



Clinical Characteristics and Treatment Uptake in Patients Newly Infected With HIV Identified in a One Year Period—the *Phaedra* Cohort

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Introduction and Aim

The clinical value of initiating antiretroviral (ARV) therapy during primary HIV infection (PHI) is currently unclear. To determine whether baseline patient characteristics influenced the decision to start ARV therapy we collected data on patients identified with PHI over a one year period.

Methods

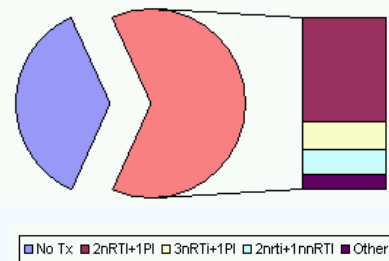
From September 2002 to September 2003, all consenting persons newly infected with HIV were recruited to a cohort study from multiple participating sites in Boston, USA, and Melbourne, and Sydney, Australia. Acute infection was defined as PHI symptoms, viraemia and an incomplete antibody response; early infection was defined as positive Western blot with a preceding negative ELISA within a one year period. Clinical, immunological, and virological evaluations were recorded at baseline and at standard of care visits thereafter, as were timing and choice of ARV therapy. Using SAS (version 8.2) procedure GENMOD, the likelihood of commencing treatment was modelled.

Results

Baseline Characteristics	Median Values	Interq. Range
Plasma RNA copies/mL	303,000	724,300
CD4+ cells/mm ³ ‡	460	413
Age at study entry	34	11
# ARS symptoms	5	3
Duration of symptoms, days	20	22
WB Bands positive at entry ‡	3	6
Acutely infected	61%	
Risk for transmission, MSM	95%	

‡Variables statistically significant at $p < 0.05$

63% of patients started treatment by last follow up; 61% were acutely infected, with risk factor for transmission 95% MSM. Regression analysis showed plasma RNA, age, number or duration of seroconversion symptoms, time from estimated infection date to diagnosis, and categorisation of patients as acute versus early to be not statistically significant. Only lower baseline CD4 counts ($p = 0.0343$) and



Results, continued

fewer bands positive ($p = 0.0002$) were found to be predictive factors in the uptake of treatment. Separate analysis of characteristics predicting use of ARV containing boosted PI [52%] versus nnRTI [10%] combinations showed clinical site and geographic locale to be the only factors significantly associated with type of regimen selected.

Conclusions

The majority of newly infected patients were commenced on ARV therapy. Predictors of initiating therapy were: lower baseline CD4 count and fewer positive Western blot bands. Despite good clinical trial data supporting the use of nnRTI combinations, most subjects were treated with a boosted PI based combination.

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