

## ORIGINAL ARTICLE

# **Analyzer Transfer of a Broad Range High-Sensitivity C-Reactive Protein Immunoassay**

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### SUMMARY

C-reactive protein (CRP) is measured in two main clinical situations: inflammation, where levels in the range of 5-300 mg/L are expected, and, more recently, assessment of the cardiovascular risk, where concentrations between 0.1 and 10 mg/L should be determined. Few commercially available methods display a measuring range covering both zones and laboratories are compelled to use two different assay protocols or even two different methods. The aim of the study was to adapt the Roche C-Reactive Protein (Latex) kit, initially developed for the Roche Cobas Integra analyzers, to the Hitachi Modular P800 analyzer in order to obtain on this instrument a broad range assay for CRP measurement. The method was successfully adapted and validated against a high-sensitivity and a traditional assay. The resulting method correlates well with the other two and displays a measuring range of 0.10-171 mg/L with an imprecision lower than 5.5%. This assay could be particularly practical in the routine clinical laboratory, being suitable for every use of CRP measurements. (Clin. Lab. 2001;47:405-409)