

## **Hepatitis C virus direct acting antiviral dispensing mode and treatment completion within inner-city Vancouver community health centres**

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**Background:** Well-tolerated all-oral direct-acting antiviral agents (DAA) for the treatment of Hepatitis C virus (HCV) have success rates approaching 100% in clinical trials. Poor adherence or treatment completion has previously been raised as a concern for inner-city complex patient populations, with substance use and mental health challenges. There is little data on whether certain modes of dispensing DAAs would have an effect on treatment completion.

**Methods:** This study is a prospective observational cohort study from three interdisciplinary community health centers in inner-city with data gathered from self-administered questionnaires and electronic medical records. We observed treatment completion in our cohort who received DAAs either on a weekly basis from a HCV clinic or on a daily basis from any location, or had some other forms of dispensing. Separate analyses were done for those with recent injection drug use (IDU) and for those on opioid agonist therapy (OAT). We observed factors associated with treatment completion through bivariate analysis.

**Results:** In this cohort, of which 29% self-reported injecting drug use prior to treatment, nearly all participants (97%) completed treatment. Younger age, presence of medical co-morbidities, recent inject drug use, higher frequency of cocaine and alcohol use were associated with lower treatment completion. We could not show that either daily dispensing or co-dispensing of DAA with OAT was associated with higher treatment completion. The same result for daily dispensing was found for those with recent IDU. Intention-to-treat (ITT) SVR 12 and modified ITT SVR12 were 85% (203/239) and 95% (203/213), respectively.

**Conclusion:** Treatment completion did not vary for individuals receiving daily HCV DAA treatment compared to weekly dispensing at a HCV clinic. In this cohort, younger age, presence of medical co-morbidities, and alcohol and cocaine use were associated with reduced treatment completion. Overall, high SVR12 results were seen in keeping with results from clinical trials.

**Disclosure of Interest Statement:** *This study was supported by Vancouver Coastal Health Research Institute Team Grant Award funded by the Vancouver General Hospital & University of British Columbia Hospital Foundation. Mark Hull has received honoraria for speaking engagements and advisory boards from Merck, Gilead and Vive. All honoraria were paid to his institution. Susan Nouch has received an honorarium for an advisory board from Gilead. Lesley Gallagher has received Honoria for speaking engagement from Merck, Abbvie and Pendopharm, has participated in advisory committees for Merck and Gilead and has received travel grants from Gilead. For the remaining authors, there are no conflicts of interest.*