

## RECURRENT VIRAEMIA FOLLOWING SUCCESSFUL HCV DAA THERAPY AMONG PEOPLE WITH RECENT INJECTING DRUG USE: THE SIMPLIFY AND D3FEAT STUDIES

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**Background:** HCV direct acting antiviral (DAA) therapy is effective in people who inject drugs however, little is known about HCV reinfection following DAA therapy among people who have recently injected drugs and/or people on opioid substitution therapy (OST).

### Methods:

SIMPLIFY and D3FEAT are phase IV clinical trials to trial DAA therapy among people with recent injecting drug use (IDU; last six months) or those receiving OST, through a network of 25 international sites (SIMPLIFY: sofosbuvir/velpatasvir for 12 weeks in people with recent injecting; D3FEAT: paritepravir/ritonavir/dasabuvir/ombitasvir±ribavirin for 12 weeks in people with recent injecting or receiving OST). This analysis assessed HCV recurrence from end of treatment response (ETR) through 24 weeks post-ETR (SVR24).

**Results:** Overall, 179 participants (72% male, median age 48 years) had an ETR and at least one subsequent follow-up visit in SIMPLIFY (n=97) and D3FEAT (n=82). At treatment initiation, 80% (n=144) reported IDU in the past 6 months, 54% (n=97) reported IDU in the past month, and 60% (n=108) were receiving OST. IDU between ETR and follow-up was reported in 69% (n=124). HCV recurrence was observed in six participants over 78 person-years (py) follow-up [7.7/100 py (95% CI 3.5-17.2)]. This included one case of HCV reinfection confirmed by sequencing, three cases of probable reinfection (HCV RNA undetectable at SVR12 and HCV RNA detectable at SVR24), and two cases in whom sequencing is ongoing to determine HCV reinfection [HCV RNA recurrence at SVR12 or SVR24 (no SVR12 visit)]. Incidence in those who did and did not report ongoing injecting after ETR was 7.2/100 py (95% CI 2.7-19.3/100 py) and 8.9/100 py (95% CI 2.2-35.5/100 py), respectively..

**Conclusion:** HCV recurrence occurs following HCV DAA therapy among recent PWID and those receiving OST. Additional data, including HCV sequencing to distinguish HCV reinfection and relapse, will be reported.

**Disclosure of Interest Statement:**

The conference collaborators recognise the considerable contribution that industry partners make to professional and research activities. We also recognise the need for transparency of disclosure of potential conflicts of interest by acknowledging these relationships in publications and presentations.