

Markers of Inflammation

Test	What is it?	Utility	Role in Infection	Confounders	Normal Range
Erythrocyte Sedimentation Rate (ESR)	Rate at which RBCs fall in a test tube (mm/hour)	Surrogate marker of inflammation	Rises in 24-48 hours, slow decline may correlate with resolution of infection/inflammation	Autoimmune diseases, cancer, pregnancy, obesity, age	Newborn: 0-2 Children: 3-13 Women: 0-29 Men: 0-22
C-Reactive Protein (CRP)	Protein made in response to elevations in IL-6	Direct marker of inflammation	Rises in 4-24 hours, peaks at 48 hours, tighter correlation with acute infection		0-3 (upper limit varies depending on assay)
Procalcitonin	Protein made in response to	Direct marker of bacterial inflammation	Rises in 2-4 hours, peaks in 24 hours, parallels with severity of infection or inflammation (higher value is worse)	Renal disease, stimulant use, trauma, surgery	<0.1 (for infants > 72 hours to adults) Suspected pneumonia >0.25 Suspected sepsis > 0.5