UPTAKE OF TESTING, LINKAGE TO CARE, AND TREATMENT FOR HEPATITIS C INFECTION AMONG PEOPLE WHO INJECT DRUGS IN AUSTRALIA: THE ETHOS ENGAGE STUDY

<u>Heather Valerio</u>¹, Maryam Alavi¹, David Silk¹, Carla Treloar², Andrew Milat³, Adrian Dunlop^{4,5}, Jo Holden⁶, Charles Henderson⁷, Janaki Amin⁸, Phillip Read⁹, Louisa Degenhardt¹⁰, Gregory J Dore¹ and Jason Grebely¹, on behalf of the ETHOS Engage Study Group

¹The Kirby Institute, UNSW Sydney, Sydney, Australia

² Centre for Social Research in Health, UNSW Sydney, Sydney, Australia

³ Centre for Epidemiology and Evidence, NSW Health, Australia

⁴ Hepatitis NSW, Australia

- ⁵ Drug and Alcohol Clinical Services, Hunter New England Local Health District, Newcastle, Australia
- ⁶ Population Health Strategy & Performance, NSW Health, Australia

⁷ NSW Users and AIDS Association, Australia

⁸ Macquarie University, Sydney, Australia

⁹ Kirketon Road Centre, Sydney, Australia

¹⁰ National Drug and Alcohol Research Centre, UNSW Sydney, Sydney, Australia

Background: People who inject drugs (PWID) are at high risk of HCV infection but have poor access to treatment in many settings. Unrestricted direct-acting antiviral (DAA) therapy has been available in Australia since March 2016. Our objective was to evaluate burden of HCV and the uptake and factors associated with HCV testing and treatment among PWID in Australia in the DAA era.

Method: ETHOS Engage is an observational cohort study collecting behavioural and clinical data among PWID attending drug treatment clinics and needle and syringe programs in Australia. All participants underwent point-of-care HCV RNA testing via Xpert[®] HCV Viral Load Finger-Stick assay. Logistic regression was used to identify factors associated with treatment uptake.

Results: Between May 2018-March 2019, 1,001 participants were enrolled. Overall, 67% had injected drugs in the last month, 72% were receiving opioid substitution therapy (OST), 73% were ever HCV-infected (Ab+ve), and 60% had a history or testing consistent with prior or current chronic HCV. Among those Ab+ve (n=734, 73%), 75% had previously been tested for HCV RNA. Among those ever with chronic HCV (n=600, 60%), 59% had received treatment. Uptake of HCV therapy was high, including among those with current and no OST (62%, 48%) injecting in last month (57%), and heroin (63%) and amphetamine (56%) injecting in the last month. In adjusted analysis, males (vs. females; adjusted odds ratio 1.60, p=0.015) and people receiving OST (vs. no OST; 1.76, p=0.007) were more likely to have received HCV treatment. Among those with valid point-of-care results, 27% were currently HCV RNA+ve, 30% had treatment-induced clearance, 17% spontaneous clearance, and 26% were HCV Ab-ve.

Conclusion: Unrestricted DAA access in Australia has yielded high treatment uptake and more than halved HCV viraemia among PWID attending drug treatment and needle syringe programs. To achieve elimination, sub-populations of PWID may require additional support to encourage screening and engagement with HCV care.

Disclosure of Interest statement: None provided