Background
Life expectancy increased in HIV-infected populations due to antiretroviral treatment (ART). Whether HIV-infection and/or ART increase cardiovascular risk against a background of increasing prevalence of obesity, hypertension and diabetes in low- and middle-income countries is not yet clear. To answer this question in a rural South-African population, the Ndlovu Cohort Study was designed. We describe the baseline distribution of cardiovascular risk factors in relation to HIV and ART.

Methods
The Ndlovu Cohort Study is a prospective cohort study of 1000 HIV-positive and 1000 HIV-negative adults from the Moutse area, Limpopo, South Africa with an intended follow-up duration of ten years. Information is collected on demographics, anthropometrics, life-style, kidney and liver function, CRP, glucose and proteinuria. Carotid intima-media thickness (CIMT) and pulse wave velocity (PWV) measurements are used to assess subclinical atherosclerosis, respectively arterial stiffness. Cardiovascular risk factors were compared between HIV-negative and HIV-positive participants, whether or not on ART. Data were adjusted for gender and age.

Results
By December 2015, 1053 participants were included, 66% women; 345 (32.8%) women were HIV-positive of whom 235 (68.1%) received ART. HIV-infected participants were significantly older (40.0 versus 37.3 years), and mainly women (73%). HIV was associated with a lower body mass index, lower total - and LDL cholesterol and a lower prevalence of hypertension and diabetes. ART was associated with increased HDL and triglyceride levels. Current smoking did not differ between groups (23.6%), HIV and ART were associated with higher CRP values. Framingham risk scores (FRS) did not differ between HIV+/HIV- and/or ART use.

Conclusions
HIV infection is accompanied by a lower prevalence of cardiovascular risk factors, although the level of inflammation is increased. So far, we found no evidence that the 10-year cardiovascular disease risk according to FRS is influenced by HIV infection or HIV treatment.