

## **SOFOSBUVIR/LEDIPASVIR WITH AND WITHOUT RIBAVIRIN IN PATIENTS WITH HCV GENOTYPE 1 INFECTION RECEIVING OPIOID SUBSTITUTION THERAPY: PHASE 3 ION TRIALS**

Grebely J<sup>1</sup>, Mauss S<sup>2</sup>, Brown A<sup>3</sup>, Bronowicki J<sup>4</sup>, Puoti M<sup>5</sup>, Wyles D<sup>6</sup>, Natha M<sup>7</sup>, Zhu Y<sup>7</sup>, Yang J<sup>7</sup>, Kreter B<sup>7</sup>, Brainard DM<sup>7</sup>, Yun C<sup>7</sup>, Carr V<sup>8</sup>, and Dore GJ<sup>1</sup>

<sup>1</sup>The Kirby Institute, UNSW Australia, Sydney, NSW, Australia; <sup>2</sup>Center for HIV and Hepatogastroenterology, Düsseldorf, Germany; <sup>3</sup>Liver Unit, Department of Medicine, St Mary's Hospital, London, United Kingdom; <sup>4</sup>Hépatogastroentérologie, INSERM U954, CHU Nancy, France; <sup>5</sup>Azienda Ospedaliera Ospedale Niguarda Ca' Granda, Milan, Italy; <sup>6</sup>Division of Infectious Diseases University of California, San Diego, USA; <sup>7</sup>Gilead Sciences, Foster City, USA; <sup>8</sup>Gilead Sciences, Stockley Park, United Kingdom.

**Background:** Interferon-based therapy is safe and effective among people receiving opioid substitution therapy (OST), but treatment uptake remains low. The aim of this post-hoc analysis was to evaluate the impact of OST and drug use during therapy on completion, adherence, sustained virologic response (SVR12) and safety of sofosbuvir/ledipasvir ( $\pm$  ribavirin).

**Methods:** The Phase III ION studies evaluated a fixed-dose combination of sofosbuvir/ledipasvir  $\pm$  ribavirin administered for 8/12/24 weeks in patients with chronic HCV genotype 1. People with clinically significant drug use (prior 12 months) or non-cannabinoids detected at screening by urine drug tests (not explained by prescriptions) were ineligible. Stored samples were available from ION-1 for retrospective testing for illicit drugs by ELISA.

**Results:** Among 1,952 patients enrolled in the ION studies, 4% (n=70) were receiving OST. Among those receiving (n=70) and not receiving OST (n=1,882), there was no difference in treatment completion (97% vs. 98%,  $P=0.40$ )  $\geq 80\%$  adherence (93% vs. 92%,  $P=1.00$ ), SVR12 (94% vs. 97%,  $P=0.28$ ), and serious AEs (4% vs. 3%,  $P=0.43$ ). Among participants in the ION-1 trial, 23% (n=196) had illicit drug use during therapy (15% cannabinoids alone; 8% other illicit drugs + cannabinoids). There was no difference in treatment completion,  $\geq 80\%$  adherence, SVR12 or serious AEs in those with no drug use during treatment compared with those who used cannabinoids and/or other illicit drugs. No cases of HCV reinfection have been observed in the 24 weeks following treatment.

**Conclusions:** OST and drug use during HCV therapy did not impact treatment completion, adherence, SVR12 or safety.

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