Supplementary Data

Appendix 1
Analyses of CD4+ recovery in this study were divided into those with HIV RNA < 5 log copies/ml and those with HIV RNA > 5 log copies/ml. In the group with lower HIV RNA levels the mean CD4+ count increase per month was +17.3 in the <50 age group versus +14.1 in the >50 age group (p<0.0001). Similar results were observed among patients with higher baseline HIV RNA levels with a mean CD4+ count increase per month of +42.9 in the younger group and +36.9 in the older group (p<0.0001). In this study older patients were more likely to have had an AIDS-defining event and tended to have lower CD4+ cell counts at initiation of treatment. Those in the older age group progressed more rapidly to viral suppression (76% in the over 50 age group versus 70.6% in the under 50 age group) [14]

Appendix 2
Guaraldi et al observed increased vascular age by CAC calculation in 40.5% of a HIV- infected population (mean age 48 years) with an average increase of 15 years over chronological age [22]. Interestingly, they also observed that years of exposure to HAART and higher CD4+ counts were significantly associated with increased coronary age. This suggests a possible pathogenic role for CD4+ cells in atherosclerosis medicated through increased pro-inflammatory cytokine production associated with CD4+ recovery [22]. However, the literature remains conflicting in this area with other publications describing an association between low CD4+ counts and cardiovascular risk in HIV-infected patients [23, 24].
Appendix 3:

With maturation of the D:A:D study cohort, there is now sufficient follow up time to examine additional associations between each of the three major drug classes and the risk of MI [30]. Recently, seven NRTIs (zidovudine, stavudine, didanosine, zalcitabine, lamivudine, abacavir and tenofovir), four PIs (indinavir, nelfinavir lopinavir-ritonavir and saquinavir) and 2 NNRTIs were examined for their association with increased MI risk. Of the drugs considered, only indinavir, lopinavir-ritonavir, didanosine and abacavir were significantly associated with an increased risk of MI [30].

Appendix 4:

In 1991 the American Academy of Neurology (ANN) published diagnostic Criteria for HIV-associated cognitive impairment using the terms HIV-associated dementia (HAD) and minor motor cognitive disorder (MCMD) [38]. A diagnosis of HAD necessitated an acquired abnormality in at least two cognitive domains, with an additional abnormality of either motor function or motivation and/or emotional control. Representing milder impairment, MCMD required at least 2 cognitive and/or behavioral symptoms and an objective finding of one acquired cognitive or motor abnormality. Mild neurocognitive disorder and HAD are similar to the AAN definition, however motor, affective and behavioral dysfunction were not included in the revised criteria. ANI requires poor performance in 2 cognitive areas without abnormality in daily functioning and represents an additional sub-category introduced in 2007[39]*.
Appendix 5: Full References


