Decreasing HCV incidence and prevalence through enhancing care and treatment among HIV co-infected individuals: the co-EC Study results

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co-EC study

Disclosures

Study funding

- The coEC Study is funded by an investigator-initiated grant from Bristol Myers Squibb
- Victorian Government Operational Infrastructure Fund supports Burnet Institute

Personal disclosures

- Investigator- initiated research grants from Gilead Sciences, Bristol-Myers Squibb, AbbVie, Merck
- Honoraria from Bristol-Myers Squibb, Merck Sharp & Dohme, Gilead Sciences, AbbVie
- NHMRC fellowship support

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Introduction and aims

The co-EC Study: HIV **co**-infection **E**liminating hepatitis **C** transmission by enhancing care and treatment

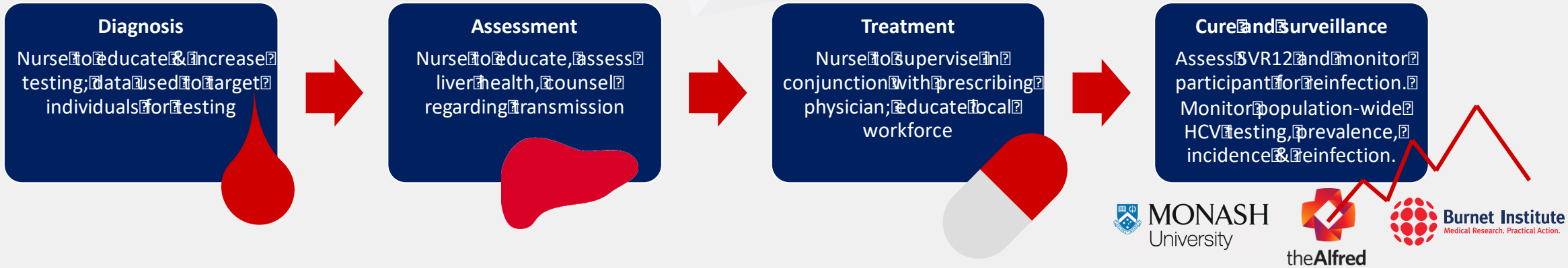
Co-Primary Aims

- Demonstrate that it is possible to rapidly scale up HCV treatment among individuals with HCV/HIV co-infecting in Victoria
- Measure the impact of treating HCV on prevalence and infection among individuals with HIV-infected individuals in Victoria

Methods

Study Design

- A nurse-led, clinician-directed trial of HCV directly acting antiviral treatment among people with HCV/HIV co-infection was performed in Melbourne, Australia.
- At six key primary and tertiary care sites for HIV clinical care, providing care for 75% of people with HIV in our jurisdiction, all HCV/HIV coinfected people meeting standard prescribing guidelines were eligible for treatment.
- Primary HCV incidence and prevalence among the primary care population was measured using a state-wide surveillance system that electronically collects HCV and HIV testing data from 2012 to present.
- Poisson regression was used to determine change in incidence.



