

HIGH RATES OF SUSTAINED VIROLOGICAL RESPONSE IN PEOPLE WHO INJECT DRUGS TREATED WITH ALL-ORAL DIRECT ACTING ANTIVIRAL REGIMENS

Alain H. Litwin^{1,2}, MD MPH; Linda Agyemang¹, MPH; Matthew Akiyama^{1,3}, MD, MS; Moonseong Heo⁵, PhD, Jordan Wong², RPA; Irene J. Soloway², RPA; Galina Umanski⁴; Sheila Reynoso², BA; Jennifer Hidalgo², BA; Kiara Lora², BA; Hiral Patel², MPH

Background: The majority of existing cases of HCV in the United States occur among people who inject drugs (PWID). Many PWID including those on opiate agonist treatment (OAT) are denied potentially life-saving HCV treatment. Treatment of patients with all-oral direct acting antiviral (DAA) regimens is associated with high rates of SVR in genotype 1 and 4 patients enrolled in registration trials, but these trials usually excluded active PWID.

Methods: RISE II is a prospective study that enrolled PWID with chronic HCV genotypes (G) 1 and 4 on OAT including those actively using drugs. Patients received DAA regimens according to AASLD/IDSA guidelines: sofosbuvir/ledipasvir or sofosbuvir/simeprevir. Adherence was measured via electronic weekly blister packs and visual analogue scales (VAS), and drug use was assessed through urine screens.

Results: Patient characteristics (n=61) include: mean age 53.0; male, 62.3%; Latino, 65.6%; African-American, 18.0%; Caucasian, 11.5%; Cirrhotic, 23.0%; HIV-infected, 23.0%; depression (62.3%); G1 (n=59); and G4 (n=2). One-hundred percent of patients achieved ETR and SVR4 (61/61). SVR12 results were available for the first 55 patients with an SVR12 of 98% (54/55); six patients completed treatment and are awaiting SVR12. There was no increase in the proportion of patients who used drugs 6 months prior to treatment versus during treatment: any drug (59% v. 59%), other opiates (41% v. 40%), cocaine (31% v. 24%), and benzodiazepines (34% v. 22%). Mean adherence by monitors was 73.4% (daily time frame) and 90.2% (weekly time frame); mean adherence by VAS was 98%. Patients who were using drugs were significantly less likely to achieve 80% adherence (daily time frame) after adjusting for cirrhosis, HIV status, and depression.

Conclusion: This study demonstrates that all PWID completed therapy with high rates of SVR despite significant rates of drug use. This data demonstrates support for the treatment of PWID.

This study was supported by NIDA R01 DA034086

1. Albert Einstein College of Medicine and Montefiore Medical Center, Department of Medicine and Division of General Internal Medicine
2. Montefiore Medical Center, Department of Psychiatry and Behavioral Sciences and Division of Substance Abuse
3. Albert Einstein College of Medicine and Montefiore Medical Center, Department of Medicine and Division of Infectious Diseases
4. Albert Einstein College of Medicine and Montefiore Medical Center, Department of Family and Social Medicine
5. Albert Einstein College of Medicine, Department of Epidemiology and Population Health