

Abstract (corrected)

Background:

Despite a high level of engagement in care, priority access to DAAs and high HCV treatment uptake, acute HCV incidence still appears on the rise in HIV+ MSM in France. Acute HCV has been reported in PrEP users, but there are currently no data regarding the incidence in this population. We assessed the incidence of acute HCV in PrEP-using MSM and in HIV+ MSM enrolled in a large French cohort.

Methods:

The Dat'AIDS cohort covers about 25% of French HIV+ patients in care. HIV+, HCV-negative MSM with serological follow-up in 2016 and HIV-negative, HCV-negative PrEP-using MSM enrolled from January 2016 to May 2017 in 14 of the 16 cohort sites were analyzed to assess the incidence of a first acute HCV. The incidence of HCV reinfection was determined in patients having cured a previous infection. Since PrEP recruitment was highly heterogeneous between sites, a sub-analysis was conducted based on the 5 sites with the highest number of PrEP patients. Incidence of reinfection was not determined in PrEP-using MSM due to a too small number of cases.

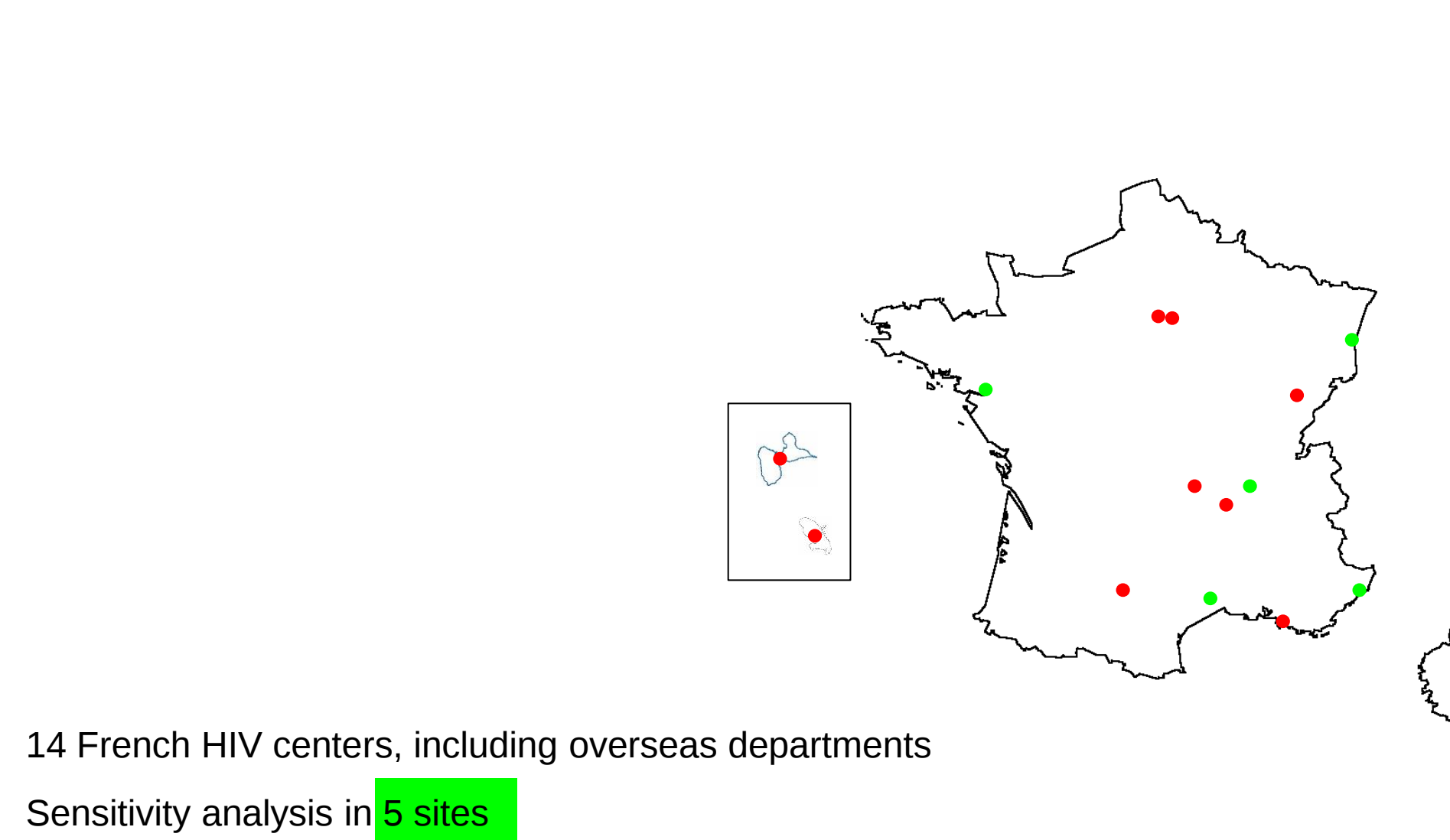
Results:

