

Background

To meet WHO HCV elimination goals, specific programs will be needed to engage vulnerable populations with a high prevalence of HCV infection, such as PWUD. The most prescribed regimens in Canada include elbasvir/grazoprevir (E/G), ledipasvir/sofosbuvir (L/S) and velpatasvir/sofosbuvir (V/S). While clinical trials have highlighted the efficacy of these regimens, real world data are required to confirm these results, especially among PWUD.

Methods

A retrospective analysis was performed on all HCV-infected PWUD, initiating HCV treatment (Rx) at our centre between 06/15-10/17. All subjects were enrolled in a multidisciplinary model of care, addressing medical, psychological, social and addiction-related needs. The primary outcome was achievement of SVR12. A secondary outcome was maintenance of SVR in long-term follow-up in subjects with ongoing risk behaviors for recurrent viremia.

Results

A total of 148 individuals (all PWUD, 66% heroin/58% cocaine use) have initiated therapy with one of E/G, L/S, or V/S. The E/G cohort (n = 39) includes 6 HIV+, 18 on opiate substitution therapy (OST), 31 Rx naïve, 21 GT1a, and 4 cirrhotic. To date, 34/36 achieved SVR12, with no virologic failures (2 LTFU). The L/S cohort (n = 64) includes 7 HIV+, 6 on OST, 36 Rx naïve, 43 GT1a, 19 cirrhotic. To date, 49/55 achieved SVR12, with 2 virologic relapses, 4 LTFU, one unrelated opioid overdose death. The V/S cohort (n=45) includes 6 HIV+, 13 on OST, 30 Rx naïve, 9 GT1a, 23 GT3a, 10 cirrhotic. To date, 29/29 achieved SVR12.

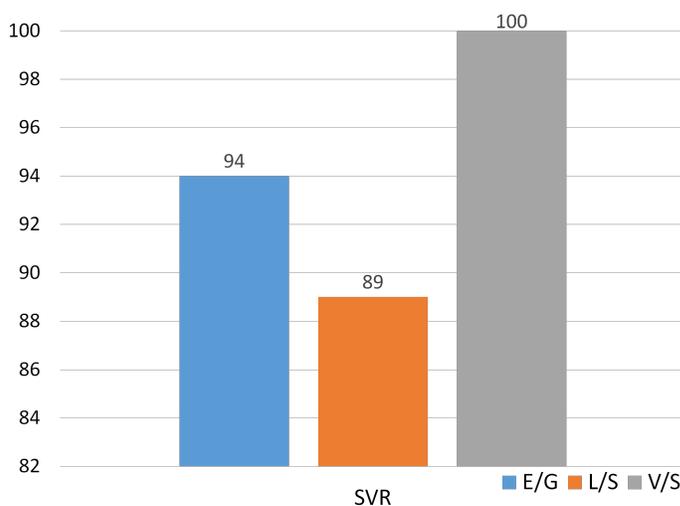
Table 1. Patient Characteristics

	E/G (n= 39)	L/S (n= 64)	V/S (n= 45)
HIV+	6 (15%)	7 (11%)	6 (13%)
OST	18 (46%)	6 (9%)	13 (29%)
Rx Naive	31 (79%)	36 (56%)	30 (67%)
GT1a	21 (54%)	43 (67%)	9 (20%)
GT3a	-	-	23 (51%)
Cirrhotic	4 (10%)	19 (30%)	10 (22%)

Table 2. Treatment Outcomes

	E/G	L/S	V/S
Achieved SVR (%)	34 (94%)	49 (89%)	29 (100%)
Virologic Failures (%)	-	2 (4%)	-
LTFU (%)	2 (6%)	4 (7%)	-
Death (%)	-	1 (2%)	-

Table 3. Achievement of SVR 12 based on regimen (%)



Conclusion

Currently prescribed all-oral HCV treatment regimens appear to be highly and equally effective in a real world PWUD cohort. This provides support for expanded access to HCV treatment. Pending complete and ongoing follow-up in this important cohort, health care providers have three excellent options to provide HCV treatment to PWUD engaged in care, in support of the WHO's global elimination targets.

Acknowledgements

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