

# Reliability and clinical relevance of HIV drug-resistance testing at low viraemias



With many treatment combinations available resistance testing is recommended for determining optimal antiretroviral drug choices before people with HIV start or change their treatment. Currently, approved genotypic resistance tests require a viral load of at least 1000 copies/ml however it is thought that testing should still be accurate at lower viral loads. This study therefore examined the reliability and clinical utility of standard genotypic resistance tests in cases of low-level viraemia i.e. a viral load between 50 and 999 copies/ml. The testing batched viral loads by according to number of copies and results found that overall, 96% of samples were successfully sequenced. Samples with viral loads between 50 and 200 copies/ml had a success rate of 67%, increasing to 93% when viral load was between 501 and 999 copies/ml. Thus showing that the genotypic test can be successfully used as soon as failures in treatment become

apparent- even at low viraemias. Thereby optimizing treatment and guiding patients to an effective alternative regimen.

[Santoro, MM. et al. 2014. Reliability and clinical relevance of the HIV-1 drug resistance test in patients with low viremia levels. \*Clin Infect Dis.\*](#)