

**Date:** March 17, 2016  
**To:** North Zone- Westlock Hospital  
**Physicians, Nurses, Laboratory Directors and Managers**  
**From:** AHS Laboratory Services  
**Re:** On site C-Reactive Protein (CRP) Testing at Westlock Hospital

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**Key Messages:**

- Effective **April 5<sup>th</sup>, 2016**, on site CRP testing will be implemented at the Westlock hospital laboratory for both pediatric and adult patients.
- The new test code is CRP1
- CRP1 testing will replace ESR when ordered.
- A pop up comment will prompt the user to order a CRP1 instead.
- The reference interval for males and females is <10 mg/l

**Why this is important:**

C-Reactive Protein is considered the best single test because:

- CRP shows a rapid response to infection and inflammation and correlates well with the severity of inflammation. It increases within an hour of stimulus and returns rapidly to normal following resolution/therapy.
- AHS Laboratory Services has recommended CRP instead of ESR when investigating inflammation/infection<sup>1</sup>

CRP levels correlate well with the severity of inflammation<sup>1</sup>

CRP (mg/L)	
10-40*	Mild inflammation, viral or bacterial infection
40-90*	Moderate inflammation, viral or bacterial infection
>90*	Marked inflammation, severe bacterial infection, vasculitis, severe arthritis

\*Estimated concentrations inferred from literature values

- Physicians will be notified by a result comment that the CRP has been substituted for ESR as the preferred single test. If ESR is still required either in place of or in conjunction with CRP, please contact the laboratory and provide an indication.

**Action Required:**

- Effective April 5<sup>th</sup>, 2016, begin ordering CRP testing on symptomatic patients. Discontinue ordering ESR.

**References:**

1. AHS Laboratory Report. April 2013. "C-Reactive Protein (CRP). The Best Lab Test for Inflammation/Infection."

**Inquiries and feedback may be directed to:**

- Dr. Ying-Han (Roger) Hsu, Consultant Pathologist for Westlock at 587-772-1200

**This bulletin has been reviewed and approved by:**

- Dr. Carolyn O'Hara, Deputy Zone Clinical Department Head (North Zone), Laboratory Services.