LOW RATE OF REINFECTION FOLLOWING DIRECT-ACTING ANTIVIRAL HCV TREATMENT AMONG PEOPLE WITH RECENT INJECTING DRUG USE: A REAL-LIFE EXPERIENCE

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Background:
Ongoing risk behavior following hepatitis C virus (HCV) treatment among people who inject drugs (PWID) can lead to reinfection, reversing the benefits of cure. The aim of this study was to calculate the incidence of reinfection following successful direct-acting antiviral (DAA) treatment among recent PWID attending a low-threshold clinic.

Methods:
We included consecutive patients with injecting drug use 6 months prior to treatment who had achieved an end of treatment response (ETR) after DAA treatment between 2014 and 2017. Patients were treated at a low-threshold clinic in downtown Oslo located within the premises of the city's harm reduction services, providing a needle and syringe program (NSP) but not opioid substitution treatment (OST). All individuals were followed prospectively with HCV RNA measurement and self-reported risk behaviors. Incidence rates were calculated using person-time techniques assuming a Poisson distribution.

Results:
A total of 69 individuals were included (83% male, mean age 49 years, 39% cirrhosis, 80% OST, 75% injected during treatment). Post-ETR HCV RNA recurrence was observed in 2 of 69 (2.9%) individuals over a total follow-up time of 58.9 person-years (PY). Case 1 (female, age 45, genotype 3a, cirrhosis) remained HCV RNA negative 4 weeks post-ETR but demonstrated recurrent viremia 8 weeks later (genotype 3a, persistent viremia). She reported injecting drug use and sharing of equipment during treatment and follow-up. Case 2 (male, age 42, genotype 1, no cirrhosis) became HCV RNA positive 128 weeks post-ETR (genotype 3a, persistent viremia). He reported injecting drug use during treatment and follow-up but no sharing. Both cases received OST and had access to NSP. Both cases were considered probable reinfections; incidence 3.4/100 PY (95% CI 0.41-12.3).

Conclusion:
The relatively low incidence of reinfection in this population of recent PWID could be explained by high OST coverage and treatment being administered at a NSP site.

Disclosure of Interest Statement:
Håvard Midgard and Olav Dalgard have received speaker and consultancy fees from Abbvie, MSD and Gilead. Liver stiffness is measured with a mobile FibroScan device donated by Abbvie. No pharmaceutical grants were received in the development of this study.