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SUMMARY OF THESIS*

CIMERMAN, Sérgio – Avaliação da resposta anti-retroviral com o teste imunoenzimático menos sensível (ELISA detuned) em pacientes com infecção pelo HIV/AIDS. São Paulo, 2002. (Tese de Doutorado – Escola Paulista de Medicina/Universidade Federal de São Paulo).

ASSESSMENT OF ANTIRETROVIRAL RESPONSE BY THE LESS SENSITIVE IMMUNOENZYMATIC TEST (DETUNED ELISA) IN HIV-INFECTED/AIDS PATIENTS

Objective: To assess the antiretroviral response by the less sensitive immunoenzymatic test (detuned ELISA) in HIV-infected/AIDS patients.

Cases and methods: The less sensitive ELISA (detuned) was applied to samples from a previous study on patients submitted to a potent antiretroviral scheme based on the use of indinavir sulfate. Patient samples stored frozen at -80°C were evaluated at zero, 4, 8, 12, 16, and 20 weeks by flow cytometry and by the polymerase chain reaction (RT-PCR) with sensitivity of less than 400 copies in both cases. The detuned ELISA was carried out as recommended by the manufacturer and by the Centers for Disease Control and Prevention, with standard optical density (SOD) measured with a spectrophotometer. Each sample was processed in the screening mode and confirmation was necessary in some cases. When the confirmatory mode was necessary, an SOD of less than 1,000 was recommended as a non-reactive test (negative detuned), probably a test with low circulating antibodies. **Results:** Two out of the 119 samples in the series were found to present a negative detuned test at 16 and 20

weeks and at 12 weeks, respectively. The Spearman correlation and Friedman tests showed a tendency to an antiretroviral response when the levels of absorbance obtained by detuned ELISA were compared to the viral burden, and a highly significant correlation was observed when CD_4 cells and viral burden were compared. **Conclusions:** The proposed methodology was employed for the first time in the present study in order to assess the antiretroviral response in HIV-infected/AIDS patients. This method had been previously used only to determine the annual incidence of recent infection in large populations. Additional studies are needed for the evaluation of less sensitive (detuned) ELISA as a possible marker of the efficacy of antiretroviral response in patients with AIDS.

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