# High Sensitivity C-Reactive Protein: Emerging Biomarker for Primary Prevention of Cardiovascular Disease

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Increased CRP as measured using a high-sensitivity assay (hsCRP) is considered to be a very promising novel biochemical marker for the prediction of future coronary events. Several prospective studies have also demonstrated that hsCRP is a predictor of future cardiovascular morbidity and mortality among individuals with known cardiovascular disease.[1,2] Recently completed study, clinical trial JUPITER[3] has demonstrated that statins therapy to those with elevated hsCRP can significantly reduce future Cardiovascular disease (CVD). US National guidelines[4] suggested that patients who are at intermediate risk (10%–20% 10-year predicted risk) for future cardiovascular events and who also have increased hsCRP (>3 mg/L) be considered for more aggressive vascular disease prevention strategies.

We had read with interest on recent reports of Ghosh et al "Prognostic value of baseline high-sensitivity C-reactive protein in patients undergoing replacement arthroplasty" "published in Journal of Nepal Medical Association 2009 vol 48 No 3 issue 174 page 144-8." It is very interesting to know elevated baseline hsCRP can predict the complication after post operative D14 of replacement arthroplasty. However, use of term high sensitivity on the article is not justifiable. High sensitivity refers detection of minimally elevated CRP and the technique usually have detection limit less than 0.03 mg/dL (0.3 mg/L). CRP greater than 1.0 mg/dL can be routine estimated in laboratory and doesn't refer high sensitivity. Recent laboratory medicine guideline by National academy of clinical biochemistry,[5] recommended that hsCRP results, regardless of the method used, should be expressed as mg/L. Further, hsCRP assays categorizes patients as Low risk <1.0 mg/L, Average risk 1.0–3.0 mg/L, High risk <3.0 mg/L, Very high risk ≥10.0 mg/L. US National guidelines (2003) also suggest similar categories but it had recommended hsCRP ≥10.0 mg/L as indicator of other inflammatory diseases. Ghosh et al had used unit of mg/dL and categorized patients on the basis of hsCRP as <3.0 mg/dL and >3.0 mg/dL that is (<30.0 mg/L and > 30.0mg/L). Such highly elevated condition can be seen only in the state of inflammation and are detected by routine CRP not by so called hsCRP.

## REFERENCES

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