

MOVING TOWARDS HCV ELIMINATION IN HIV/HCV CO-INFECTION IN AUSTRALIA FOLLOWING UNIVERSAL ACCESS TO INTERFERON-FREE THERAPY

Marianne Martinello^{1,2}, Gregory J Dore^{1,2}, Rohan I Bopage^{3,4}, Robert Finlayson⁵, David Baker⁶, Mark Bloch⁷, Ecaterina Filep¹, Jasmine Skurowski¹, Lanni Lin¹, Francois Lamoury¹, Sofia Bartlett¹, Tanya Applegate¹, Margaret Hellard⁸, Gail V Matthews^{1,2}

1. The Kirby Institute, UNSW Sydney, Sydney, NSW, Australia;
2. St Vincent's Hospital, Sydney, NSW, Australia;
3. The Albion Centre, Sydney, NSW, Australia;
4. School of Public Health and Community Medicine, UNSW, Australia, Sydney, NSW, Australia;
5. Taylor Square Private Clinic, Sydney, NSW, Australia;
6. East Sydney Doctors, Sydney, NSW, Australia;
7. Holdsworth House Medical Practice, Sydney, NSW, Australia;
8. Burnet Institute, Melbourne, VIC, Australia

Introduction: HCV elimination among people with HIV/HCV co-infection may be possible in Australia, given population size, high proportion diagnosed and linked to care, and unrestricted access to direct-acting antiviral (DAA) therapy. The aim of this analysis was to assess HCV treatment uptake and outcomes among HIV/HCV co-infected adults enrolled in the Control and Elimination of HCV from HIV-infected individuals within Australia (CEASE-D) cohort study following the availability of DAA therapy.

Methods: Cumulative HCV treatment uptake was defined as the proportion of individuals with detectable HCV RNA at enrolment who initiated HCV treatment during follow-up (July 2014-March 2017). Clinical and demographic factors associated with treatment uptake were evaluated by logistic regression analysis. Sustained virological response was assessed in individuals who had completed 12 weeks post treatment follow-up (SVR12) at the time of analysis.

Results: A total of 412 HIV/HCV antibody-positive individuals were enrolled, of whom 95% were male, 13% had cirrhosis, and 22% had ever received interferon-based therapy. The principal modes of HCV transmission were injection drug use (54%) and sexual exposure in men-who-have-sex-with-men (28%). HCV RNA was detected in 78% (n=317), with genotype 1 (62%) and 3 (27%) predominant.

Cumulative HCV treatment uptake among individuals with detectable HCV RNA was 67% (n=211; 95%CI 62-72%), with a marked increase in annual treatment uptake in 2016 (66%, 95%CI 60-71%) as compared with 2014 (4%, 95%CI 1-12%) and 2015 (8%, 95%CI 5-13%) (p<0.001). Sofosbuvir/ledipasvir (51%) and sofosbuvir + daclatasvir (38%) were most frequently prescribed. No clinical or demographic factors, including current high-risk drug and sexual behaviour, were associated with HCV treatment uptake.

Among 159 individuals with follow-up post treatment, SVR12 was 96%, with one case of reinfection following SVR.

Conclusion: Broad unrestricted access to government-subsidised DAA therapy has permitted rapid treatment scale-up with high uptake and efficacy among people with HIV/HCV co-infection.

Disclosure of Interest Statement: The Kirby Institute is funded by the Australian Government Department of Health and Ageing. The views expressed in this publication do not necessarily represent the position of the Australian Government. The Burnet Institute receives funding from the Victorian Operational Infrastructure Support Program. Research

reported in this publication was supported by Gilead Sciences Inc as an investigator-initiated study. The content is solely the responsibility of the authors. Gregory Dore, Margaret Hellard and Gail Matthews are supported by the National Health and Medical Research Council (GD: Practitioner Fellowship; MH: Principal Research Fellowship; GM: Career Development Fellowship).