Results

Participant recruitment

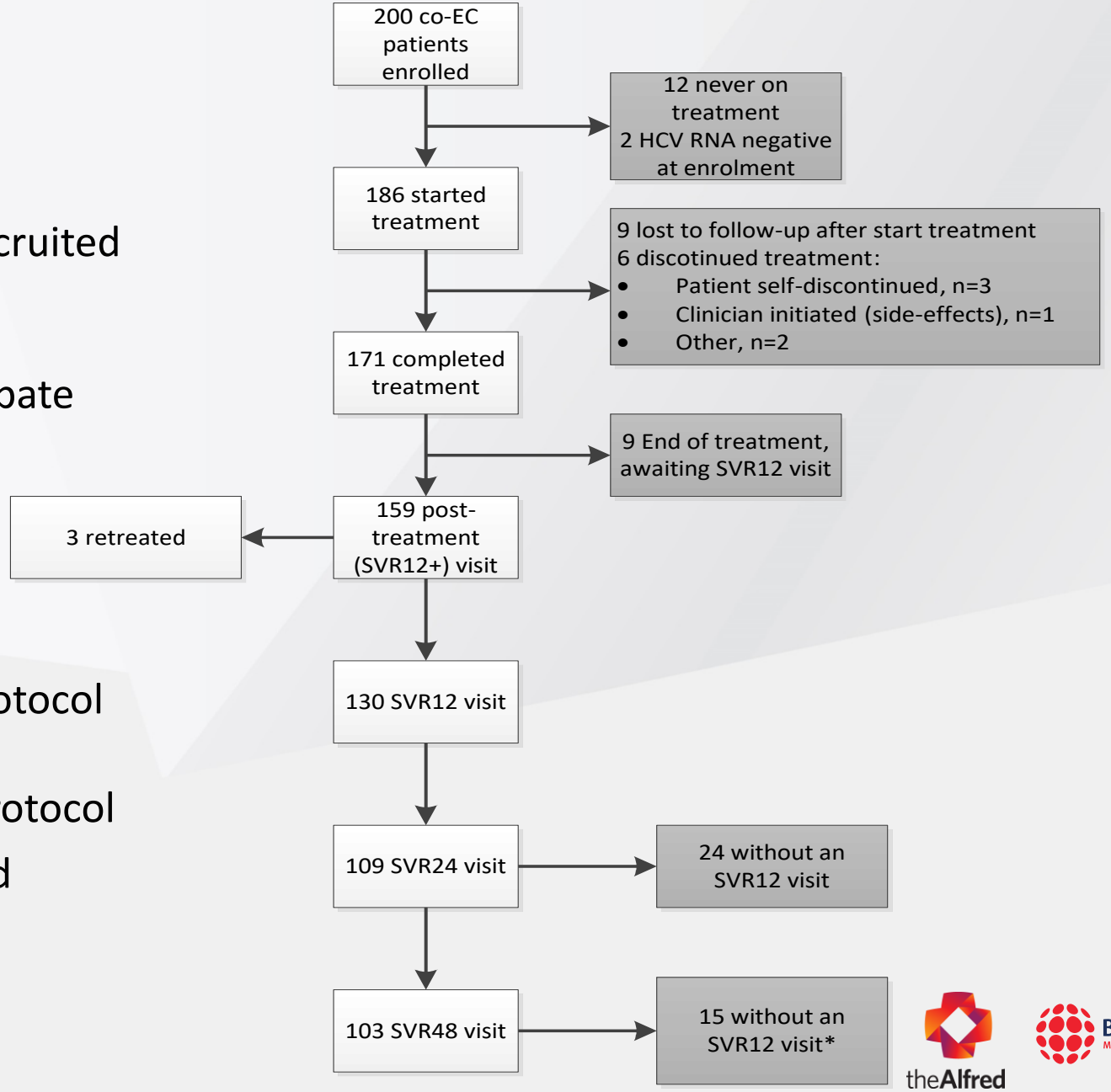
- Overall, 200 participants were recruited across six sites sequentially
- All individuals preparing for HCV treatment were invited to participate

Treatment commencement

- 186 initiated treatment

Treatment outcomes

- SVR12+ in primary care
  97% (95% CI: 91.4, 99.1%) per protocol
- SVR12+ in tertiary care
  100% (95% CI: 92.1, 100%) per protocol
- SVR12+ among those who started treatment 86% (155/186) (mITT)



