATP guidance document evolved over time



Draft guidance document

Consultations
- Public
- Internal

ATP Info Hub

ATP Info Hub

Advanced therapeutic products (ATPs)

Scientific and technological advances are driving rapid change in health care. Products are becoming increasingly unique, complex and distinct. As such, they can occasionally face significant barriers under Health Canada's existing regulations.

These innovative products are known as advanced therapeutic products. They can be either drugs or medical devices, or any combination of both.

A framework for regulating and authorizing ATPs
What the framework is, international harmonization, support for innovators.

Using the ATP framework
Using the ATP framework to create a tailored ATP pathway.

Get involved and share knowledge about ATPs
Who should get involved, how to get involved.

ATP candidates
What are suitable candidates, how we identify them, the candidates we are working on.

Suggest potential ATP candidates
Use our form to suggest a new ATP candidate.

Date modified: 2025-03-14

Summary of changes from draft guidance to ATP Info Hub

- Simple, plain language
- Key messages to address concerns and questions raised by external stakeholders during the public consultation:
  - Decision-making
  - Legislative factors
  - Fees
  - Suggestions of ATP candidates
  - Clinical trials/investigational testing
  - Equity of support for innovators

Adaptive Machine Learning-Enabled Medical Devices

What is aMLMD?

Machine Learning Medical Devices (MLMDs) are medical devices that utilize machine learning, a subset of artificial intelligence to fulfill their intended medical purpose. The term "adaptive MLMDs" (aMLMDs), refers to these devices when they are expected to undergo changes after receiving Health Canada authorization, which could impact their safety or effectiveness.

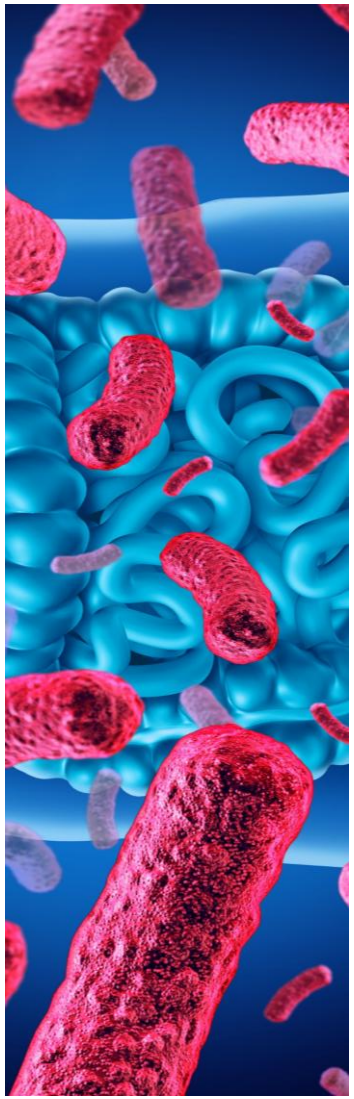
What was the regulatory barrier?

Any change that impacts the aMLMD output (e.g., diagnosis or therapy) constitutes a significant change to the device and requires the manufacturer to submit an amendment application.

What did we do?

Development of aMLMD as an ATP candidate provided valuable insight from stakeholder engagement, international regulatory developments, and legal counsel. We concluded that the existing regulatory framework (*Medical Device Regulations*) can appropriately oversee these products with some policy updates. We published a guidance on MLMDs that outlines pre-market considerations for these devices.

Fecal Microbiota Therapy



What is FMT?

Fecal Microbiota Therapy (FMT) is a medical procedure where bacteria and natural antibacterials are transferred from a healthy donor's stool into a patient's colon to re-establish a healthy microbial community within the patient's gut.

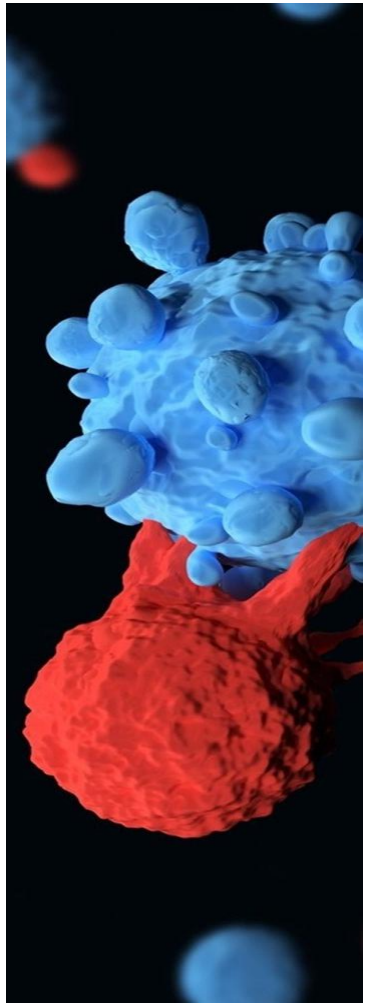
What was the regulatory barrier?

FMT is considered investigational for recurrent *Clostridioides difficile* infections (CDI). Physicians must navigate the regulatory system to file a clinical trial application to treat their patients with FMT. In 2015, Health Canada introduced an interim policy guidance document; however, a long-term regulatory solution was necessary.

What did we do?

A regulatory solution was being developed with input from physicians across Canada using FMT. However, the project was put on hold, as a New Drug Submission was filed for an FMT product that, if authorized, would address the current regulatory challenges with FMT used for CDI. Health Canada issued a Notice of Compliance for REBYOTA (a Novel First-in-Class Microbiome-Restoration Therapy for the Prevention of Recurrence of C. diff Infection) on March 5, 2025.

