

Supplementary material

Supplementary Table 1: Characteristics of HIV1-infected patients with incident Herpes Zoster in the FHDH-ANRS CO4 cohort in 1992-2011 and 2005-2008.

	HIV-infected population with HZ	
	1992-2011 (n=7 167)	2005-2008 (n= 1 341)
Men N(%)	5161 (72.0)	913 (68.1)
Age at HZ or last follow-up[‡] , median (iqr)	38 (33-45)	41 (35-48)
Transmission group, N (%)		
MSM	2836 (39.6)	512 (38.2)
IVDU	1139 (15.9)	120 (8.9)
Others	3196 (44.5)	709 (52.9)
Migration from sub-Saharan Africa, N (%)	662 (9.2)	195 (14.5)
AIDS prior to HZ or to last follow-up[‡] , N (%)	2143 (29.9)	341 (25.4)
CD4 at HZ or last follow-up[‡]/mm³ , median (iqr)	304 (155-465)	380 (243-527)
CD4 nadir[‡]/mm³ , median (iqr)	176 (57-315)	225 (97-350)
CD8 at HZ or last follow-up^{‡*} , median (iqr)	901 (604-1275)	952 (675-1304)
CD4/CD8 at HZ or last follow-up^{‡*} , median (iqr)	0.3 (0.2-0.5)	0.44 (0.3-0.6)
pHIV RNA at HZ or last follow-up^{‡*}, cp/mL		
median (iqr)	3200 (157-42000)	2268 (50-44 249)
<500	1496 (28.7)	517 (39.5)
500 - 5000	1293 (24.8)	194 (14.8)
5000 - 30000	885 (17.0)	204 (15.6)
≥30000	1540 (29.5)	394 (30.1)
Periods, N(%)		
1992-1996	1784 (24.9)	
1997-2000	1941 (27.1)	
2001-2004	1505 (21.0)	
2005-2008	1341 (18.7)	
2009-2011	596 (8.3)	
Duration of Combined ART at HZ or last follow-up[‡] N(%)		
No cART and <1996	1146 (16.0)	–
No cART and ≥ year 1996	2369 (33.1)	473 (35.3)
cART for less than 6 months	759 (10.1)	130 (9.7)
cART for more than 6 months	2893 (40.4)	738 (55.0)

* 6 months before to 1 month after HZ diagnosis

‡ before diagnosis of HZ in patients with HZ and before the end of follow-up in patients without HZ

Supplementary Table 2: Risk of Herpes Zoster in HIV-infected patients. Multivariable Cox regression analyses adjusted for cART use.

		Model 1 with cART adjustment (N=7167 HZ, AIC=154 099)			Model 2 with cART adjustment (HZ=5122, AIC=106 262)				
		HR	95%CI		P**	HR	95%CI		P**
Gender and transmission group					<.0001				<.0001
	IVDU men	0.97	0.89	1.06		0.95	0.85	1.06	
	Other men	1				1			
	MSM	1.21	1.13	1.29		1.18	1.09	1.27	
	IVDU women	1.14	1.01	1.29		1.21	1.04	1.41	
	Other women	1.07	0.99	1.15		1.13	1.04	1.22	
Age at FHDH entry					0.0047				<.0001
	<24 years	0.81	0.69	0.94		0.72	0.59	0.87	
	25-34	0.96	0.89	1.03		0.88	0.81	0.96	
	35-44	0.95	0.89	1.01		0.90	0.84	0.97	
	45-54	1				1			
	55-64	1.10	0.99	1.22		1.15	1.03	1.29	
	≥65	0.94	0.78	1.12		1.02	0.84	1.24	
Sub-saharan origin	yes vs no	0.78	0.72	0.85	<.0001	0.81	0.74	0.89	<.0001
AIDS*	yes vs no	1.25	1.18	1.33	<.0001	1.26	1.18	1.35	<.0001
CD4 nadir[‡] (/mm³)					<.0001				
	≥500	1				1			
	350 - 499	1.34	1.20	1.49		1.18	1.04	1.33	
	200 - 349	1.57	1.42	1.73		1.30	1.15	1.46	
	<200	2.03	1.83	2.26		1.62	1.42	1.85	
CD4 current* (/mm³)	log2	0.87	0.86	0.89	<.0001	0.93	0.91	0.96	<.0001
cART use*	yes vs no	0.60	0.57	0.64	<.0001	0.84	0.78	0.90	<.0001
HIV RNA current (cp/ml)*									<.0001
	<500					1			
	500-4 999					1.74	1.61	1.89	
	5 000-29 999					2.13	1.94	2.34	
	≥30 000					2.89	2.65	3.15	
CD4/CD8 ratio*									<.0001
	≥0.9					1			
	[0.5 - 0.9[1.21	1.07	1.37	
	[0.3 - 0.5[1.64	1.46	1.86	
	<0.3					1.86	1.64	2.11	
	missing					1.23	1.08	1.41	

*time-updated variables

[‡] before diagnosis of HZ in patients with HZ and before the end of follow-up for patients without HZ

Abbreviation: HZ. Herpes Zoster; HR Hazard ratio; 95%CI: 95% confidence interval; MSM: men who have sex with men.

AIC Akaike's Information Criterion

** p-value for the overall effect of the variable