

Abstract

Background:

High HCV treatment uptake combined with very effective direct-acting antiviral (DAA)-based regimens recently resulted in a dramatic decline in active HCV infection in French HIV-infected patients in all risk groups except MSM. Recent data suggested that wide access to DAA in the Netherlands led to a 51% decline in acute HCV between 2014 and 2016. However, this decrease was observed for genotype 1 only, and not for genotype 4 (Boerekamps A et al. *Clin Infect Dis* 2017). We assessed the yearly incidence of acute HCV infection in HIV-infected patients enrolled in a large French cohort from 2012 to 2016.

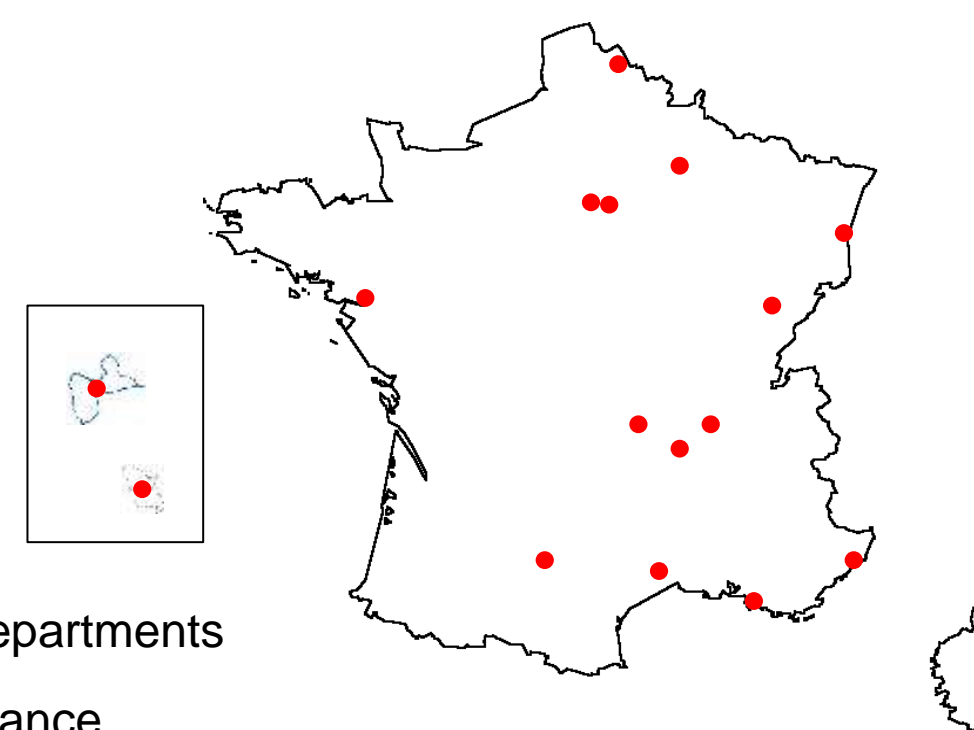
Methods:

The Dat’AIDS cohort covers about 25% of HIV-infected patients in care in France. HCV negative patients with serological follow-up between 2012 and 2016 were analyzed and the incidence of first acute HCV infection was determined yearly. For patients who had cured a previous infection, the incidence of HCV reinfection was also determined yearly.

Results:

Among 40,714 HIV-patients followed between 2012 and 2016, HCV status was available in 38,217 (94%). 5,559 patients (15%) were already HCV infected at the time of the study. HCV treatment uptake was 43% among patients with a detectable HCV-RNA in 2016. By the end of 2016, 82% of all patients had cured HCV, either spontaneously or following treatment. Among 21,518 HCV negative patients with serological follow-up between 2012 and 2016 (63,447 PY), 218 first HCV infections occurred. Similarly, among 3,392 patients who had cured a previous infection (10,595 PY), 74 reinfections occurred. The yearly HCV incidence for MSM and for patients with other HIV-risk factors is reported.