Decentralized CAR T



What is Decentralized CAR T?

Chimeric antigen receptor (CAR) T-cell therapy is a type of immunotherapy that uses a patient's own immune cells to fight cancer. Decentralized manufactured CAR T-cell therapy aims to improve treatment access by manufacturing the product closer to patient treatment.

What was the regulatory barrier?

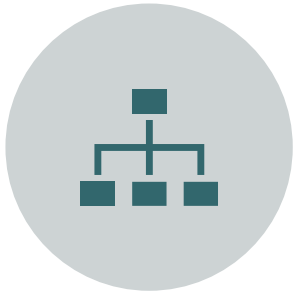
Existing autologous CAR T-cell therapies manufactured centrally have been authorized under the *Food and Drug Regulations*. These same regulations may not be appropriate for authorizing decentralized manufacturing of these products.

What did we do?

Via an Internal Working Group, we are exploring whether decentralized manufactured CAR Ts presents a regulatory barrier that would require a tailored ATP pathway to resolve. An External Reference Group is informing our assessment of whether decentralized CAR Ts need the creation of a regulatory sandbox to facilitate their market authorization.

Lessons learned to support success (work upfront to create a sandbox)

Strong rationale for choice of the framework



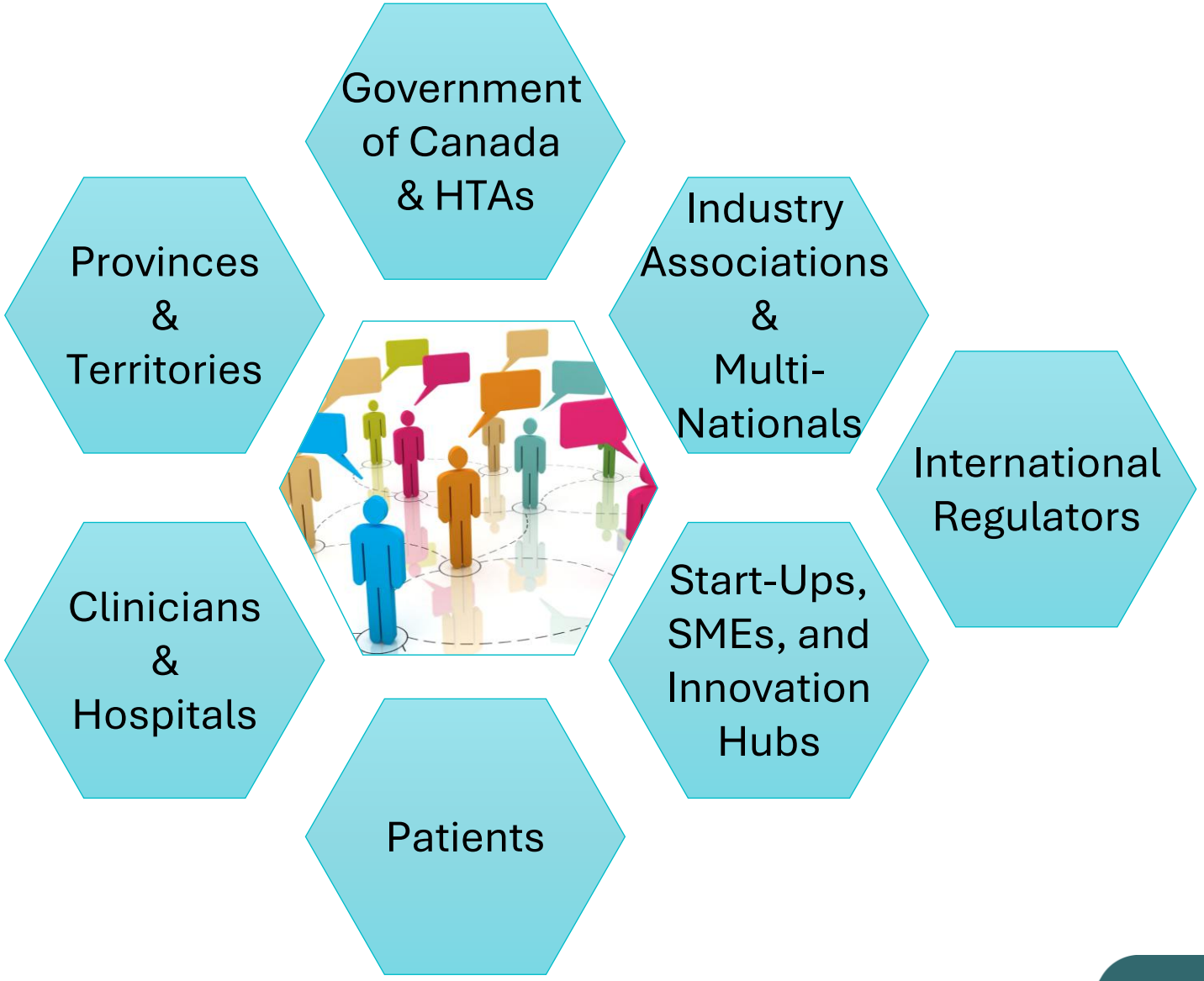
Project set-up

Stakeholder engagement strategy and working groups

Communication and transparency strategy

Forward thinking

How will the ATP framework help us regulate future products?



Contact Us

ATP Info Hub (webpage):
https://www.canada.ca/en/health-canada/services/drug-health-product-review-approval/advanced-therapeutic-products.html

Generic ATP inbox: atp-ptn@hc-sc.gc.ca