HCV REINFECTION AND INJECTION RISK BEHAVIOR FOLLOWING ELBASVIR/GRAZOPREVIR TREATMENT IN PARTICIPANTS ON OPIOID AGONIST THERAPY: CO-STAR THREE-YEAR FOLLOW-UP STUDY

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Background/Aim: High rates of efficacy were observed in Co-STAR, a 12-week, phase 3 trial of elbasvir/grazoprevir (EBR/GZR; an NS5A inhibitor and an NS3/4A protease inhibitor) in participants on opioid agonist therapy (OAT). The aim of the Co-STAR Three Year Followup Study (3YFU) is to evaluate hepatitis C virus (HCV) reinfection and injection risk behaviors in participants treated with EBR/GZR.

Methods: This 3-year observational cohort study enrolled participants who received ≥1 dose of EBR/GZR in the phase 3 trial. Every 6 months, participants are tested for HCV RNA, and if detected, viral genotype and sequencing are performed. Participants completed a questionnaire to assess drug use.

Results: Of 296 participants treated in Co-STAR, 199 (67%) were enrolled in the 3YFU (76% male; 79% white; 8% HIV/HCV co-infection; 80% receiving methadone). Participants enrolled in the 3YFU were older than those not enrolled (average age, 49 vs 44 years), and fewer were infected with genotype 1a (72% vs 84%) or had a positive urine drug screen at enrollment (56% vs 68%). Of the 191 participants in 3YFU for whom injection risk behavior information was available, 42% (n=81) reported noninjection drug use and 25% (n=48) reported injection drug use in the last 6 months. Among 296 participants treated in Co-STAR, 8 cases of HCV reinfection were observed over 198 person-years of follow-up (4.0/100 person-years; 95% confidence interval 1.7-8.0). Spontaneous clearance was seen in 3 of 5 reinfections detected through follow-up week (FW)12 and in none of 3 reinfections detected after FW12.

Conclusion: The rate of HCV reinfection following EBR/GZR treatment among those receiving OAT was consistent with rates from previous meta-analyses of studies in persons who use drugs. Further analyses will evaluate the impact of ongoing drug use on HCV reinfection risk and the incidence of HCV reinfection up to 3 years' post-EBR/GZR treatment.

Disclosure of interest statement

JG is a consultant/advisor and has received research grants from AbbVie, Bristol-Myers Squibb, Cepheid, Gilead Sciences, and Merck/MSD. FA, AHL, OD, EG, OS, AL, RN, CYP, BC, DMI, and GJD received research support from Merck & Co., Inc., relevant to the conduct of the Co-STAR study. HCH, ING, MK, PH, MR, JW, EB, and HLP are current or former employees of, and may own stock in, Merck & Co., Inc.,