# HCV TREATMENT UPTAKE AMONG MARGINALIZED PEOPLE WHO INJECT DRUGS IN NORWAY: A REGISTRY-BASED STUDY

Malme KB<sup>1,5</sup>, Ulstein K<sup>2</sup>, Finbråten AK<sup>3</sup>, Wüsthoff LEC<sup>4</sup>, Dalgard O<sup>1,5</sup>, Knute Boe Kielland<sup>6,</sup> Midgard H<sup>5,7</sup>

<sup>1</sup>Akershus University Hospital, <sup>2</sup>Agency for Social and Welfare Services, City of Oslo, <sup>3</sup>Lovisenberg Diaconal Hospital, <sup>4</sup>Norwegian Center for Addiction Research, <sup>5</sup>University of Oslo, <sup>6</sup>Norwegian National Advisory Unit on Concurrent Substance Abuse and Mental Health Disorders, Innlandet Hospital trust, Brumundal, Norway, <sup>7</sup>Oslo University Hospital

### Background:

Improving HCV treatment uptake among people who inject drugs (PWID) is crucial to achieve the WHO elimination targets, but there is a paucity in data on DAA treatment uptake among PWID. The aim was to assess HCV treatment uptake and associated factors in a large cohort of PWID in Norway.

### Methods:

Registry-based observational study where all registered users of the City of Oslo's low-threshold social and health services for PWID between 2010-2016 were linked to HCV notifications (1990-2019; 67% HCV RNA+, 33% anti-HCV+) and prescriptions of HCV treatment, OAT and benzodiazepines (2004-2019). HCV treatment rates were calculated using person-time of observation assuming a Poisson distribution. Factors associated with treatment uptake were explored using logistic regression analysis.

### **Results:**

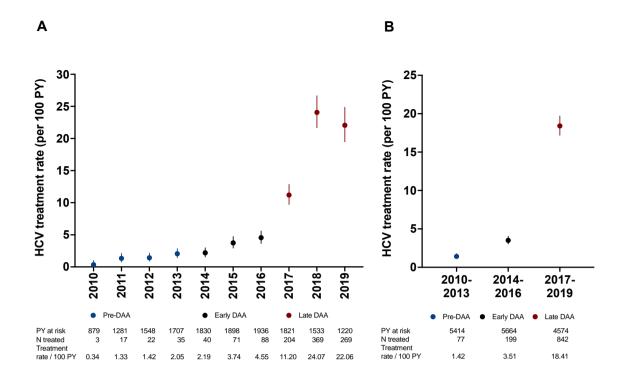
Among 2436 participants with notified HCV infection (median age at end of observation 45.9 years, 30.7% female, 73.3% OAT), 1118 (45.9%) received HCV treatment between 2010-2019 for an overall treatment incidence of 7.39/100 PY (95% CI 6.96-7.83). Treatment was interferon-based in 102 (9.1%) and DAA-based in 1016 (90.1%) individuals. Treatment rates increased from 1.42/100 PY (95% CI 1.12-1.78) in the pre-DAA period (2010-2013) to 3.51/100 PY (95% CI 3.04-4.04) in the early DAA period (2014-2016; fibrosis restrictions) and 18.4/100 PY (95% CI 17.19-19.70) in the late DAA period (2017-2019; no fibrosis restrictions), peaking at 24.07/100 PY (95% CI 21.68-26.66) in 2018 (Figure 1). DAA uptake was less likely among females (aOR 0.68; 95% CI 0.62-0.87) and more likely among participants with current OAT use (aOR 1.34; 95% CI 1.11-1.62).

# **Conclusion:**

Treatment uptake among PWID increased in the DAA era. Strategies to enhance treatment among women and individuals not engaged in OAT should be addressed.

# **Disclosure of Interest Statement:**

HM, OD and KU have received lecture and consultancy fees from Gilead, MSD and Abbvie. No pharmaceutical grants were received in the development of this study.



**Figure**. Annual HCV treatment incidence rates (2010-2019) among people who inject drugs in Oslo, Norway. Dots represent point estimates and bars represent Poisson 95% confidence intervals.