

Poster presentation

## **CNAI 10329: a prospective epidemiological study to determine the prevalence of HLA-B\*5701 in HIV-1 infected individuals in five European countries**

JM Prins<sup>\*1</sup>, A Rauch<sup>2</sup>, C Bergin<sup>3</sup>, M Ristola<sup>4</sup>, T Branco<sup>5</sup> and HC Pearce<sup>6</sup>

Address: <sup>1</sup>Academic Medical Centre, Amsterdam, Netherlands, <sup>2</sup>University Hospital Inselspital and University of Berne, Berne, Switzerland, <sup>3</sup>St James' Hospital, Dublin, Ireland, <sup>4</sup>University Central Hospital, Helsinki, Finland, <sup>5</sup>Hospital de Dia de Doenças Infecciosas, Hospital Amadora-Sintra, Amadora, Portugal and <sup>6</sup>GlaxoSmithKline, London, UK

\* Corresponding author

from Ninth International Congress on Drug Therapy in HIV Infection  
Glasgow, UK. 9–13 November 2008

Published: 10 November 2008

*Journal of the International AIDS Society* 2008, **11**(Suppl 1):P155 doi:10.1186/1758-2652-11-S1-P155

This abstract is available from: <http://www.jiasociety.org/content/11/S1/P155>

© 2008 Prins et al; licensee BioMed Central Ltd.

### **Purpose of the study**

The allele HLA-B\*5701 is strongly associated with hypersensitivity reaction (HSR) to abacavir (ABC). This multi-centre observational study determined HLA-B\*5701 prevalence in the HIV-1 population in five European countries (The Netherlands, Switzerland, Ireland, Portugal and Finland). Secondly, the HLA-B\*5701 prevalence in major ethnotypes was assessed and HLA-B\*5701 local and central laboratory methodologies were compared. Similar prevalence studies were performed in other European countries.

### **Methods**

Any HIV-1 infected patient aged 18 years or older was eligible for the study. Patients provided cheek cells and blood samples for HLA-B\*5701 assessment by central and local laboratory methodologies. All patients with HLA-B\*5701 results available from the central laboratory were included in the analyses.

### **Summary of results**

A total of 1,112 subjects were recruited; 78% of Caucasian origin and 12% of black origin. 1,106 out of 1,112 samples were available for determining HLA-B\*5701 status by the central laboratory. Test results were completely consistent between central and local laboratories. Overall prevalence of HLA-B\*5701 was 5.9% (65/1,110; 95% CI: 4.5–7.4%). Prevalence rates varied significantly across participating countries ( $p = 0.003$ ) and ranged from 8.8%

in Switzerland to 1.3% in Portugal. The latter may be due to the relatively high number of subjects of black origin, thus reflecting the choice of centres with larger proportion of immigrant populations from the African countries. Prevalence rates varied significantly between Caucasian subjects (6.7%) and subjects of black origin (0%) ( $p = 0.002$ ).

### **Conclusion**

This study adds to the available data on HLA-B\*5701 prevalence in European populations, and shows further variation in the prevalence of HLA-B\*5701 in different countries. It is important to understand the prevalence of the allele in specific populations to inform cost-effectiveness models with regard to genetic screening for ABC HSR.