

The Clatterbridge Hospital Study: Comparison of One- Step Assays to the DAKO ELISA

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A group of 297 stool samples collected over the period August 1999 to February 2000 were tested for the presence of rotavirus by the classical DAKO ELISA method, by the Coris Rota-Strip One-Step test and by the Novamed, Ltd. RotaStick One-Step test.

Of the 297 samples 25 were found positive by both methods while 272 were found negative by both methods. There were no inconclusive results; agreement between the two methods was 100%.

As no discrepancies were detected between the methods tested, any advantages had to be found by comparing ease of use, speed of completion of the test, flexibility and cost. Our laboratory made the decision to change from the ELISA method to the immunochromatographic strip method, the problem was to decide which one.

The Coris kit occupied very little space, however the Novamed kit could be stored at room temperature. The Coris kit required test tubes and test tube racks whereas these items were supplied with the Novamed kit and the dilution butter was already individually dispensed. The individually wrapped strips and self contained buffer of the Novamed kit helped to minimize any contamination that could occur when using the Coris kit.

In this laboratory immunochromatography for the detection of rotavirus antigen has been found easy, convenient, reliable, flexible and quick in use. In a high-tech computerized age these kits are a breath of fresh air.

	DAKO ELISA	ROTA-STRIP	ROTASTICK
<i>True positive</i>	25	25	25
<i>False negative</i>	0	0	0
<i>True negative</i>	272	272	272
<i>False positive</i>	0	0	0
<i>Sensitivity (%)</i>	100.0	100.0	100.0
<i>Specificity (%)</i>	100.0	100.0	100.0

Remark: At the end of this study and till now (08/2002) the Clatterbridge Hospital is using the ROTA-STRIP from CORIS BIOCONCEPT