Dat’AIDS HCV cohort



16 French HIV centers, including overseas departments
25% of HIV-infected patients under care in France

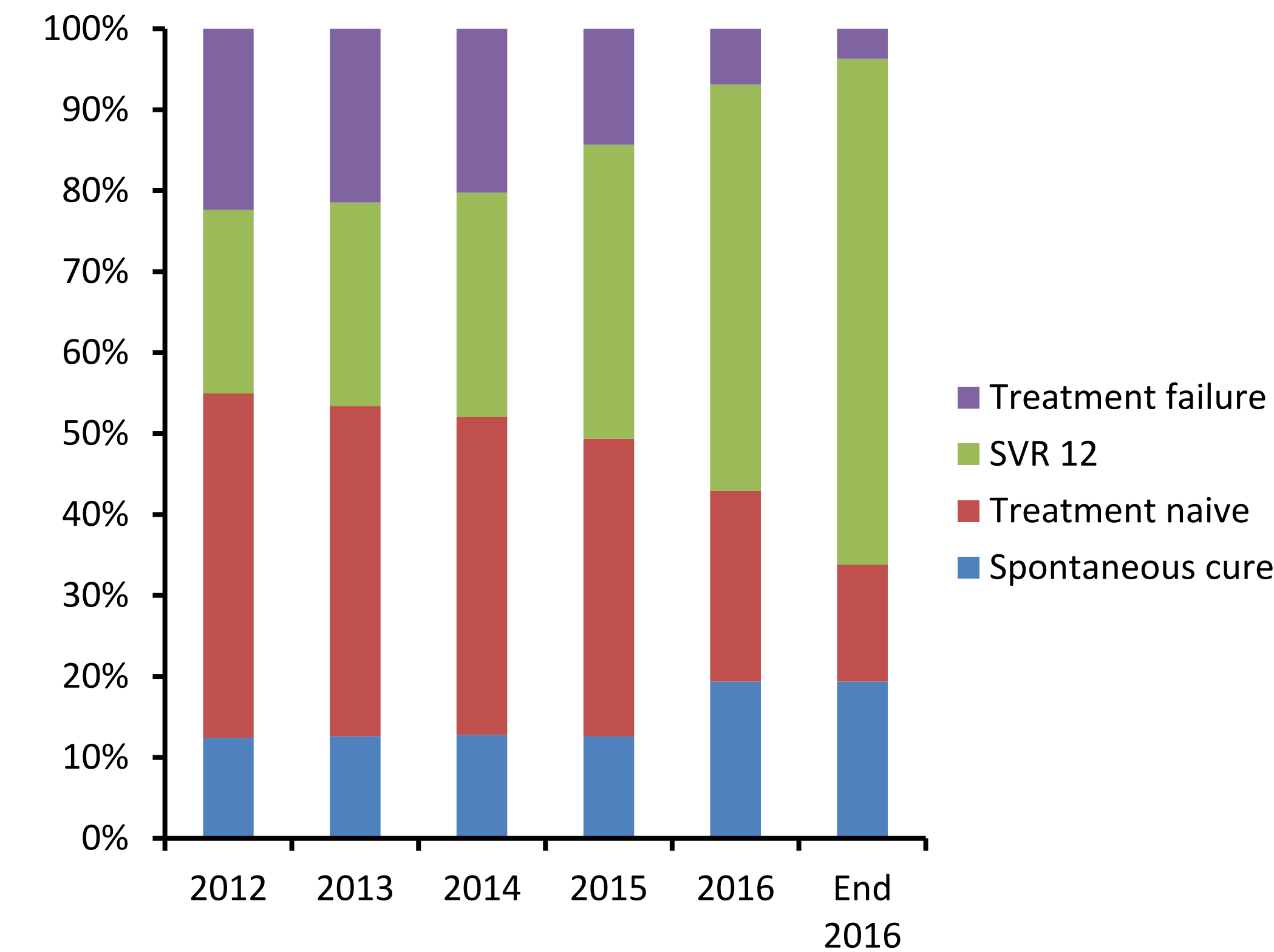
Patients’ characteristics

	HIV-infected, HCV negative (n=21,519)	HIV-HCV coinfectd, cured HCV (n=3,406)
Age, years (median (IQR))	45 (36-52)	49 (45-52)
Female gender (n (%))	5 972 (27.8%)	934 (27.4%)
Deceased (n (%))	354 (1.6%)	88 (2.6%)
CDC stage C (n (%))	4 839 (22.5%)	915 (26.9%)
HIV risk factor (n (%))		
MSM	10 253 (47.6%)	662 (19.4%)
Heterosexual	9 438 (43.9%)	701 (20.6%)
IVDU	160 (0.7%)	1 669 (49.0%)
Other/unknown	1 668 (7.8%)	374 (11.0%)
Antiretroviral treatment (n (%))	21 157 (98.3%)	3 379 (99.2%)
HIV viral load < 50 copies/mL (n (%))	19 013 (88.4%)	2 892 (84.9%)
CD4 cell count (median (IQR))	629 (450-839)	653 (453-879)
Acute HCV (n)	219	73

