**Adherence to Hepatitis C Treatment Regimen Among People Who Inject Drugs in Norway: Implications for Treatment Strategies**

Razavi-Shearer D1, Kielland KB2, Midgard H3, Razavi H1, Wüsthoff LE4, Dalgard O3

1. Center for Disease Analysis, Lafayette, Colorado, USA
2. Norwegian National Advisory Unit on Concurrent Substance Abuse and Mental Health Disorders, Innlandet Hospital Trust, Norway

3. Department of Infectious Diseases, Akershus University Hospital, Norway

4. Agency of Social and Welfare Services, City of Oslo, Norway

**Background:** High adherence to direct acting anti-virals (DAAs) can have a positive effect on the sustained viral response (SVR12) of the treatment of hepatitis C virus (HCV). The modelling of the viremically infected HCV active PWID population in Norway was used to examine the impact of adherence in the treatment and cure of this population.

**Methods:** A modelling approach was used to estimate the effect of adherence to DAAs among PWID treated for HCV on the reduction in prevalence in Norway. In Norway the estimated number of chronic HCV infection among people who have recently injected drugs is 3,970. A treatment scenario resulting in almost a 90% reduction in prevalence among PWID by the year 2030 was chosen to highlight this effect. A SVR12 of 90% was used across all genotypes and was compared to higher adherence resulting in a SVR12 of 95% and lower adherence resulting in a SVR12 of 80%.

**Results:** Assuming a base scenario of 90% SVR12 among treated PWID there was an 89% reduction in prevalence in 2030 compared to the 2030 prevalence under the current treatment uptake. When the SVR12 was increased to 95%, the reduction in prevalence increased to 94%, there was a difference of 190 fewer infected PWID due to being cured. Finally, when the SVR12 was decreased to 80% the reduction in prevalence decreased to 76%, a difference of 510 PWID who remained HCV infected after treatment.

**Conclusion:** While low adherence resulting in a lower SVR12 can adversely affect the outcomes of treatment scenarios only marginal increases in outcomes result once adherence resulting in a SVR12 of 90% is reached. For groups at risk for potentially lower adherence, such as in active frequent PWID, the expenditure of resources to maintain a SVR12 ≥90% through education and counseling may prove to be beneficial.

**Disclosure of Interest Statement:** This study was supported by Gilead Sciences