



BACKGROUND

• Several studies have documented the negative impact of HIV in the progression of liver disease in HCV coinfecting patients.

• However, the role of HCV in the outcome of HIV-infected individuals is more controversial. Until recently, it was assumed that such an impact was minimal or none, but recent reports have shown that HCV may impair the immune recovery in patients with HAART and even accelerate the clinical progression of HIV infection and AIDS-related death.

• Studies are needed that evaluate the relation between HCV coinfection and HIV clinical and immunological progression.

OBJECTIVES

• To evaluate the impact of coinfection with Hepatitis C Virus on the immunological recovery of HIV-infected patients treated with highly active antiretroviral therapy

METHODS

• **Design:** Prospective cohort study of all patients who began HAART after March, 1997 and:

- Had a minimum follow-up of 24 months.
- Had undetectable viral load (<20 copies/mL) during all the follow-up

• **Setting:** Outpatient clinic for patients with HIV infection/AIDS in a tertiary hospital in Spain.

• **Collection of Data:** Data were uniformly collected with visits scheduled every 3-4 months. The following laboratory tests were performed: complete blood cell count, serum chemistries (liver enzymes and total bilirubin), CD4+ cell count and HIV RNA level. The HCV and HBV serologies are routinely performed at enrollment. No information was available regarding HCV RNA.

• **Main outcome measures:** Absolute CD4 count after 12, 18 and 24 months of therapy. Increase in CD4 count respect to baseline values after 12, 18 and 24 months of therapy.

• **Statistical analysis:** Data were analyzed with SPSS 9.0 software. Univariate analysis and stepwise multivariate logistic regression were performed to analyze risk factors associated with increases in CD4 count.

CONCLUSIONS

• **Coinfection with Hepatitis C Virus is associated with an impaired immunological recovery in HIV infected patients who receive antiretroviral therapy.**

• **The impairment becomes evident after the first 12 months of HAART.**

RESULTS

Population of Study

Patients who initiated HAART >Marzo 96:	503
Follow-up >24 months:	351 (70%)
Undetectable HIV RNA:	295 (59%)
Complete data for analysis:	288 (58%)

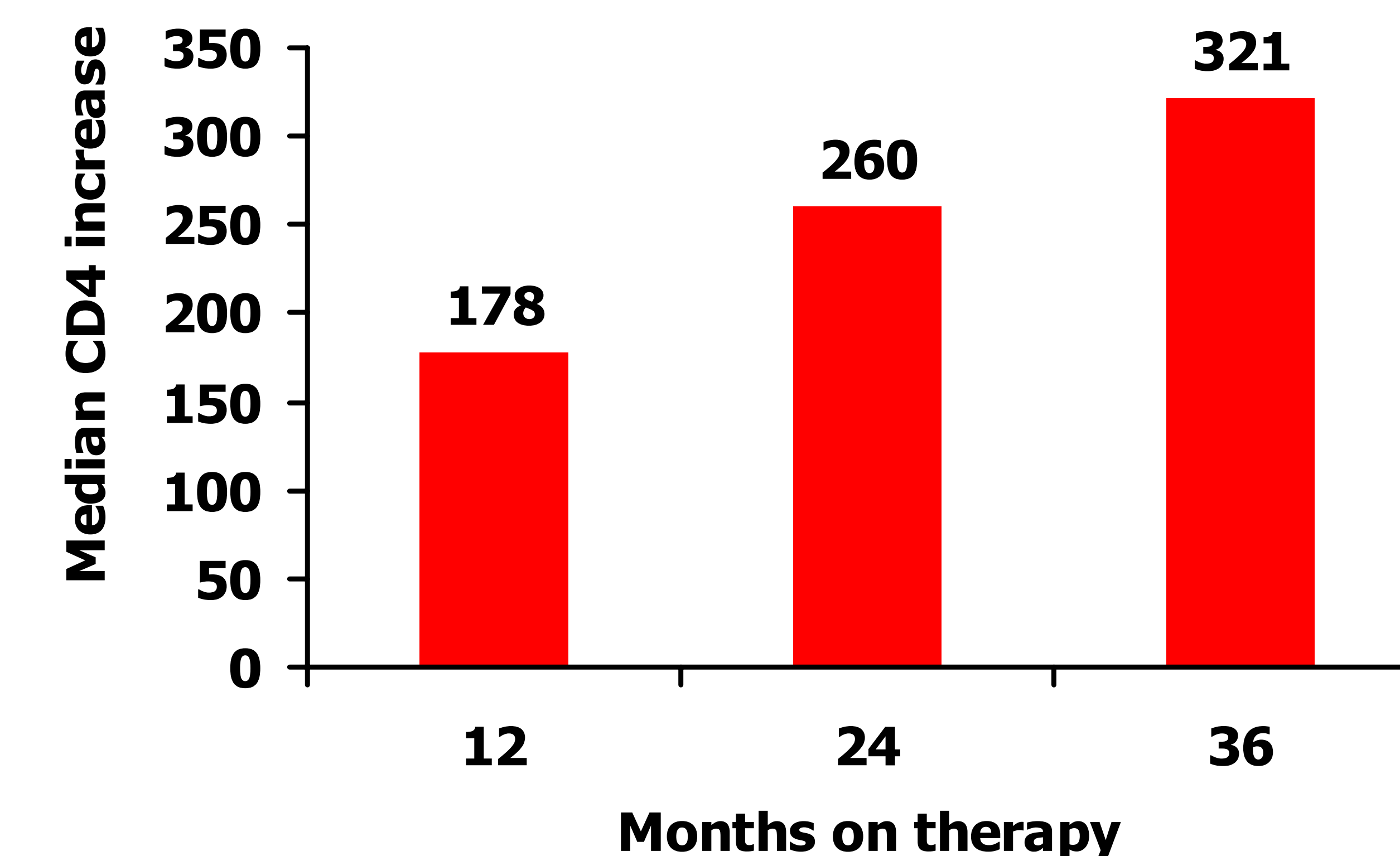
Baseline Characteristics (n=288 patients)

