

Poster presentation

## HIV indeterminate serology in a Portuguese blood donor population – review of seven years

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### Background

To study the meaning of HIV indeterminate serology (HIVi), evaluating the deferral criteria of HIV screening test, we looked for donors (D) whose blood donations (BD) were discarded for HIVi from 1/1/1999 till 31/12/2005. The test system of blood donations is Prism Abbott Anti-HIV 1/2; HIV supplemental test was New Lav-Blot I/II-Bio-Rad till 2002 and Inno-Lia™ HIV I/II-Innogenetics afterwards. We perform a NAT test in all single donation since 2000, detecting HIV-1 and HCV RNA; since 2/2004 we perform Procleix® Ultrio™ Assay. Grey zone (GZ) for HIV screening test means 20% inferior to the cutoff (ICO). D that have been deferred for HIV serology but didn't obey to these criteria were excluded.

### Results

In seven years, we find in a body of 25 024 D, 145 with HIVi; 8 were excluded and 18 had no follow-up. 64 D showed a confirmed result and 55 D didn't confirm. 77 cases had the supplemental test negative, 52 showed an indeterminate pattern and one a positive pattern. This case became negative after 1 year of follow-up. None of D seroconverted. 50 cases of the indeterminate supplemental test have occurred before 2002. None of BD or D had a reactive NAT test. The ICO value showed a direct relation with the confirmation rate.

### Conclusion

We found 0,58% indeterminate HIV donors, 41,6% in GZ ICO and 54% didn't confirm. ICO hadn't shown predictive value for HIV infection. A positive supplemental test in a low prevalence population may not correspond to HIV infection. Inno-Lia™ HIV I/II showed a specificity of 92,9% compared to 47,4% of New Lav-Blot I/II. GZ in anti-HIV test hasn't brought more security. There isn't HIV-1 infection without a NAT test reactive and we save 23,8% of HIVi donors.