

## **CROI 2019 PRESS CONFERENCE ABSTRACTS**

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#### **FALL IN HCV INCIDENCE IN HIV+ MSM IN LONDON FOLLOWING WIDER ACCESS TO DAA THERAPY**

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#### **Background:**

Modelling of the London HCV epidemic in HIV+ MSM suggested early access to DAA treatment plus risk-behaviour modification may reduce incidence. With high rates of linkage to care and treatment access, micro-elimination of HCV within HIV+ MSM may be realistic, ahead of 2030 WHO targets. Data from European cohorts have shown a reduction in HCV incidence amongst HIV+ MSM. We examine the effect of HCV treatment access (in the pre- and post-DAA era) and risk-behaviour modification upon incidence of HCV first and re-infections in HIV+ MSM in three large London clinics.

#### **Methods:**

A retrospective cohort study was conducted at 3 London HIV clinics (Royal Free and St Mary's Hospitals, Mortimer Market) between July 2013 and June 2018. During each 6-month period the following data were collected [1] number of first acute HCV diagnoses [2] number of subsequent acute HCV diagnoses (re-infections) [3] denominator of HIV+MSM under active follow up [4] number of PEG IFN/RBV or DAA-based HCV treatments for acute/early HCV (<12m since diagnosis) [5] number of PEG IFN/RBV or DAA-based HCV therapies for chronic HCV (>12m since diagnosis). Incidence rates (acute HCV diagnoses/ HIV+ MSM 1000 PYFU) and re-infection rates (re-infections/all incident infections x 100) were calculated for each time-period.

#### **Results:**

293 acute HCV infections were identified (246 first infections and 47 re-infections). DAA treatment became widely available in late 2015. All centres adopted risk-reduction behaviour intervention with counselling/psychology. Incidence of first HCV episode peaked at 17.72/1000 HIV+MSM PYFU [95%CI 12.81–22.64] in 2015. Rates fell to 4.64 [95%CI 2.53–7.78] by 2018. Re-infection rates increased from 9% to 16% during the study period. Supervised early HCV treatments (<12m of diagnosis) increased from 22% to 61% between 2013 and 2018. Supervised chronic HCV/HIV treatment rates increased from 2.8/month in pre-DAA era to 15.6/month in post-DAA era. Time from diagnosis to starting any HCV treatment reduced from average of 40.9 months (2013) to 3.1 months (2018).

#### **Conclusion:**

There has been a 74% reduction in incidence of first HCV infection and 62% reduction of overall HCV incidence in HIV+MSM since the epidemic peak of 2015 which coincides with wider access to DAA-based therapy across London. However re-infection rates remain high and maybe increasing. Further interventions to reduce ongoing transmission including access to treatment for reinfection are likely needed if micro-elimination is to be achieved.