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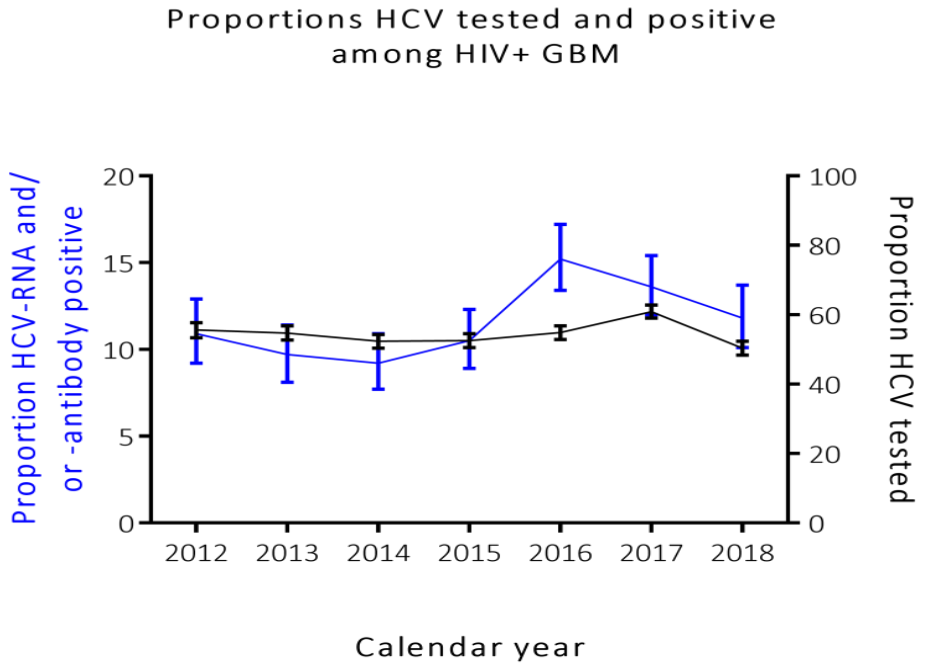
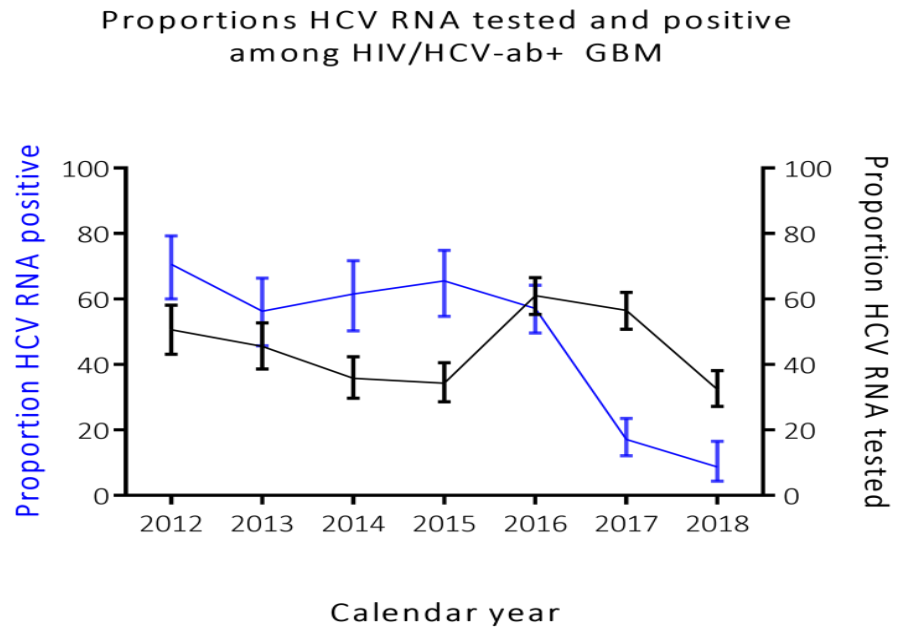
Results: population outcomes

- Over 9100 HCV tests were performed in primary care among MSM living with HIV since 2012; between 50-60% of were tested annually.
- HCV RNA prevalence among people with detectable HIV and HCV antibodies was 57% in 2016, which declined to 8% (an 86% reduction) in 2018 (p<0.001)



	2012	2013	2014	2015	2016	2017	2018
Number HCV+	125	120	117	136	210	214	143
Number HCV tested	1,144	1,241	1,276	1,297	1,383	1,573	1,214
Total HIV+	2,059	2,268	2,437	2,470	2,521	2,583	2,410



	2012	2013	2014	2015	2016	2017	2018
Number RNA+	60	49	48	55	101	29	8
Number RNA tested	85	87	78	84	177	170	92
Total HCVab+	168	191	218	245	290	301	284

