

## PRELIMINARY EVALUATION OF THE CHORUS SYSTEM FOR THE DETERMINATION OF IgG ANTI-HELICOBACTER PYLORI.

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In the normal workflow of our Seroimmunology laboratory, besides the routine of large numbers of tests, there is a typology of tests performed in a small quantity (from 1000/year and below), which constitute a small organizational problem, because - above all when they are performed with ELISA method - they must be grouped and performed on fixed days of the week (with consequent lengthening of the "turn-around time"). Moreover, they involve a remarkable employment of personnel (as far as they are often performed with the manual method) and are a source of waste and hidden costs (due for example to the testing of the controls and/or calibrators in each run), which affect the final cost of the test. In this work, we performed a preliminary evaluation of a new analytical system, based on the EIA method with single test ready-to-use devices, the DIESSE Diagnostica Senese SpA's Chorus, using a kit for the determination of anti-H. pylori IgG (approximately 550 tests/year), as a paradigm for this "problem". As a reference kit we used the Enzy-Well H. pylori IgG, manufactured by DIESSE Diagnostica Senese SpA as well, currently used in our laboratory.

113 routine samples were analyzed, obtaining an agreement of 94% (55 positives, 51 negatives). As far as the results in disagreement are concerned, in 5 out of 7 it was due to samples which proved negative with the Chorus system and positive with manual method, with values between 10 and 15 AU/mL, which correspond to the cut-off (respectively pediatric's and adult's) of the manual kit.

In conclusion, the Chorus system proved a very satisfactory agreement with the method in use, with the advantage of allowing the daily performance of the test, and shortening the answer times.