

## Differences in time to HCV treatment initiation following HCV diagnosis in the broad direct-acting antiviral era in five countries

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**Background:** Delays in treating hepatitis C virus (HCV) increase the risk of loss to care and onward transmission, jeopardising HCV elimination. We describe differences in treatment initiation following HCV diagnosis among people with HIV (PHIV) in five countries with high treatment uptake in the direct acting antiviral (DAA) era.

**Methods:** Data were from five of 11 cohorts from the International Collaboration on Hepatitis C Elimination in HIV Cohorts (InCHEHC), including data from Australia, France, the Netherlands, Switzerland and Spain. Individuals were eligible if first HCV diagnosed after DAAs became broadly available in their country. We used Kaplan-Meier methods to estimate the probability of treatment initiation by country. Follow-up started at HCV diagnosis (first positive RNA result), and ended at first treatment initiation, cohort administrative censoring date, loss to follow up, or end of 2019, whichever came first.

**Results:** Of 92,626 PHIV in the five cohorts, 1084 were first diagnosed with HCV after broad DAA access began. Overall, 404 (37%) initiated treatment during 1120 person-years of follow up. Time to treatment initiation was shortest in the Netherlands and longest in Australia. Six months and one year after diagnosis respectively, the probability of treatment initiation was 20% (95% CI: 16-24%) and 27% (95%CI: 22-31%) in Australia, and 39% (95%CI: 33-44%) and 52% (95% CI: 47-57%) in the Netherlands, with few participants treated more than one year after diagnosis.

**Conclusion:** Time to HCV treatment initiation among PHIV varies substantially between countries even among those with broad access to DAA and high treatment uptake. Those diagnosed during broad access to DAAs may be less engaged in care and therefore less likely to initiate treatment than previously treated participants. Policy differences between countries with respect to treatment of acute HCV and differences in HCV RNA testing may contribute to differences in treatment uptake.

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