Among 10,537 HIV+ MSM followed in 2016 in 14 centres, HCV serological status was available in 10,049 (95.4%). 681 patients were already HCV+ when entering the study (prevalence 6.4%) and serological follow-up was available in 2016 for 4,151 HCV-negative patients. Virological follow-up was available for 478 patients who had cured a previous infection. 57 acute HCV infections occurred in 2016 (42 first infections, 15 reinfections). Incidence of first HCV infection, reinfection and overall acute HCV was respectively **1.01**, **3.14** and **1.23 /100PY**.

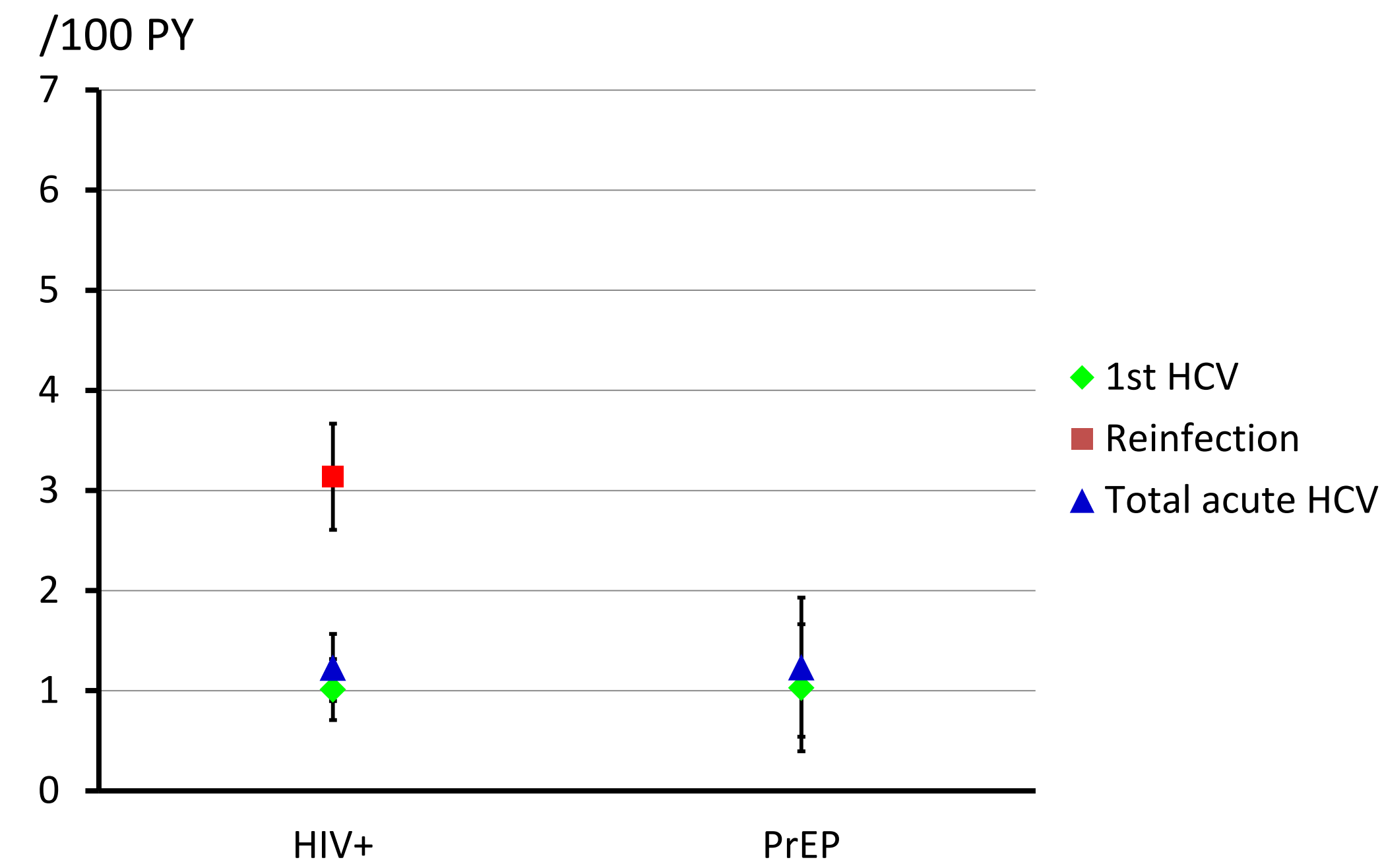
930 PrEP-using MSM were enrolled. HCV serology was available in all patients and serological follow-up was available for 916 (972 PY). 17 patients were already HCV-infected when entering the study (prevalence 1.8%), of whom 14 were cured and 3 had an active HCV infection. 12 acute HCV occurred during follow-up (10 first infections, 2 reinfections). Incidence of first HCV infection and overall acute HCV was respectively **1.03** and **1.24 /100PY**.

