Host and Viral Factors Shape the Composition of the HIV-1 Viral Reservoir in the 2000HIV Cohort

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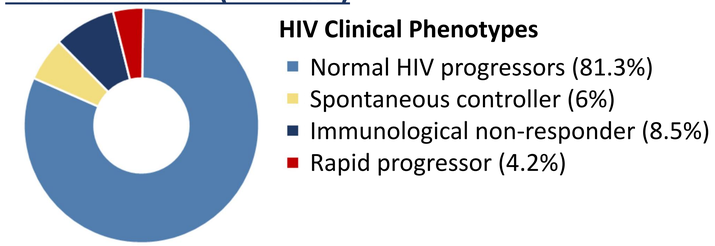
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BACKGROUND

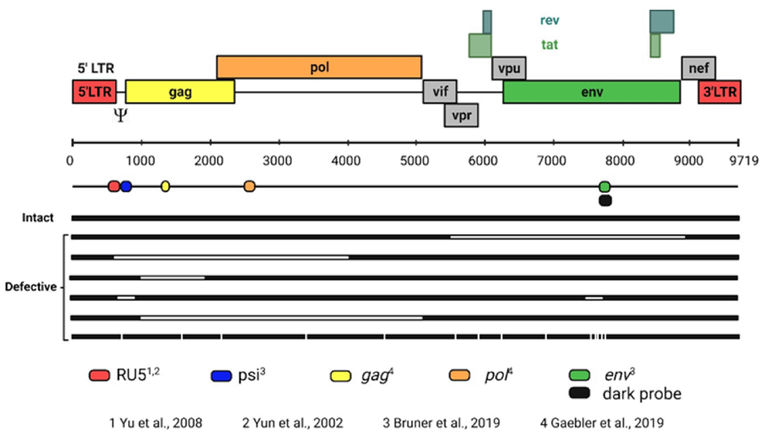
The HIV-1 host interaction exhibits remarkable diversity, resulting in various clinical profiles and virological traits, including coreceptor tropism.

2000HIV cohort (n = 1895)



METHODS

Total (RU5) and intact (psi$^+$gag$^+$pol$^+$env$^+$) HIV-1 DNA levels were quantified in all 1895 PLWH by using the Rainbow proviral HIV-1 DNA digital PCR assay. Analysis is completed for 863/1895 PLWH.

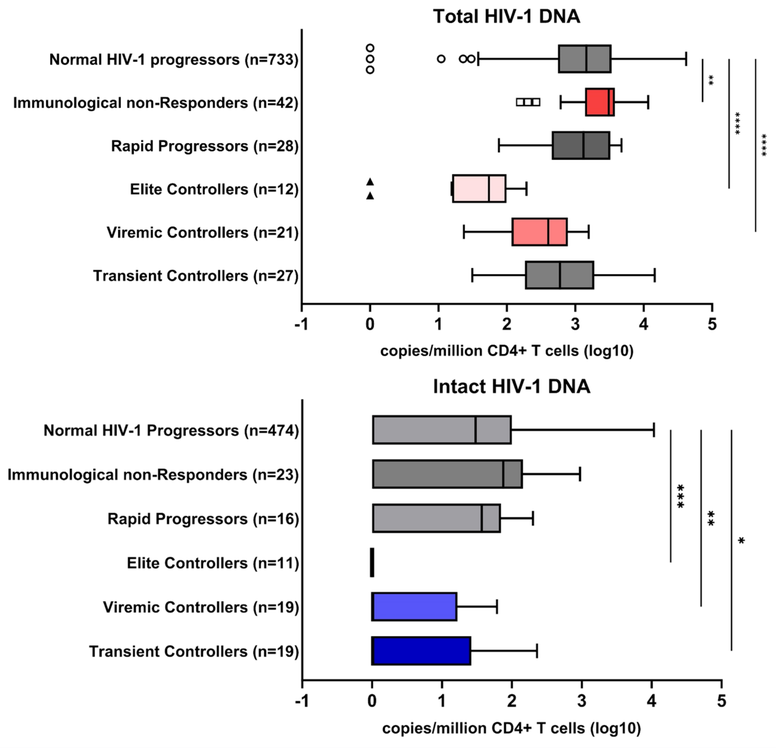


In this study, we identified two distinct groups of PLWH, LoViReT-like and HiViReT-like, based on their total HIV-1 DNA levels (10% cut-off) *(Gàlvez et al., 2020)*. Coreceptor tropism was determined by sequencing the viral env region and using the Geno2pheno algorithm (10% false positive rate).

Rainbow proviral HIV-1 DNA assay reveals phenotypic, clinical and coreceptor tropic differences.

RESULTS

1. Reservoir levels differ significantly among clinical phenotypes.



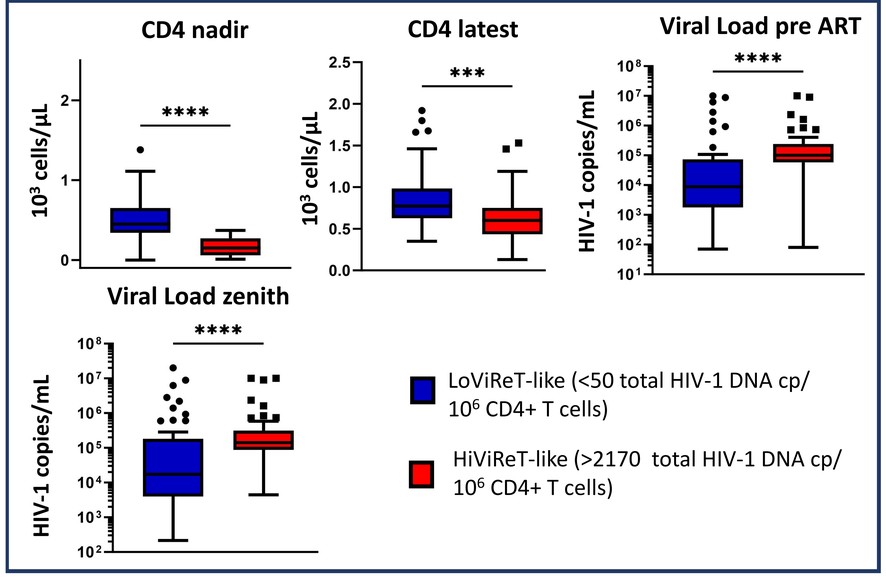
ACKNOWLEDGEMENTS

We thank al the study participants who donated blood samples, as well as MDs and study nurses who helped with the recruitment and coordination of this study.

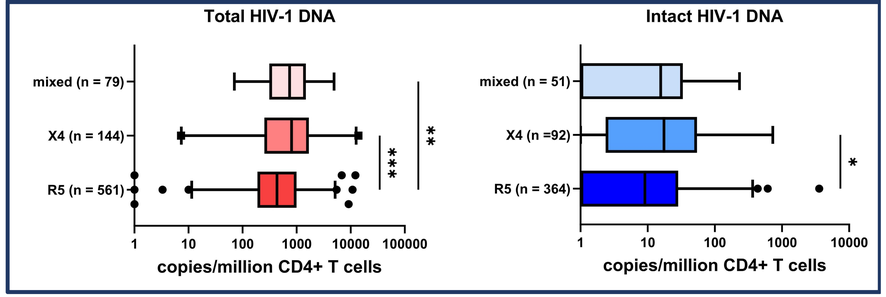
ADDITIONAL KEY INFORMATION

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2. Clinical parameters associated with infection were significantly different between LoViReT- and HiViReT-like groups.



3. Reservoir levels differ significantly between different coreceptor tropism.



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www.2000HIV.com