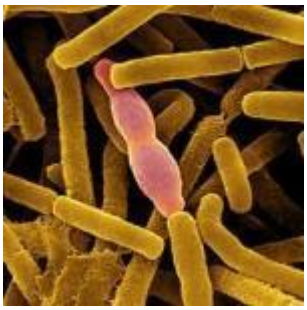
Nucleoside reverse-transcriptase inhibitors (NRTIs) as first-line ART in African Children



There have been no paediatric trials which have compared nucleoside reverse-transcriptase inhibitors (NRTIs) as first-line antiretroviral therapy (ART) in Africa, where most HIV-infected children live.

A recent open access paper in Lancet Infectious Diseases reports on the CHAPAS-3 study, which compared stavudine, zidovudine, or abacavir as dual or triple fixed-dose-combination paediatric tablets with lamivudine and nevirapine or efavirenz. The open-label, parallel-group, randomised trial (CHAPAS-3), enrolled children from one centre in Zambia and three in Uganda. The primary endpoint was grade 2–4 clinical or grade 3/4 laboratory adverse events. Analysis was intention to treat. Children (n=480) were randomised: 156 to stavudine, 159 to zidovudine, and 165 to abacavir. After 48 weeks, 98 (85%), 81 (80%) and 95 (81%) ART-naive children in the stavudine, zidovudine, and abacavir groups, respectively, had viral load less than 400 copies per mL and most ART-experienced children maintained suppression.

Clinical and subclinical lipodystrophy was not noted in those younger than 5 years and anaemia was no more frequent with zidovudine than with the other drugs. The absence of

hypersensitivity and superior resistance profile along with once-daily dosing favours abacavir dosing for African children.

Mulenga, V. et al, 2015. Abacavir, zidovudine, or stavudine as paediatric tablets for African HIV-infected children (CHAPAS-3): an open-label, parallel-group, randomised controlled trial. *The Lancet Infectious Diseases*.