# UNDERSTANDING UNSUCCESSFUL DIRECT-ACTING ANTIVIRAL HEPATITIS C TREATMENT AMONG PEOPLE LIVING WITH HIV FROM THE INTERNATIONAL COLLABORATION ON HEPATITIS C ELIMINATION IN HIV COHORTS (INCHECH)

<u>Brendan Harney</u><sup>1,2,3</sup>, Rachel Sacks-Davis<sup>1,2</sup>, Daniela K van Santen<sup>1,2,4</sup>, Gail Matthews<sup>5,6</sup>, Marina Klein<sup>7,8,9</sup>, Karine Lacombe<sup>10,11</sup>, Linda Witkopp<sup>12,13</sup>, Marc van der Valk<sup>14,15,16</sup>, Maria Prins<sup>4,14,15</sup>, Inma Jarrin<sup>17</sup>, Andri Rauch<sup>18</sup>, Margaret Hellard\*<sup>1,2,3</sup>, Joseph Doyle\*<sup>1,2</sup>; on behalf of The International Collaboration on Hepatitis C Elimination in HIV Cohorts (InCHEHC). \*Joint senior authors

- 1. Disease Elimination Program, Burnet Institute, Melbourne, Australia
- 2. School of Public Health and Preventive Medicine, Monash University, Melbourne, Australia
- 3. Department of Infectious Diseases, Alfred Health and Monash University, Melbourne, Australia
- 4. Department of Infectious Diseases, Research and Prevention, Public Health Service of Amsterdam, Amsterdam, The Netherlands
- 5. The Kirby Institute, UNSW, Sydney, Australia
- 6. St Vincent's Hospital, Sydney, Australia
- 7. Epidemiology, Biostatistics & Occupational Health, McGill University, Montreal, Canada
- 8. Canadian Institutes of Health Research, Canadian HIV Trials Network, Vancouver, Canada
- 9. Division of Infectious Diseases and Chronic Viral Illness Service, Department of Medicine, McGill University Health Centre, Montreal, Canada
- 10. Sorbonne Université, INSERM, Institut Pierre Louis d'Épidémiologie et de Santé Publique, Paris, France
- 11. Service de Maladies Infectieuses, Hôpital Saint-Antoine, APHP, Paris, France
- 12. CHU Bordeaux, Pôle de Santé Publique, F-33000, Bordeaux, France
- 13. University of Bordeaux, Department of Public Health, Inserm Bordeaux Population Health Research Centre, Bordeaux, France
- 14. Department of Infectious Diseases, Amsterdam Universitair Medische Centra, University of Amsterdam, Amsterdam, Netherlands.
- 15. Amsterdam Infection & Immunity Institute, Amsterdam Universitair Medische Centra, University of Amsterdam, Amsterdam, Netherlands
- 16. Stitching HIV Monitoring, Amsterdam, The Netherlands
- 17. Centro Nacional de Epidemiologia, Institute of Health Carlos III, Madrid, Spain
- 18. Department of Infectious Diseases, Inselspital, Bern University Hospital, University of Bern, Bern, Switzerland

# **Background**

Historically, hepatitis C virus (HCV) was difficult to treat among people with HIV, however treatment with direct-acting antivirals (DAA) results in 90-95% of people being cured. There is a need to further understand why 5-10% are not successfully cured in order to ensure no one is left behind in HCV elimination efforts.

### Methods

Data included people from Australia, Canada, France, the Netherlands, Spain, and Switzerland. People who had interferon-free DAA HCV treatment data recorded between 2014 and 2019 and ≥ one HCV RNA test 12 or more weeks after end of treatment (EOT) were included in analyses. We used mixed-effects logistic regression to examine factors associated with unsuccessful treatment, defined as a positive RNA test at their first test 12+ weeks after EOT. Factors included in univariable analyses were key population group, years since HIV diagnosis, HIV viral load, CD4 cell count, HCV genotype, cirrhosis, and previous interferon-based HCV treatment. Factors significant at 90% in univariable analyses, and age, were included in multivariable analyses.

### **Results**

Overall, 4554 people had DAA treatment data; the majority were gay or bisexual males (46%) or had a history of injection drug use (37%). Of these people, 4509 (99%) had HCV RNA test data recorded, and 3844 (85%) had a test 12+ weeks following EOT, ranging from 83% to 86% across population groups. Unsuccessful treatment was 5.5% (212/3844) overall, ranging from 4% to 8% across population groups (Figure 1). Adjusted for age and population group, a CD4 cell count between 200-350 cells/mm³ was the only factor associated with unsuccessful treatment (aOR 1.78, 95%CI 1.20-2.63) compared to a CD4 cell count >350 cell/mm³.

### Conclusion

We found that 5.5% of people with an SVR12+ test were unsuccessfully treated with minimal difference across key populations. Extra support through HCV treatment may be warranted among people with markers of sub-optimal HIV treatment.

## **Disclosures**

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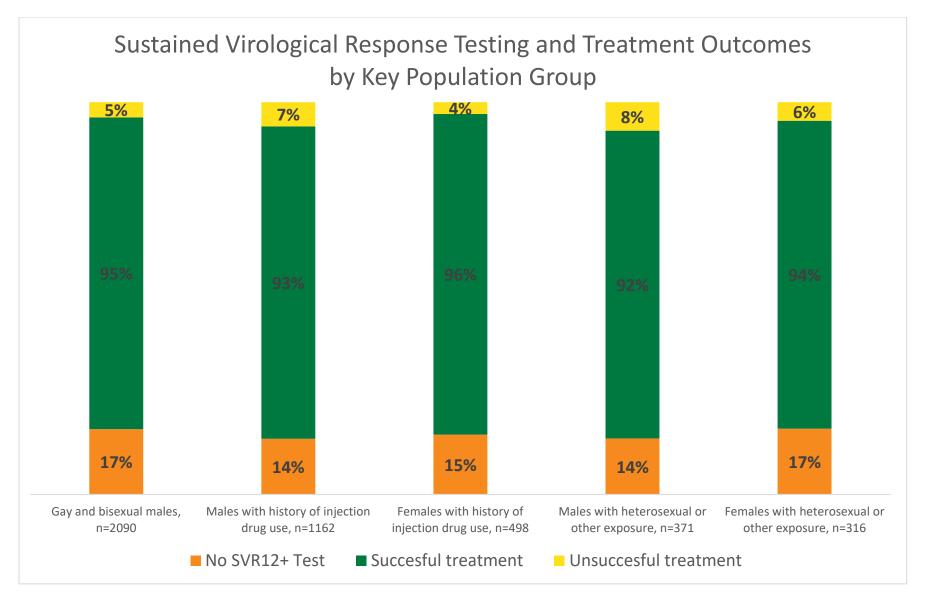


Figure 1.