

| <h2>Serum Amyloid A</h2> | |
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| Description | A very sensitive positive acute phase reactant |
| Indication | <p>Lack of specificity severely limits utility, therefore routine measurement is not recommended.</p> <ul style="list-style-type: none"> • Monitoring activity of inflammatory disease • Prediction of early mortality in acute coronary syndromes |
| Additional Info | <p>Serum amyloid A (SAA) is the circulating precursor of amyloid A protein, the fibrillar component of amyloid deposits. SAA is synthesised in the liver and secreted into the plasma in response to multiple cytokines during the acute phase response. Serum amyloid A in plasma is predominantly associated with high-density lipoprotein (HDL) and has several roles, including transport of cholesterol to the liver, recruitment of immune cells to inflammatory sites, and induction of enzymes that degrade extracellular matrix. SAA is implicated in several chronic inflammatory diseases, including amyloidosis, atherosclerosis, and rheumatoid arthritis. Reactive secondary amyloidosis is characterized by extracellular accumulation of the SAA protein in various tissues, forming highly stable deposits that are resistant to proteolysis, disrupting tissue structure and compromising function.</p> |
| Concurrent Tests | <p>C-reactive protein (CRP) Erythrocyte sedimentation rate (ESR)</p> |
| Dietary Requirements | N/A |
| Interpretation | <p>The level of SAA in the blood increases rapidly to up to 1000x normal in response to tissue injury and inflammation. High SAA is a very non-specific finding and elevated levels have been reported in a number of conditions, including sarcoidosis, systemic lupus erythematosus (SLE) rheumatoid arthritis, colitis, malignancies, unstable angina and the common cold. SAA in the blood also increases with consumption of dietary fat and cholesterol.</p> |
| Collection Conditions | Avoid measurement during intercurrent illness |
| Frequency of testing | <p>As required to guide management. Not recommended for routine measurement.</p> |