

Supplemental Table 1. Rates of Progression to Higher APRI and FIB-4 Levels among HIV Infected Youth During Follow-up

Marker Threshold	CD4 Level	# with		Person -years	Incidence Rate per 100 p-year	Incidence Rate	
		progression/ # at risk				Ratio vs Higher CD4 Level	P-value
APRI > 0.5	Overall	176/1116		2347	7.5 (5.4, 8.7)	---	---
	<350	71/275		571	12.4 (9.8, 15.7)	2.14 (1.58, 2.90)	<0.001
	≥350	101/823		1742	5.8 (4.8, 7.0)	1.00 (ref)	---
APRI > 1.5	Overall	39/1256		2823	1.4 (1.0, 1.9)	---	---
	<350	23/344		790	2.9 (1.9, 4.4)	3.62 (1.91, 6.85)	<0.001
	≥350	16/891		1991	0.8 (0.5, 1.3)	1.00 (ref)	---
FIB-4 > 1.5	Overall	46/1257		2822	1.6 (1.2, 2.2)	---	---
	<350	28/348		797	3.5 (2.5, 4.1)	3.87 (2.14, 7.00)	<0.001
	≥350	18/888		1984	0.9 (0.6, 1.4)	1.00 (ref)	---
FIB-4 > 3.25	Overall	9/1266		2871	0.3 (0.2, 0.6)	---	---
	<350	6/350		819	0.7 (0.3, 1.6)	7.35 (1.48, 36.42)	0.014
	≥350	2/894		2007	0.1 (0.0, 0.4)	1.00 (ref)	---

Supplemental Table 2. Cox proportional hazards models for risk of AIDS progression or death by levels of liver biomarkers at first assessment when aged 15 to 20 years

Liver Biomarker	Unadjusted Models*		Adjusted Model**	
	HR (95% CI)	P-value	HR (95% CI)	P-value
FIB-4 categories				
0-0.3	1.00 (ref)	---	1.00 (ref)	---
0.3-0.4	1.12 (0.55, 2.29)	0.76	0.90 (0.41, 1.99)	0.80
0.4-0.5	1.44 (0.69, 3.02)	0.34	0.88 (0.39, 1.97)	0.76
>0.5	2.41 (1.28, 4.51)	0.006	1.23 (0.62, 2.45)	0.56
p, Trend		0.002		0.49
Log(FIB-4)	2.26 (1.50, 3.41)	<0.001	1.17 (0.66, 2.08)	0.58
APRI categories				
0-0.15	1.00 (ref)	---		---
0.15-0.25	1.05 (0.44, 2.50)	0.91	0.72 (0.29, 1.77)	0.47
0.25-0.35	1.43 (0.60, 3.43)	0.42	0.80 (0.32, 2.00)	0.64
>0.35	2.56 (1.13, 5.79)	0.025	1.00 (0.42, 2.35)	0.99
p, Trend		0.001		0.60
Log(APRI)	1.88 (1.39, 2.55)	<0.001	1.19 (0.78, 1.83)	0.42

HR=hazard ratio, CI=confidence interval

*Two separate models were fit for each liver biomarker, to evaluate trends in risk with increasing levels of liver biomarkers (categories) and to evaluate trends with each 1 unit increase in log-transformed biomarker.

**Adjusted models include BMI Z-score, low CD4 count, high viral load, and treatment with HAART including a protease inhibitor.