

ORDERS FOR C-REACTIVE PROTEIN (CRP)

CRP is measured acute phase reactive protein which can be helpful in the evaluation of infectious processes, autoimmune disorders, connective tissue disorders and cardiovascular disease risk assessment. There are two CRP assays available: High-sensitivity (Hs-CRP) and Low-sensitivity (Ls-CRP); both measure the same protein.

Methodist Hospital Pathology Center laboratory has been performing High sensitivity C-reactive protein (reported as mg/L) testing since 2003.

Low sensitivity CRP (reported as mg/dL) is only performed in a reference lab, resulting in an increased test result turnaround time and cost.

Starting **March 19, 2018**, all Ls-CRP orders will be converted to Hs-CRP and reported as such.

Review of the literature shows that Hs-CRP is a suitable surrogate for Ls-CRP and other traditional inflammation and infection biomarkers.

Statistical and mathematical analysis showed that Hs-CRP is highly correlated (R=0.92) with Ls-CRP and regression analysis revealed a conversion factor of 9.2 (p<0.01).

Ls-CRP (mg/dL) = Hs-CRP (mg/L) X 9.2
For simplicity, a conversion factor of 10 may be used.

Hs-CRP is offered 24 hours a day/7 days a week.

Hs-CRP reference range:

- <1.0 mg/L – Low cardiovascular disease risk
- 1.0 - 3.0 mg/L – Average cardiovascular disease risk
- >3.0 mg/L – High cardiovascular disease risk
- >10 mg/L – Acute inflammation

Please direct any questions to Dr. George Bedrnicek at (402) 955-5528 or Dr. Deborah Perry at (402) 354-4559.

REFERENCE:

Milone MT, Kamath AF, Israelite CL.

Converting between high- and low-sensitivity C-reactive protein in the assessment of periprosthetic joint infection.
J Arthroplasty. 2014 Apr;29(4):685-9. doi: 10.1016/j.arth.2013.09.015. Epub 2013 Oct 18.