Poster presentation

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P04-35. Neutralisation activity in a geographically diverse East London cohort of HIV-1 infected patients

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Background

East London has a diverse population profile, where many of the inhabitants come from abroad. Consequently, they harbour viruses from the farthest corners of the globe, which partly reflect the worldwide HIV-1 epidemic. We have looked at antibody responses in this cohort and tried to establish the relationship of neutralising antibodies to viruses from the same versus different clades.

Methods

To date, >330 patients have been recruited. Neutralisation activity in plasma extracted from the treatment-naive patients was determined on TzmBl cells with a panel of 11 viruses, representing 6 different clades.

Results

Overall, the plasmas do not differ much between the groups in terms of virus neutralisation. However, we did find that clade C infected individuals neutralised the tested clade C viruses significantly better than the clade B patients. Moreover, following titrations clade C plasmas neutralised a CRF02_AG virus better than the AG samples.

Conclusion

Neutralisation activities appeared relatively sporadic and independent of genetic clades, although we suggest that clade C exposure may induce a neutralising humoral response to help control clade C and CRF02_AG challenge.