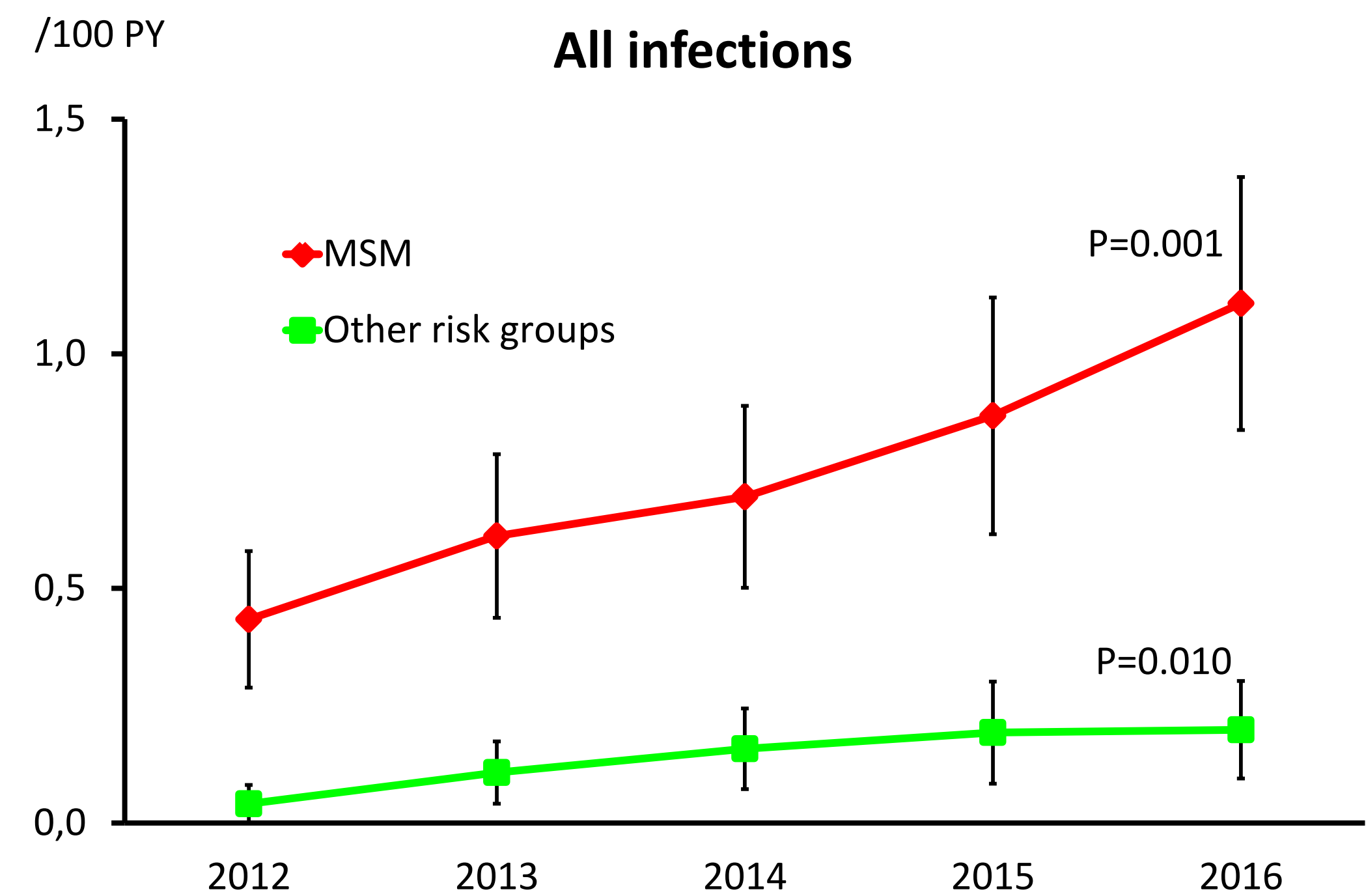
Population description per year

	2012	2013	2014	2015	2016	end 2016
Total HIV	28 783	29 389	29 482	28 808	30 533	30 358
Total HCV	5 104	5 028	4 888	4 612	3 848	3 819
HCV Ab prevalence	18%	17%	17%	16%	13%	13%
Total HCV with RNA+	3313	3128	2909	2357	1171	699
HCV-RNA prevalence / HIV	12%	11%	10%	8%	4%	2%
HCV-RNA prevalence / HCV	65%	62%	60%	51%	30%	18%
DAA treatment	268	199	465	705	496	
% treatment / HCV RNA+	8%	6%	16%	30%	42%	
Acute HCV (1st infection)	29	40	54	44	52	
Acute HCV (reinfection)	9	17	8	13	26	
Total acute infection	38	57	62	57	78	

