Evaluation of EBV; VCA-M, VCA-G and EBNA-G on CHORUS

The Clinical Microbiology Laboratory in Växjö, during july-august 2005, evaluated a new instrument – CHORUS – from Electra-Box Diagnostica AB. The test was compared to the accredited test currently used in routine (Biotest anti-EBV VCA IgM and anti-EBV EBNA IgG) and tests for heterophile antibodies (Clearview).

We tested forty (40) previously negative and positive samples, and put them in groups as follows:

1. Heterophile antibodies positive, EBV IgM weak positive; 18 samples.
   All of these samples were positive for VCA-M on CHORUS.

2. Heterophile antibodies negative, EBNA weak positive; 7 samples.
   All of these samples were positive for EBNA-G on CHORUS.

3. Heterophile antibodies positive, EBV IgM negative; 13 samples.
   12 samples were VCA-M positive on CHORUS.

4. Heterophile antibodies negative, EBNA just below cutoff; 1 sample.
   EBNA-G and VCA-G positive on CHORUS.

5. Heterophile antibodies negative, IgM slightly elevated; 1 st.
   This sample was in the grey zone for VCA-G on CHORUS.

We tested 52 consecutive samples in parallel with our own method. In 45 of the samples (87%) the results was the same. Five samples were negative in our IgM-test but positive on CHORUS VCA-M. Two samples were positive only with CHORUS VCA-G (IgG-tests are not done in our routine).

Conclusion:
There was good agreement between the tests. CHORUS VCA-M seems, in our evaluation, to have a better sensitivity than Biotest anti-EBV VCA IgM.

We think that the CHORUS is easy to use and requires little effort to perform the analyses.