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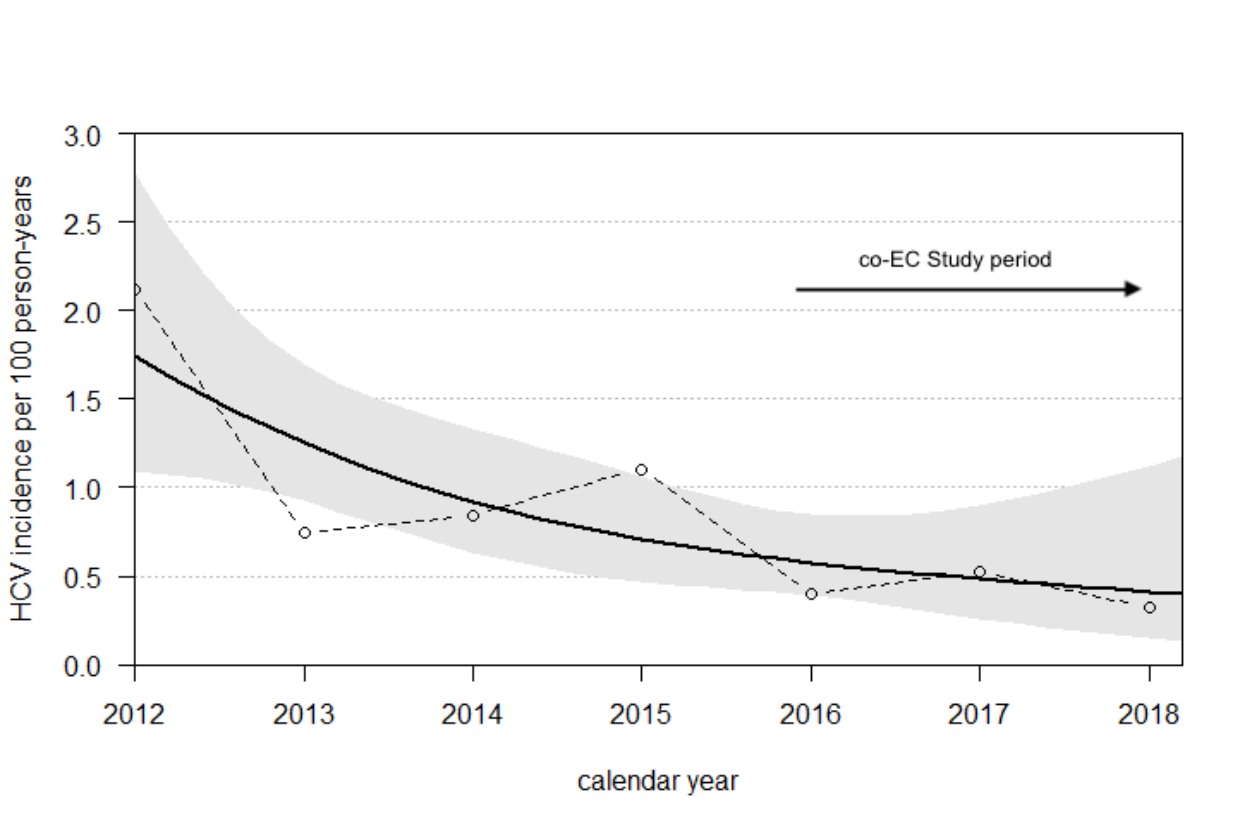
Results: population outcomes

- HCV incidence significantly decreased by a factor of 0.79 (95%CI=0.69-0.92, p=0.002) (a 21% reduction) each year



HCV incidence per calendar year among HIV-positive GBM in three high case load clinics (2012-2018)

Dots denote the observed incidence by calendar year. **Solid line** represents primary HCV incidence by calendar year and the dashed line represent the 95% confidence interval.

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Conclusions

- HCV treatment in primary and tertiary care was highly effective in this real-world cohort of HIV/HCV coinfected men, many who have high-risk sexual and drug-use behaviour
- This study provides proof of concept that expanding HCV treatment access is feasible and can lead to rapid HCV elimination among gay and bisexual men

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Acknowledgements

co-EC Study Investigators

- D. K. van Santen, D. Iser, J. Sasadeusz, M. O'Reilly, B. Harney, J. Roney, J. Cutts, A. Bowring, R. Winter, N. Medland, C. Fairley, R. Moore, B. Tee, J. F. Hoy, E. Gane, G. V. Matthews, M. Prins, M. A. Stoové, M. E. Hellard

Institutions

- Burnet Institute, The Alfred, Monash University, St Vincent's Hospital, Melbourne, Victorian Infectious Diseases Service at the Doherty Institute, Prahran Market Clinic, Melbourne Sexual Health Centre, Northside Clinic, Centre Clinic, University of Auckland, Kirby Institute, University of Amsterdam
- We would like to thank the participants for their contribution to this study; without their willing participation this research would not be possible
- Thank you also to the Burnet and Alfred Health Department of Infectious Diseases clinical research and data management team and nurses who collected the data for this study
- This study was funded though an investigator initiated grant from BMS

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