

PRELIMINARY EVALUATION OF THE CHORUS SYSTEM FOR THE DETERMINATION OF ANTI-TOXOPLASMA GONDII IgM.

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The determination of IgM class antibodies is a very important test in the evaluation of the immune state of pregnant women. Among the kits available in the market, the VIDAS Toxo IgM kit (BioMérieux) is surely one of the most used ones due to its optimal levels of specificity and sensitivity. Recently, DIESSE Diagnostica Senese SpA has developed the Chorus system for the automatic performance of the ELISA test by means of single test ready-to-use devices. In this evaluation we preliminarily analysed the Chorus system for the titration of anti-Toxoplasma IgM-class antibodies, in comparison with the VIDAS method used in our laboratory.

232 samples were tested, some of them taken from the daily routine and some from our serum collection, in order to test the agreement of the Chorus Toxoplasma IgM test with the VIDAS Toxo IgM test.

Out of 232 samples, 221 gave a result in agreement between the two diagnostic systems; in particular, 187 samples proved negative, 31 proved positive and 3 proved doubtful using both methods. Analysing more in detail the samples in disagreement, it was noticed that 5 out of 11, resulted positive with the Chorus system and doubtful with the VIDAS system; moreover, the positivity indexes of such samples proved a little bit higher than 1.2 (higher limit of the grey zone, for the Chorus system). In 3 samples out of 11, the Chorus result was doubtful (index 0,9) and negative for VIDAS. As far as the remaining 3 samples in disagreement are concerned, 2 proved doubtful with the Chorus and weakly positive with the VIDAS; one sample proved negative (index 0,7) with the Chorus and doubtful with the VIDAS (0,55, inferior limit of the grey zone).

In conclusion, the Chorus instrument provides results in good agreement with the ones provided for by the VIDAS instrument, with which it shares the reduced sample handling characteristic of automated systems based on single test ready-to-use devices.