In a sub-analysis restricted to 5 sites contributing to 44% of HIV+ MSM and 90% of PrEP patients, the overall incidence of acute HCV was **1.47** and **1.38 /100PY** in HIV+ and PrEP-using MSM, respectively.

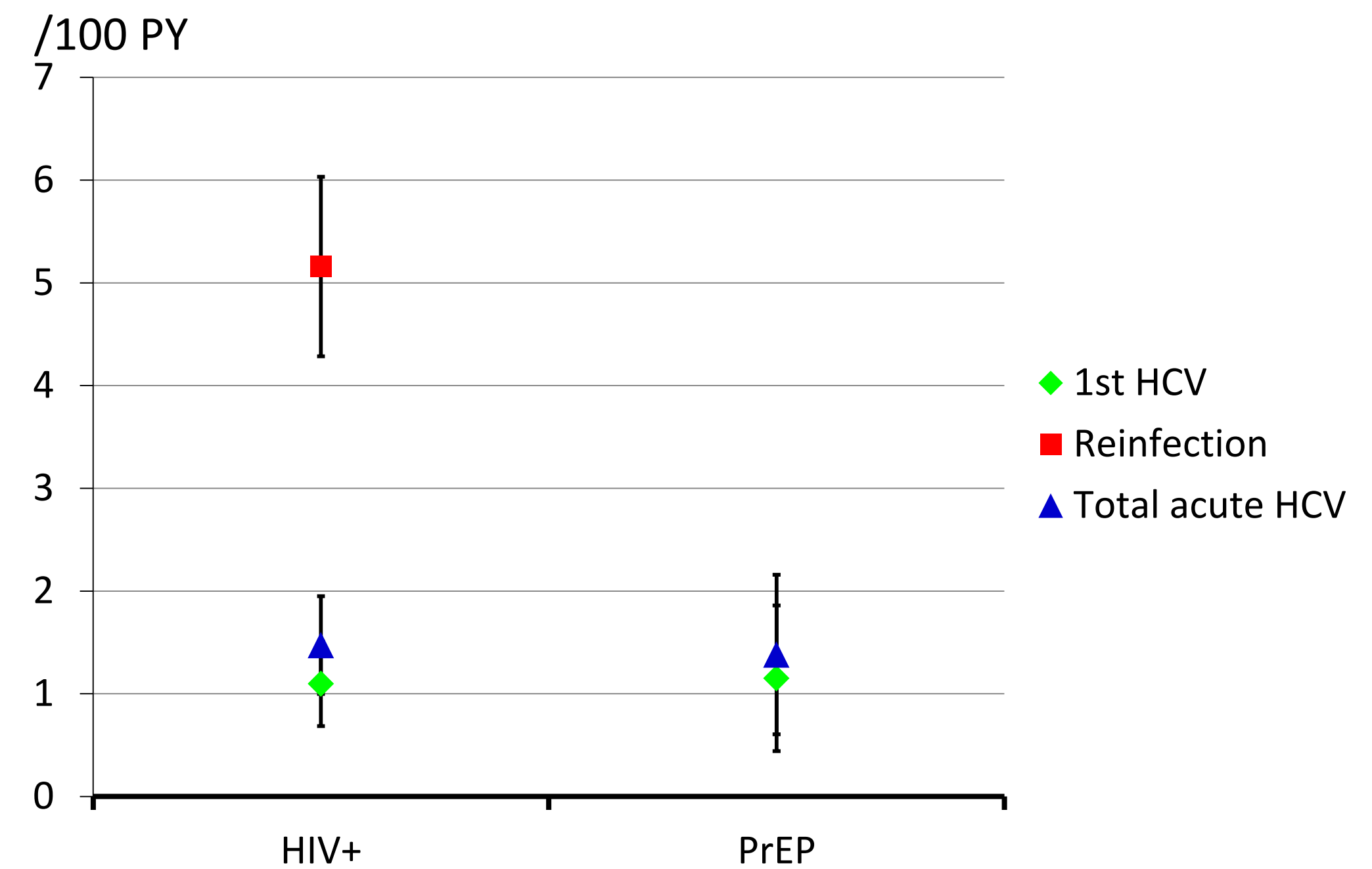
Dat'AIDS PrEP cohort



HCV incidence (All centres)



HCV incidence (5 centres)



Patients' characteristics

	14 centres		5 centres	
	HIV+ MSM n=10 537	PrEP MSM n=930	HIV+ MSM n=5 144	PrEP MSM n=836
Age (median (IQR))	41 (50-57)	37 (30-45)	41 (49-56)	37 (30-45)
CDC C (n (%))	2 085 (19.8%)	-	946 (18.4%)	-
Antiretroviral treatment (n (%))	10 372 (98.4%)	-	5 042 (98.0%)	-
HIV viral load < 50 copies/mL (n (%))	9 456 (89.7%)	-	4 669 (90.8%)	-
CD4 cell count (median (IQR))	505 (677-879)	-	515 (686-885)	-
Available HCV serology (n (%))	10 049 (95.4%)	930 (100%)	5 009 (97.4%)	836 (100%)
HCV Ab+ at entry (n (%))	681 (6.4%)	17 (1.8%)	372 (7.2%)	17 (2.0%)
HCV RNA+ at entry (n (%))	229 (2.2%)	3 (0.3%)	137 (2.7%)	3 (0.4%)
Follow-Up for 1 st HCV infection (Patient-Year)	4,151	972	2,462	869
Acute 1 st HCV infection	42	10	27	10
Follow-Up for HCV reinfection (Patient-Year)	478	14	253	14
HCV reinfection	15	2	13	2
Total acute HCV infection	57	12	40	12
HCV Ab / end of year	723 (6.9%)	27 (2.9%)	399 (7.8%)	27 (3.2%)

Conclusion

Incidence of a first HCV infection and of all acute HCV in HIV+ MSM and in PrEP-using MSM was similar in France in 2016-2017. HIV+ and PrEP-using MSM probably share similar at-risk practices for HCV and should be targeted for preventive interventions.

Dat'AIDS Study Group

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