

## HEPATITIS C TREATMENT AND REINFECTION SURVEILLANCE AMONG PEOPLE WHO INJECT DRUGS IN A LOW-THRESHOLD PROGRAM IN OSLO, NORWAY

Midgard H<sup>1,2</sup>, Kjersti Ulstein<sup>3</sup>, Øystein Backe<sup>3</sup>, Tarjei Foshaug<sup>3</sup>, Hanne Sørli<sup>3</sup>, Kristin Vennesland<sup>3</sup>, David Nilssen<sup>2</sup>, Elin Hoffmann Dahl<sup>4</sup>, Ane-Kristine Finbråten<sup>5</sup>, Linda Wüsthoff<sup>3</sup>, Olav Dalgard<sup>1</sup>.

<sup>1</sup>Akershus University Hospital, <sup>2</sup>Oslo University Hospital, <sup>3</sup>Agency for Social and Welfare Services, City of Oslo, <sup>4</sup>Haukeland University Hospital, <sup>5</sup>Lovisenberg Diaconal Hospital

### Background:

The aims were to evaluate HCV treatment effectiveness, estimate reinfection rates, and demonstrate the feasibility of reinfection surveillance and retreatment among marginalized people who inject drugs (PWID). This abstract presents a recently published study (Midgard et al. IJDP 2021).

### Methods:

Prospective observational study including consecutive HCV RNA positive individuals attending a low-threshold clinic in Oslo, Norway, between 2013 and 2020. Participants were offered individually tailored HCV treatment and post-treatment HCV RNA surveillance at three months intervals.

### Results:

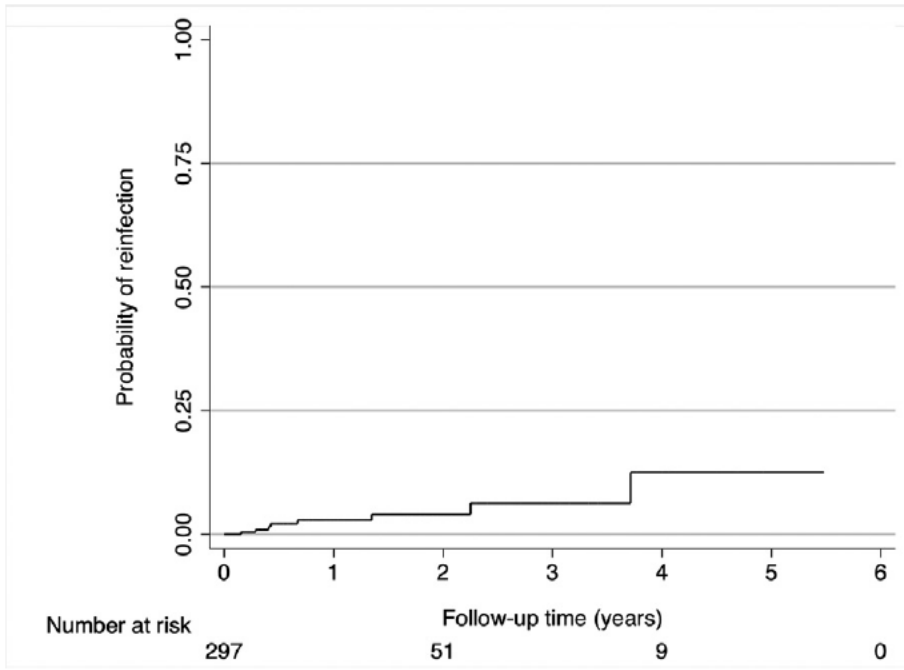
Of 488 HCV RNA positive individuals, 363 initiated treatment (median age 48.7 years, 72.5% male, 17.2% liver cirrhosis, 54.3% unstable housing). All participants had a history of injecting drug use, 71.1% received OAT, and 70.1% reported recent (past 3 months) injecting. In intention-to-treat analysis, excluding those with HCV RNA results pending, virologic response was achieved in 306 of 340 (90.0%) participants. In modified intention-to-treat analysis, also excluding those with loss to follow-up, virologic response was achieved in 306 of 323 (94.7%). Virologic response was not associated with recent injecting drug use or socio-demographic factors. Reinfection surveillance was accomplished in 297 individuals (308.2 PY of follow-up; median 0.50 years). Eight cases of reinfection were detected for an incidence of 2.60/100 PY (95% CI 1.12–5.11) overall (Figure), and 3.74/100 PY (95% CI 1.62–7.37) among those with injecting drug use during follow-up (n=205). Reinfection was associated with younger age (IRR 0.37; 95% CI 0.18–0.74), and all cases occurred in participants aged below 49 years with ongoing injecting drug use who reported mixed heroin/amphetamine injecting. Successful retreatment was provided in all cases and no second reinfections were observed.

### Conclusion:

The findings consolidate previous evidence supporting the effectiveness of HCV treatment among PWID, provide novel data on reinfection rates and associated factors, and demonstrate the feasibility of reinfection surveillance and retreatment in a real-world setting.

### Disclosure of Interest Statement:

HM, KU, ØB and OD report personal lecture and advisory fees from Abbvie, Gilead and MSD. The HCV clinic has previously used a mobile FibroScan donated from Abbvie. No pharmaceutical grants were received in the development of this study.



**Figure.** Kaplan Meier graph of time to reinfection in the overall population at risk.