

TABLE 1. Helping HIV-Infected Persons Decide When to Start HAART

Modified from the Guidelines for the Use of Antiretroviral Agents in HIV-1-Infected Adults and Adolescents. Recommendations for When to Initiate Antiretroviral Therapy in Chronic HIV Infection, November 10, 2003. http://aidsinfo.nih.gov/guidelines/adult/AA_111003.html.

Clinical Category	CD4+ T-Cell Count	Plasma HIV RNA	Recommendation
Symptomatic (AIDS or severe symptoms)	Any value	Any value	Treat
Asymptomatic, AIDS	CD4+ T-cells <200/mm ³	Any value	Treat
Asymptomatic	CD4+ T-cells >200/mm ³ but <350/mm ³	Any value	Most clinicians recommend offering treatment*
Asymptomatic	CD4+ T-cells >350/mm ³	>55,000 (by RT-PCR or bDNA)**	Some clinicians recommend initiating therapy, as the three-year risk for untreated patients to develop AIDS is >30%. Other clinicians recommend deferring therapy and monitoring the CD4+ T-cell count and plasma HIV RNA more frequently. Clinical outcome data after initiating therapy are lacking.
Asymptomatic	CD4+ T-cells >350/mm ³	<55,000 (by RT-PCR or bDNA)**	Most clinicians recommend deferring therapy and monitoring the CD4+ T-cell count, as the three-year risk for untreated patients to develop AIDS is <15%.

* Clinical benefit has been demonstrated in controlled trials only for patients with CD4+ T-cells <200/mm³

** Although a 2-2.5 fold difference existed between RT-PCR and the first bDNA assay (version 2.0), with the 3.0 version bDNA assay, values obtained by bDNA and RT-PCR are similar except at the lower end of the linear range (<1,500 copies/mL).

TABLE 2. The Risk for Progression to AIDS-Defining Illness Among a Cohort of Men Not Receiving HAART, Predicted by Baseline CD4+ T-Cell Count and HIV Viral Load*

CD4 <200 cells/mm ³		Percentage with AIDS-defining Illness after 3, 6, 9 years‡			
Plasma Viral Load (copies/mL)†		n	3 years	6 years	9 years
bDNA	RT-PCR				
≤500	≤1,500	0§	-	-	-
501-3,000	1,501-7,000	3§	-	-	-
3,001-10,000	7,001-20,000	7	14.3	28.6	64.3
10,001-30,000	20,001-55,000	20	50.0	75	90.0
>30,000	>55,000	70	85.5	97.9	100.0
CD4 201 - 350^ cells/mm ³		Percentage with AIDS-defining Illness after 3, 6, 9 years‡			
Plasma Viral Load (copies/mL)†		n	3 years	6 years	9 years
bDNA	RT-PCR				
≤500	≤1,500	3§	-	-	-
501-3,000	1,501-7,000	27	0	20.0	32.2
3,001-10,000	7,001-20,000	44	6.9	44.4	66.2
10,001-30,000	20,001-55,000	53	36.4	72.2	84.5
>30,000	>55,000	104	64.4	89.3	92.9
CD4 >350 cells/mm ³		Percentage with AIDS-defining Illness after 3, 6, 9 years‡			
Plasma Viral Load (copies/mL)†		n	3 years	6 years	9 years
bDNA	RT-PCR				
≤500	≤1,500	119	1.7	5.5	12.7
501-3,000	1,501-7,000	227	2.2	16.4	30.0
3,001-10,000	7,001-20,000	342	6.8	30.1	53.5
10,001-30,000	20,001-55,000	323	14.8	51.2	73.5
>30,000	>55,000	262	39.6	71.8	85.0

‡ In the reference study, AIDS was defined according to the 1987 CDC definition, which did not include asymptomatic persons with CD4+ T-cells counts < 200 cells/mm³.

§ Too few subjects were in the category to provide a reliable estimate of AIDS risk.

^ A recent evaluation of data from the (MACS) Multicenter AIDS Cohort Study of 231 persons with CD4+ T-cell counts >200 and <350 cells/mm³ demonstrated that of 40 (17%) persons with plasma HIV RNA <10,000 copies/mL, none progressed to AIDS by 3 years. Of 28 individuals (29%) with plasma viremia of 10,000 - 20,000 copies/mL, 4% and 11% progressed to AIDS at 2 and 3 years, respectively. Plasma HIV RNA was calculated as RT-PCR values from measured bDNA values.