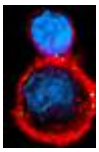
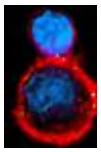
South African treatment guidelines should use viral load, not CD4 count for greater success





Fully suppressive HIV treatment greatly reduces the risk of HIV transmission however, not all HIV-positive patients are taking ART. In most settings, decisions about the best time to start ART are primarily guided by CD4 count and symptoms. South African guidelines set a CD4 count of 350 cells/mm3 as the threshold to initiate ART. But investigators have been concerned that some people with CD4 counts above this level may still be infectious ie a viral load above 10,000 copies/ml. This study therefore monitored CD4 count and viral load in people testing HIV positive at the ZAZI clinic, a voluntary counselling and testing facility in Soweto, South Africa.T he study population comprised 348 people who were identified as HIV positive in their first test. Just over half (53%) of participants had a CD4 count above 350 cells/mm3 and were thus, on the basis of current guidelines, ineligible for ART. Of the 183 participants who did not qualify for ART on the basis of their CD4 count, 34% had a viral load above 10,000 copies/ml.With more than a third of newly diagnosed patients failing to qualify for immediate ART on the basis of their CD4 count this makes for a large proportion of patients having a potentially highly infectious viral load. Concluding that consideration should be given to updating guidelines for replacing CD4 count threshold with viral load threshold for ART initiation, when planning treatment as prevention (TasP) interventions.

Govender, S. et al. 2014. CD4 Counts and Viral Loads of Newly Diagnosed HIV-Infected Individuals: Implications for Treatment as Prevention. *PLOS*.