

## **NURSE-LED, COMMUNITY-BASED HEPATITIS C TREATMENT IS FEASIBLE AND EFFECTIVE AMONG PEOPLE WHO INJECT DRUGS AND THEIR INJECTING NETWORK: THE HCV TREATMENT AND PREVENTION (TAP) STUDY**

Doyle JS<sup>1,2</sup>, Dietze PM<sup>1,3</sup>, Stooze M<sup>1,3</sup>, Higgs P<sup>1,6</sup>, Desmond P<sup>4,5</sup>, Iser DM<sup>2,5</sup>, McBryde E<sup>1,7</sup>, Harney B<sup>1,2</sup>, Pedrana AE<sup>1,3</sup>, Spelman T<sup>1</sup>, Von Bibra S<sup>1</sup>, Roney J<sup>1</sup>, Thompson AJ<sup>4,5\*</sup>, Hellard ME<sup>1,2,3\*</sup>

<sup>1</sup>Burnet Institute, Melbourne, Australia; <sup>2</sup>Department of Infectious Diseases, Alfred Health and Monash University, Melbourne, Australia; <sup>3</sup>School of Population Health and Preventive Medicine, Monash University, Melbourne, Australia; <sup>4</sup>Department of Medicine, University of Melbourne, Melbourne, Australia; <sup>5</sup>Department of Gastroenterology, St Vincent's Health, Melbourne, Australia; <sup>6</sup>LaTrobe University, Melbourne Australia, <sup>7</sup>Department of Infectious Diseases, James Cook University, Townsville Australia; \*Contributed equally

**Background:** Treating hepatitis C among people who inject drugs (PWID) concurrently with their injecting partners is challenging but potentially an important model to interrupt HCV transmission. The HCV Treatment and Prevention (TAP) Study aimed to test the feasibility and effectiveness of treating PWID and their injecting partners in community settings using a nurse-led model of care.

**Methods:** People with chronic HCV mono-infection who injected drugs in the same time and place with  $\geq 1$  person in previous six months were eligible (clinicaltrials.gov, NCT02363517). Participants were randomised to receive sofosbuvir/velpatasvir treatment individually, or concurrently with their HCV-infected injecting partners. Participants were recruited via mobile street-based vans or primary health clinics, with nurses performing assessments and delivering treatment. We report pooled SVR12+ (co-primary outcome) and treatment uptake. Follow up to 72 weeks post-treatment for reinfection incidence by randomised group (co-primary outcome) is ongoing.

**Results:** The TAP Study enrolled 242 participants; 114 primary participants with 127 injecting partners. Median age of participants was 39 years (range 20-59 years), most were male (167, 69%), unemployed (189, 78%), had previously been incarcerated (144, 60%), and 22% (52) reported unstable housing. Treatment was commenced in 93 (85%) primary participants and 37 (55%) viraemic injecting partners. In per-protocol analysis, among 132 participants who started treatment, 118 had HCV RNA measured at or after SVR12, and 103 (86%) achieved SVR12+. In modified intention to treat analysis, 74% achieved SVR12+, mostly due to failure to attend for assessment. There were five known relapses, two non-responders, eight unspecified treatment failures, and nine probable or confirmed reinfections. During follow up to date, reinfection incidence is 10.2/100 person years.

**Conclusions:** Nurse-led HCV treatment for active PWID is feasible and effective for community-based active PWID.

**Disclosure of interests:** The TAP Study was funded by an investigator-initiated research grant from Gilead Sciences. The funders played no role in the conduct of the study or the decision to submit.