OBJECTIVES

The performance of two new EBV assay panels on two automated instruments, namely, Abbott ARCHITECT EBV (Abbott, Dolemenheim, Germany) with individual assays for VCA IgG, VCA IgM and EBNA IgG and Bio-Rad’s BioPlex®2200 New EBV IgG (Bio-Rad, Marnes la Coquette, France) multiplex assay with separate modules for simultaneous detection of VCA IgG, EA IgG, EBNA IgG and EBV IgM (sensitive detection of VCA IgM and EAIs as compared to that of LIASON® VCA IgG, EBV IgM and EBNA IgG) was compared in our laboratory.

MATERIALS AND METHODS

462 unselected serum samples (358 seropositive and 104 seronegative) and 170 controls with known EBV serostatus were tested with different EBV serology methods. In cases of discordant serostatus, Mikrogen recomLine EBV IgM/IgG immunoblots (Mikrogen, Neuried, Germany) were used to resolve discrepancies.

RESULTS

The following Tables (II, III and IV) show the comparison of serologic EBV status of 462 samples.

Concordance between EBV status of ARCHITECT and LIASON®

In case of discordant serostatus, Mikrogen recomLine EBV IgM/IgG immunoblots (Mikrogen, Neuried, Germany) were used to resolve discrepancies.

Concordance between EBV status of BioPlex®2200 and LIASON®

Evaluation of assays for VCA IgG in EBV primary infection

The agreement with ARCHITECT and BioPlex®2200 compared to LIASON® was 95% and 91% for Primary infections, 95% and 94% for Initial EBV infection, 86% and 94% for past infections and 72% and 67% for Seronegative profiles, respectively. The concordance between ARCHITECT and LIASON® was 98%.

Conclusions

An isolated VCA IgM was detected in 64% of cases with BioPlex®2200. New EBV IgG appears later than VCA IgG of ARCHITECT and LIASON® during the primary infection.

REFERENCES

1. T.D Ly, C Coignard, C Marcenaro (Biomnis, Ivry sur Seine, France) 24th ECCMID 19-13 May 2014, Barcelona

Performance of two new fully automated immunoassay panels (ARCHITECT and BioPlex® 2200 New EBV IgG) for the determination of Epstein-Barr Virus serological status

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