"Testing for Soluble ST2 in Heart Failure Patients: Reliability of a Point of Care Method"

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ABSTRACT

BACKGROUND: Our objective was to determine soluble ST2 (sST2) concentrations in heart failure (HF) patients with a point-of-care (POCT) assay. METHODS: sST2 levels were measured in 71 HF patients with both POCT and ELISA methods. The concentrations of sST2 were correlated to HF severity and to some established biomarkers of cardiovascular risk. RESULTS: sST2 levels measured with the ASPECT-PLUS POCT method were significantly correlated with the comparison ELISA assay (r = 0.94, p < 0.01) and were related to HF severity. Levels of sST2 measured with the POCT assay were significantly correlated to NT-proBNP (r = 0.57, p < 0.001), BNP (r = 0.75, p < 0.001), Galectin-3 (r = 0.40, p < 0.01) and PTH (1-84) (r = 0.39, p < 0.01). CONCLUSIONS: POCT and ELISA methods for sST2 testing were significantly correlated, and our results confirmed also the clinical reliability of the sST2 POCT assay. Furthermore, the POCT method allows a faster delivery of results to physicians.

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PMID: 28164491