

## Interpretation and Utilization Guidance of Immunopathology Tests

<b>Vasculitis Panel</b>			
<b>Antibody</b>	<b>Antigen</b>	<b>Disease Association</b>	<b>Maximum frequency</b>
Anti-GBM	Glomerular and alveolar basement membrane	Elevated in Goodpasture's Syndrome and Anti-Glomerular Basement Membrane Disease	Once Monthly
Anti-MPO	Myeloperoxidase	Elevated in certain vasculitides, ie Microscopic Polyangiitis and Churg-Strauss Syndrome. This autoantibody typically results in a P-ANCA staining pattern on immunofluorescence, but this type of assay is no longer performed at the QE II HSC lab)	Once Monthly
Anti-Proteinase	Serine Proteinase-3 (PR3)	Elevated in Granulomatosis with Polyangiitis (formerly called Wegener's Granulomatosis). This antibody typically results in a C-ANCA staining pattern on immunofluorescence, but this type of assay is no longer performed at the QE II HSC lab)	Once Monthly

<b>ANA Panel</b>			
<b>Antibody</b>	<b>Antigen</b>	<b>Disease Association</b>	<b>Maximum frequency</b>
ANA	Note: the ANA is positive if any of the specificities below are positive (it is not a separate test)		Once every 2 weeks
Anti-dsDNA	Double-stranded DNA	Systemic Lupus Erythematosus (SLE). Highly specific but low sensitivity. Elevated levels may be associated with renal involvement and active lupus.	Once every 2 weeks
Anti-Chromatin	dsDNA with its associated histone and non-histone proteins	Seen most commonly in SLE	Once every 2 weeks
Anti-Ribosomal-P	Phosphoproteins (P proteins) located on the 60S subunit of ribosomes	Highly specific for SLE. Associated with neuropsychiatric manifestations of lupus (weakly predictive)	Once every 2 weeks
Anti-SS-A/Ro	60 kDa cytoplasmic ribonucleoprotein	Found in Sjogren's Syndrome and in SLE. Associated with sicca syndrome, photosensitive rash neonatal lupus and congenital heart block in neonates.	Once every 2 weeks
Anti-SS-B/La	47 kDa cytoplasmic ribonucleoprotein	Found in Sjogren's Syndrome and in SLE. Associated with sicca syndrome, photosensitive rash neonatal lupus and congenital heart block in neonates.	Once every 2 weeks
Anti-Centromere B	Centromere B	Highly specific and sensitive for Limited Scleroderma (CREST).	Once every 2 weeks

Anti-Sm	Small nuclear ribonucleoproteins	Highly specific but low sensitivity for SLE	Once every 2 weeks
Anti-Sm/RNP	Small nuclear ribonucleoproteins (U1 snRNP, which includes proteins reactive to anti-Sm and anti-RNP)	Positive when either anti-Sm or anti-RNP antibodies are present.	Once every 2 weeks
Anti-RNP	Small nuclear ribonucleoproteins	When associated with anti-Sm antibodies it is associated with SLE. When present by itself it is associated with Mixed Connective Tissue Disease (MCTD)	Once every 2 weeks
Anti-Scl-70	Topoisomerase I	Highly specific but low sensitivity for Diffuse Scleroderma.	Once every 2 weeks
Anti-Jo-1	Histidyl tRNA synthetase	Highly specific but low sensitivity for Polymyositis	Once every 2 weeks

<b>Miscellaneous Immunopathology Tests</b>			
<b>Antibody</b>	<b>Antigen</b>	<b>Disease Association</b>	<b>Maximum frequency</b>
Anti-Cardiolipin	Cardiolipin (a phospholipid)	Found in 30-40% of patients with SLE, or by itself. May be associated with unexplained venous or arterial thrombosis or recurrent fetal loss	Once Monthly
Anti-AMA-M2	Mitochondrial proteins	Associated with Primary Biliary Cirrhosis	Once every 6 months
Anti-Smooth Muscle Antibody	Actin, troponin or tropomyosin in smooth muscle	Associated with Autoimmune Liver Disease	Once every 6 months
Anti-LKM1 Antibody	Cytochrome P-450IID6	Associated with Autoimmune Liver Disease	Once every 6 months
Anti-TTG	Tissue transglutaminase	Associated with Celiac Disease. It is an IgA based test, therefore obtain immunoglobulin levels to ensure patient is not IgA deficient which might lead to false negative test result.	Once every 6 months