Abstract

Objective: To evaluate the extent of HIV-1 drug resistance among drug naïve Kenyan individuals.
Design: Cross-sectional study.
Setting: Kenya Medical Research Institute HIV laboratory Nairobi, Kenya.
Subjects: A total of seventy eight HIV-1 positive drug naïve subjects randomised from five Kenyan provincial hospitals between April and June 2004.
Results: A major non-nucleoside reverse transcriptase (NNRTI) an associated mutation was found in one patient (1.3%). NNRTI associated resistance mutations were present at amino acid codon sites G98A (2.56%); K103E (1.3%) and L100F (3.57%) prevalences. Baseline resistance may compromise the response to standard NNRTI-based first-line ART in 1.3% of the study subjects.
Conclusion: This indicates in general, that drug resistance among HIV-1 positive drug naïve individual is at low thresholds (1.3%) but the problem could be more serious than reported here. Continuous resistance monitoring is therefore warranted to maintain individual and population-level ART effectiveness.