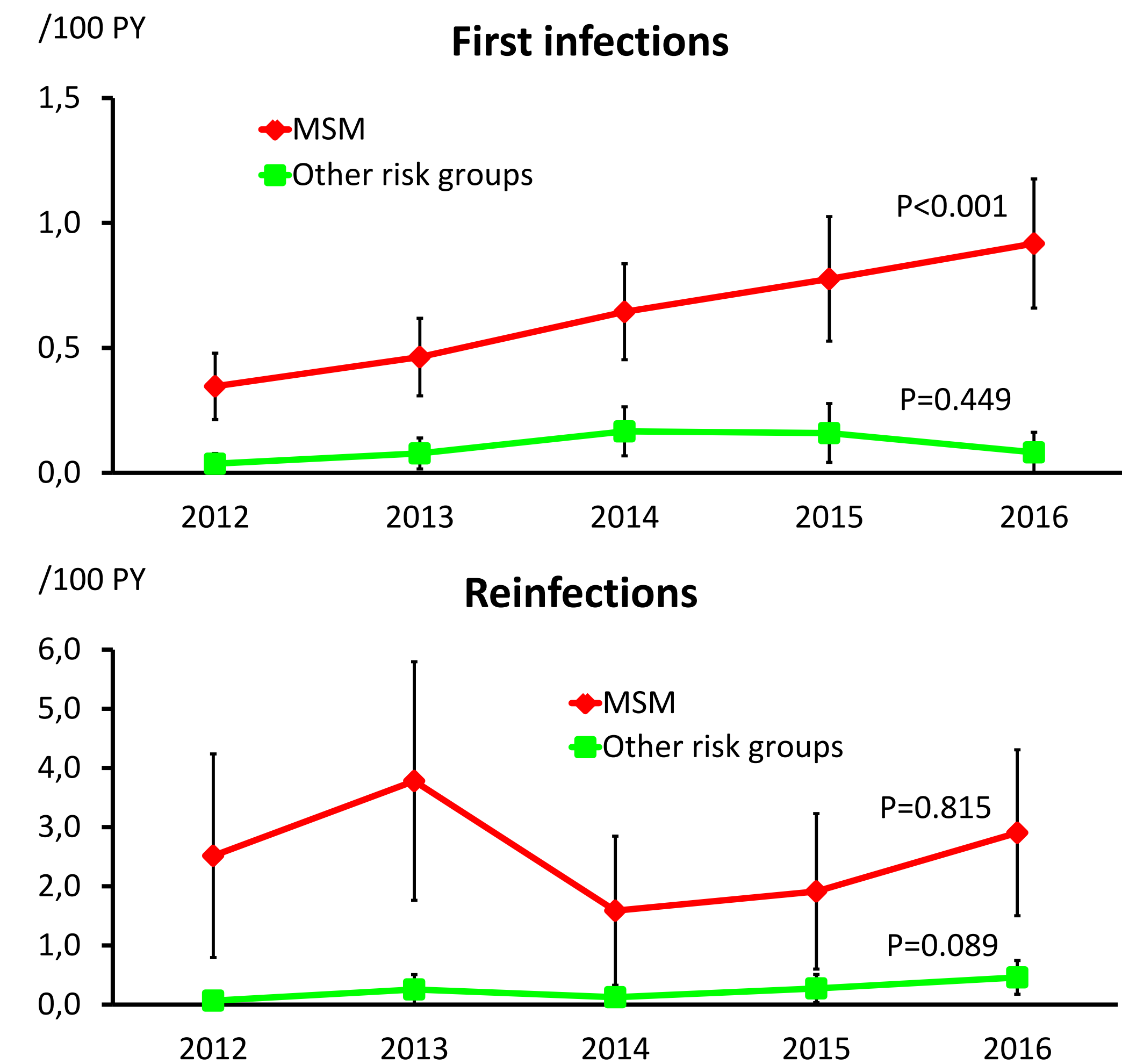
HCV treatment status



HCV incidence (all infections)



HCV incidence (1st infection / reinfection)



Conclusion

Despite a high HCV treatment uptake and cure rate, the incidence of acute HCV infection regularly increased in MSM between 2012 and 2016. The incidence of reinfection fluctuated but remained constantly higher than the incidence of first infection, suggesting that a subgroup of patients pursued high-risk practices following a first infection. The incidence in patients with other HIV-risk factors including IVDUs also increased during the period but remained considerably lower than in MSM.

Acknowledgments

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