

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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Disclosures

- HM/OD: consultant/advisor and lecture fees from Abbvie, Gilead and MSD
- The clinic uses a mobile transient elastography device donated from Abbvie

Background/aims

- Scaled-up DAA treatment among people who inject drugs (PWID) is crucial to achieve the WHO viral hepatitis elimination goals
- DAA treatment is effective across various populations of PWID¹
- Reinfection after successful treatment may compromise individual- and population-level benefits of cure²
- **The aim of this study was to assess the incidence of reinfection following DAA treatment among recent PWID**

1. Hajarizadeh et al. Lancet Gastroenterol Hepatol 2018 In Press; 2. Midgard et al. J Hepatology 2016.

Materials and methods

- A low-threshold HCV clinic established in downtown Oslo in 2013
- Needle and syringe provision (NSP) but not opioid substitution treatment (OST)
- **Consecutive patients with recent (past 6 months) injecting drug use and an end of treatment response (ETR) to DAA treatment between 2014-2018**
- **Post-treatment follow-up at 3 months intervals with HCV RNA measurement and self-reported risk behaviours**

Results: Baseline characteristics

Characteristic	n=83
Male gender	78%
Age, median years (range)	48 (27-64)
Genotype distribution	
1	49%
2	8%
3	43%
Liver stiffness > 12.5 kPa	23%
Opioid substitution therapy	78%
Injecting drug use during treatment	77%

Results: Reinfection incidence

- Two cases of post-ETR HCV recurrence over 71 person-years of follow-up

	Gender/age	GT base	LSM	Regimen	Time	GT	Persistence	OST	NSP	IDU during treatment	Sharing
Case 1	female 45	3a	14 kPa	SOF + DCV + RBV	w 12	3a	yes	yes	yes	heroin	yes
Case 2	male 42	1a	11 kPa	SOF/LDV	w 128	3a	yes	yes/no	yes	heroin amphetamines	no

- Incidence of probable reinfection 2.8/100 PY (95% CI 0.34-10.2)

Conclusions

- A relatively low incidence of reinfection was observed in this population of recent PWID
- Could be explained by
 - treatment administered at a NSP site
 - high OST coverage
 - older individuals with high prevalence of advanced liver disease

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Study participants

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