Universal access to DAA therapy paves the way for HCV control and elimination among people living with HIV in Australia

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Background: Epidemiology of HCV in Australia

In support of HCV elimination among people living with HIV in Australia:
- Population size
- High proportion diagnosed with HIV (90%)
- High proportion with HIV linked to care (85%)
- Universal access to DAA therapy

Aim: To evaluate HCV treatment uptake, treatment outcomes, and HCV infection burden 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 DAA availability.

Methodology

CEASE-D: Observational cohort study

Adults (≥18 years) with HIV infection and past (HCV Ab +ve, RNA -ve) or current (HCV Ab +ve, RNA +ve) HCV infection

Enrolment: 1 July 2014 - 22 March 2017

HCV treatment uptake (censored 31 May 2018)

- Participants with spontaneous clearance excluded, n=23
- Cumulative incidence proportion: The proportion of individuals with chronic HCV who ever initiated treatment.
Results: Treatment uptake

Cumulative HCV treatment uptake
90%
(95% CI 86%, 93%)

Results: HCV infection burden

Proportion of CEASE-D cohort with detectable HCV RNA, 2014 – 2018
Conclusion

• Rapid DAA treatment scale-up has markedly reduced the burden of HCV infection among people living with HIV, paving the way for HCV elimination in this population.

• **Empirical evidence in support of HCV Treatment as Prevention (“micro-elimination”)**

• Further HCV elimination implementation and evaluation:
  • Targeted case finding?
  • Monitoring of HCV RNA prevalence and incidence (primary and reinfection)
  • Screening for and treatment of HCV reinfection
  • Access to harm reduction services and education

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- Ms Pip Marks
- CEASE Protocol Steering Committee
- Site investigators and coordinators
- Participants and their families
Results: Enrolment demographics

N=402

- **Age (mean):** 49
- **Male:** 95%
- **GBM:** 80%
- **ATSI ethnicity:** 2%
- **Cirrhosis:** 13%
- **IDU ever:** 79%
- **HCV RNA positive:** 72%
- **CD4 (median, 10^6/L):** 595
- **HIV VL BlD:** 69%
- **cART:** 94%
- **HBsAg:** 4%
### Results: Enrolment characteristics

<table>
<thead>
<tr>
<th>Enrolment characteristics</th>
<th>N=402</th>
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<tbody>
<tr>
<td>Age, mean (SD)</td>
<td>49 (10)</td>
</tr>
<tr>
<td>Male, n (%)</td>
<td>382 (95)</td>
</tr>
<tr>
<td>Gay and bisexual men, n (%)</td>
<td>322 (80)</td>
</tr>
<tr>
<td>White, n (%)</td>
<td>344 (86)</td>
</tr>
<tr>
<td>Injecting drug use</td>
<td></td>
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<tr>
<td>Ever</td>
<td>316 (79)</td>
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<tr>
<td>Current (within 6 months)</td>
<td>146 (36)</td>
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<tr>
<td>CD4 count (10^6/L), median (IQR)</td>
<td>595 (430,810)</td>
</tr>
<tr>
<td>HIV VL &lt;20 copies/mL, n (%)</td>
<td>286 (69)</td>
</tr>
<tr>
<td>cART, n (%)</td>
<td>386 (94)</td>
</tr>
<tr>
<td>HCV RNA positive, n (%)</td>
<td>290 (72)</td>
</tr>
<tr>
<td>Cirrhosis, n (%)</td>
<td>51 (13)</td>
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