HCV-INFECTED PEOPLE WHO INJECT DRUGS (PWID): LONG-TERM ENGAGEMENT IN CARE POST-SVR IS AN IMPORTANT FACTOR TO PREVENT RECURRENT VIREMIA (RV) IN PATIENTS THAT RECEIVED IFN-BASED THERAPIES

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Background

PWID are disproportionately represented among the HCV-infected population of Canada. Even if successful HCV therapy is completed, continued unsafe practices increase the risk of RV. Long-term engagement in care may help mitigate this risk. This analysis evaluates the long-term benefits of a specific multidisciplinary intervention among PWID who have been successfully treated for HCV infection with interferon-based therapies.

Methods

A retrospective analysis was conducted among HCV-infected VIDC patients who achieved SVR on interferon-based regimens. This cohort was selected based on identified ongoing street drug use, and ongoing enrollment in multidisciplinary care at our centre to address medical, psychiatric, addiction-related, and social needs. The endpoint of this analysis was the occurrence of (RV) after the achievement of SVR.

Results

In a cohort of 90 active PWID treated for HCV infection with IFN-based therapies between March 2002 – April 2013, 70 achieved SVR with IFN-based therapies. Key demographics of individuals achieving SVR included: mean age 53 years, 86% male, 57% HIV co-infected, 60% genotype 1, 22% cirrhotic, 83% treatment-naïve, 70/63% using cocaine/heroin, 59% on opiate substitution therapy (OST). With a mean follow-up of 6.5 years (range 1 - 11 years), there were 5 cases of RV (10.9 cases/1000 PYFU, 95% CI, 0.6816- 0.8513%). Correlates of RV include active stimulant use and HIV-co-infection. No cases of RV were documented beyond 2 years post-SVR.

Table 1: Patient Characteristics Among Active PWID Who Achieved SVR and Remained in Long-term Follow-up post-SVR

Characteristics	Patients (n=70)
Mean age (years)	53
Male (n, %)	60 (86)
HIV co-infected (n, %)	40 (57)
Cirrhotic (n, %)	15 (22)
Rx Naïve (n, %)	58 (83)
Cocaine (C) Use (n, %)	49 (70)
Heroin (H) Use (n, %)	44 (63)
Stimulant (S) Use (n, %)	16 (23)
OST (n, %)	41 (59)

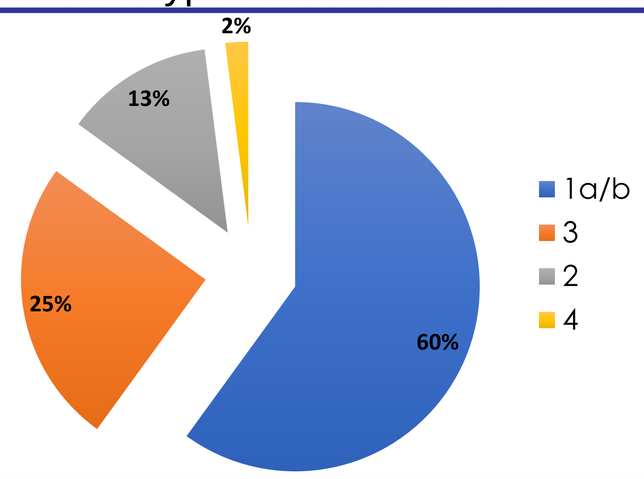
Table 2: Characteristics of Recurrent Virema

	Variable of Interest
Total Active PWID Who Achieved SVR	70
Mean PYFU	6.5 years
Cases of RV	5
Rate of RV	10.9/1000 PYFU
Wilson Confidence Interval	95% CI, 0.6816-0.8513%

Table 3: Characteristics of Patients with RV

	1	2	3	4	5
Age	50	50	61	47	55
Sex	M	M	M	M	M
Genotype	1a	2b/3a	1a	3	1a
Recreational Drug Use	Yes	Yes	Yes	Yes	Yes
Urine Drug Screen	H, S	C, H, S	H, S	S	C, H, S
Cirrhotic	Yes	Yes	No	Yes	No
DAA Use	No	No	No	No	No

Table 4: Genotype Classification of Patients



Conclusion

Maintenance in long-term multidisciplinary care post-SVR may serve to reduce the RV rate in the presence of ongoing risk behaviors. Among active PWID in our program, the RV rates were 66% lower than reported in recent meta-analyses in similar populations, with the 95% CI placing it below 1%/year. No cases of RV were documented after 2 years, a finding that may help inform the duration of more intensive follow-up in this population post-SVR to reduce the rate of RV. These are the first long-term real world data among active PWID maintained in care post-SVR, showing that the risk of RV may have been overestimated and that it may be that efforts to reduce its incidence should be preferentially focused on the period that immediately follows the achievement of SVR.

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