

# **PHARMACIST-LED HEPATITIS C DIAGNOSIS AND RAPID MANAGEMENT - IN COMMUNITY (PHARM-C): A PHASE IV NONBLINDED RANDOMIZED CONTROLLED TRIAL**

## **Authors:**

**Biondi MJ<sup>1,2</sup>, Harper B<sup>3</sup>, Gill P<sup>3</sup>, Nicolle J<sup>4</sup>, Chung D<sup>5</sup>, Boutrous M<sup>5</sup>, Wilson AD<sup>4</sup>, Lam V<sup>4</sup>, Morkos D<sup>5</sup>, Barber B<sup>2</sup>, Usoro MA<sup>1</sup>, Shah H<sup>2</sup>, Fontaine G<sup>6</sup>, Hansen B<sup>2</sup>, Capraru CI<sup>2</sup>, Feld JJ<sup>2</sup>**

<sup>1</sup> School of Nursing, York University, Toronto, ON, Canada.

<sup>2</sup> Viral Hepatitis Care Network (VIRCAN), Toronto Centre for Liver Disease, Toronto, ON, Canada.

<sup>3</sup> SpecialtyRx Solutions, Toronto, ON, Canada.

<sup>4</sup> Coderix Medical Clinic, Toronto, ON, Canada.

<sup>5</sup> Woodgreen Pharmacy, Toronto, ON, Canada.

<sup>6</sup> School of Nursing, McGill University, Montreal, QC, Canada.

## **Background:**

Recently there has been increasing interest in determining whether pharmacist-led models improve HCV treatment uptake and cure, especially when co-localized with opioid agonist therapy.

## **Methods:**

We conducted an open-label, randomized, multi-centre controlled trial at two community pharmacies in downtown Toronto, Canada among individuals with a positive HCV antibody test. HCV RNA was then completed by the Cepheid GeneXpert fingerstick assay, and if positive, participants were randomized to being treated by the community pharmacist or referred to hepatology at the Toronto Centre for Liver Disease. With a sample size of 62, the primary outcome was intention to treat completion rates in pharmacist-led programs compared to hepatology.

## **Results:**

From April 13, 2022, to July 13, 2023, 34 participants were consented, but 6 never returned for the fingerstick test. 11/28 (39%) had a detectable HCV RNA, with 6 randomized to the pharmacy, and 5 randomized to hepatology. 4/6 participants in the pharmacy arm completed an intake, 2/6 initiated treatment, and 1/6 initiated treatment during a mental health admission, with pharmacy follow-up. No participants had cirrhosis (correctly ruled out by pharmacists). Two participants were lost to follow-up after dispensing, and the other participant completed treatment and achieved SVR12/24. Of those randomized to hepatology, 2/5 attended a first appointment, initiated and completed treatment. One had undetectable HCV RNA at SVR12/24, while the other returned with undetectable RNA at SVR34. The study was stopped in October 2024 due to poor enrolment, but as a part of this study we have described multiple facilitators and barriers to pharmacist-led HCV care.

## **Conclusion:**

Our study and larger studies have demonstrated that pharmacists can treat HCV. However, considering the lack of pharmacy reimbursement, and the lack of capacity of community pharmacists to facilitate case-management, models within pharmacies, rather than led by pharmacists, may lead to better outcomes.

## **Disclosure of Interest Statement:**

This study was funded by AbbVie Canada as an Investigator-Initiated Study. Mia Biondi reports receiving speaking fees from AbbVie and Gilead, and research funding from AbbVie, Gilead, and Cepheid. Hemant Shah reports being a consultant for SRx Health Pharmacy. Guillaume Fontaine reports receiving speaking fees and hospitality from AbbVie and Gilead. Jordan Feld reports receiving speaking fees from AbbVie and Gilead, and research funding from AbbVie, Gilead, Cepheid, and Atea.