ANALYTICAL AND CLINICAL EVALUATTOM 0F AUTOMATED IMMUNOASSAYS FOR SERUM CK-MB AND MYOGLOBIN USING THE OPUS MAGNUM ANALYSER.

.Jean-Paul Chapelle, Thierry Spronck, Anne-Marie Ferir. (University Hospital, University of Liège, B-4000 Liège, Belgium)

The multiparametric immunoassay analyser OPUS MAGNUM (Behring) uses individual modules for measuring various serum proteins through calibration curves previously stored in the system. We evaluated the performance characteristics of the OPUS MAGNUM for determining creatine kinase (CK)-MB and myoglobin, two typical myocardial markers. The results were compared with measurements obtained using immunoassay (IMX, Abbott) and immunonephelometry (BNA. Behring).
Within assay and between assay CVs,, determined within the whole measuring range, ranged from7.5 to 11.1% for myoglobin and from 6.2 ire 13.7% for CK—MB. Calibration curves stability was at least two weeks; keeping CK-MB (r=O.99, n=10O) and between OPUS MAGNUM and BNA for myoglobin (r=0.99, n=84) was excellent. For CK-MB, no statistically significant difference was recorded between the results obtained on the same sample using the "stats and "batch" mode on the OPUS MAGNUM. During one week of routine and emergency use for CK-MB and myoglobin in in-hospital patients, no discrepancies were recorded compared with our routine methods.

We conclude from this study that the determination of CK-MB and myoglobin using the OPUS MAGNUM analyser is reliable and pratical and that this system is appropriate to the emergency laboratory.