Age, y	36 (19-68)
Sex, M/F (%)	74/26
Risk practice for HIV infection	
IVDU	61%
Unsafe sex	33%
Prior AIDS	29%
HVC coinfection	65%
CD4+ cell count/mm ³	186 (2-1113)
<200/mm ³	157 (54%)
HIV RNA, log ₁₀ copias/mL	5 (2.3-6.5)
<4 log ₁₀ copias/mL	26 (9%)
4-5 log ₁₀ copias/mL	96 (24%)
>5 log ₁₀ copias/mL	158 (67%)

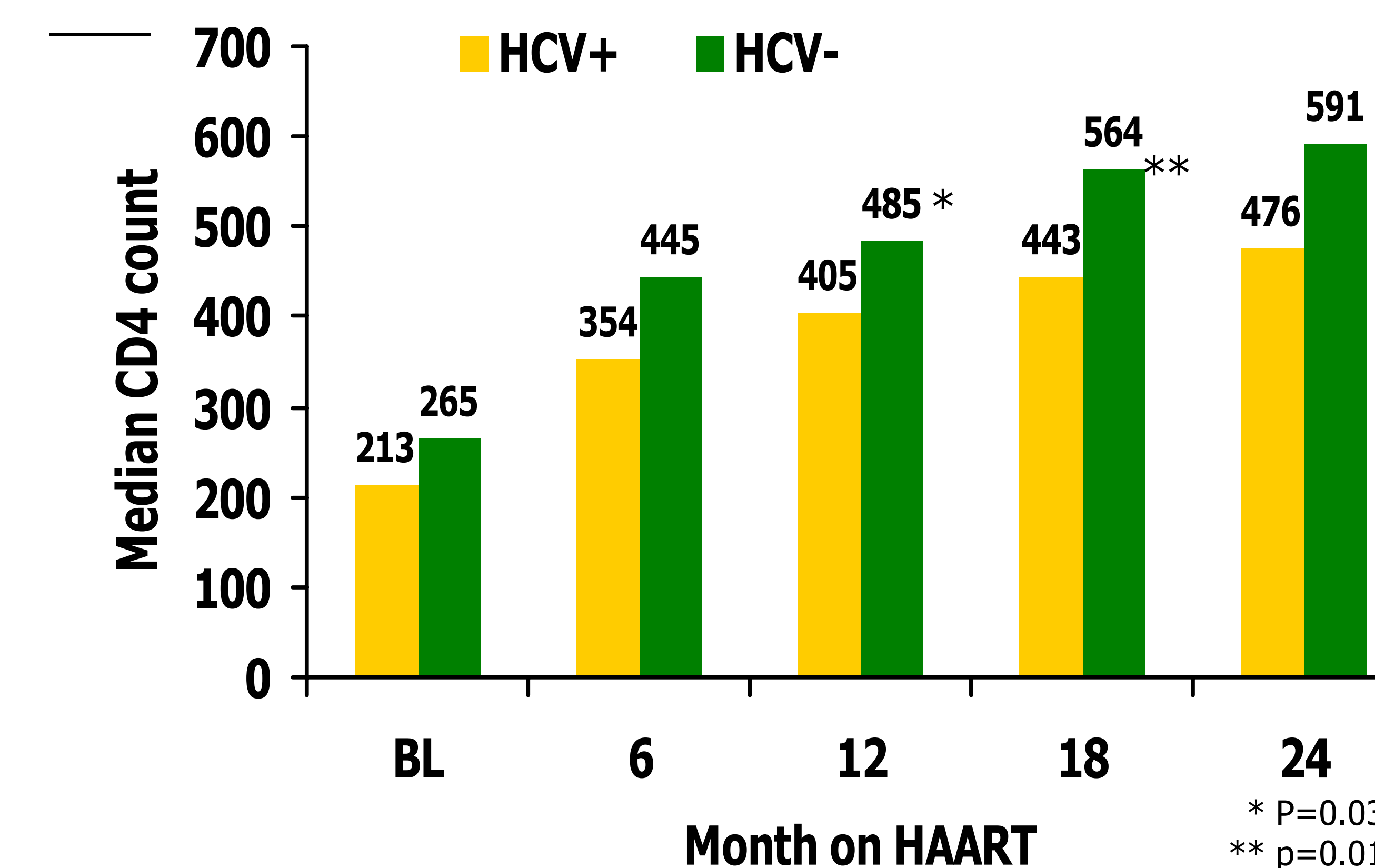
Characteristics of HCV+ vs HCV- patients

Variable	HCV+ (n=185)	HCV- (n=101)	P
Age	34	38	0.06
Male sex, %	77%	70%	0.23
IVDU	90%	9%	<0.001
Previous AIDS	31%	27%	0.46
Baseline CD4	213	265	0.25
Baseline HIV RNA	4,88	5,07	0,09
PI-including regimen	91%	92%	1

CD4 increase according to time on HAART



CD4 count according to HCV serostatus



CD4 increase according to HCV serostatus

