EVALUATION OF THE WESTERN BLOT (WB) KITS INDETERMINATION INDEX USED FOR THE TRIAL OF HTLV-1/2 INFECTION.


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HTLV-1/2 trial became mandatory in blood banks in some countries since 1986, and in Brazil it was initiated in 1993. The diagnosis is done by ELISA and WB, IFA, RIPA or INNO-LIA and PCR techniques. Blood donors have been presenting a relevant seroindetermination index by WB, which led the blood banks to adopt additional specific techniques to the diagnosis conclusion. Our objective is to evaluate the relationship among WB indetermination and the major commercially available kits through a bibliographical survey of the available publications, which had been used in the WB technique in serological trial. Until now, we found 24 articles corresponding to a total sampling of 7,323 patients in which was used the cited technique. From the evaluated articles, we analyzed the relationship among the used kits and the supplied indetermination percentage by this method. The three more useful kits were: Genelabs2.3, with a sampling of 1,022 and an indetermination of 34.2% (SD = 25%), Genelabs2.4, showing a sampling of 1,162 patients and an indetermination percentage of 35% (SD = 22.6%) and Cambridge Biotech, with a sampling of 5,139 and an indetermination index of 15.6% (SD = 4.27%). This study allowed us to demonstrate the significant relationship among the used kits at the Western Blot technique and the indetermination percentage supplied by them. Cambridge Biotech showed the lowest indetermination index. However, it does not confer the differentiation among HTLV-1 and HTLV-2, even with a significant quantity of realized tests (5,139). The difference of indetermination among the Genelabs versions was lower than 10%.