

## **SOFOSBUVIR/VELPATASVIR (S/V) FOR THE TREATMENT OF HEPATITIS C VIRUS (HCV) INFECTION AMONG VULNERABLE INNER-CITY RESIDENTS: EXTENDING THE RESULTS OF CLINICAL TRIAL PART 2**

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**Background:** The combination of Sofosbuvir/Velpatasvir(S/V) is approved for the treatment of chronic hepatitis C virus(HCV) infection. In registrational trials, cure rates of 95% were achieved when administered as one pill/day for a period of 12-weeks regardless of genotype or disease stage. There is a need to develop and evaluate systems of care in populations excluded from clinical trials. We aim to evaluate the safety and efficacy of S/V in a prospective study of HCV-infected inner-city residents enriched for risk behaviors for non-adherence to therapy, including problematic drug use and unstable housing.

**Methods:** Through dedicated outreach events, we identified HCV-infected non-engaged patients who were eligible to receive government-funded antiviral treatment for HCV infection. We offered the opportunity to enroll in a multidisciplinary program of care to address medical, psychological, social, and addiction-related needs, and provide S/V therapy in this context, with enhanced supervision of adherence.

**Results:** In this ongoing study, we have identified 239 eligible subjects, 27.7% female, median age of 46(20-81) years. Most common genotype being 1a followed by 3a(43.5%, 35.2%) and 13.8% cirrhotic. 45% have unstable housing and 83.4% utilize fentanyl. Of the 239, HCV treatment has been started in 211 cases(within a median 6 weeks of engagement in care), with 21 awaiting treatment, 3 deaths and 4 lost to follow up. Of 211, 181 have completed treatment, 26 are currently on treatment, 2 have died, 2 discontinued prematurely. Of the 181, final outcomes are available in 170 cases, with 166 confirmed as cured, 4 with documented virologic relapse. By mITT, cure rate is 166/170(97.6%).

**Conclusion:** Taken together, our data validates the development of multidisciplinary programs such as ours to address HCV infection yielding >98% rates of engagement and retention in care, prompt initiation of treatment(usually within 6 weeks) and >97% rate of cure.