

MEMORANDUM

FROM: Anatomic Pathology and Virology, Immunology and Molecular Microbiology

DATE: March 28, 2012

RE: Frequency of immunopathology testing

As part of our ongoing commitment to efficient resource utilization we have reviewed the frequency with which markers for vasculitis, rheumatologic disorders and other Immunopathology should be tested. The guidelines outlined below were developed with the input from our rheumatology, gastroenterology and surgical colleagues. If you have any questions please do not hesitate to contact the laboratory.

These utilization rules will begin on May 1, 2012

Vasculitis Panel

Anti-GBM Once Monthly
Anti-MPO Once Monthly
Anti-Proteinase Once Monthly

ANA Panel Once every 2 weeks

(Including: Anti-dsDNA, Anti-Chromatin, Anti-Ribosomal-P, Anti-SS-A/Ro, Anti-SS-B/La, Anti-Centromere B, Anti-Sm, Anti-Sm/RNP, Anti-RNP, Anti-Scl-70, Anti-Jo-1)

Other Immunopathology Tests

Anti-Cardiolipin Once Monthly

Anti-CCP * Once every 3 months
Anti-AMA-M2 Once every 6 months
Anti-Smooth Muscle Antibody Once every 6 months
Anti-LKM1 Antibody Once every 6 months
Anti-TTG Once every 6 months

Sincerely,

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^{*} CCP can only be ordered by Rheumatologists.



Interpretation and Utilization Guidance of Immunopathology Tests

| ANA Panel | | | | | |
|-----------------------|--|--|-----------------------|--|--|
| Antibody | Antigen | Disease Association | Maximum frequency | | |
| 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 | | |



Capital Health

| Miscellaneous Immunopathology Tests | | | | |
|-------------------------------------|---|--|------------------------|--|
| Antibody | Antigen | Disease Association | Maximum frequency | |
| 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-CCP | Cyclic citrullinated peptides | Sensitivity similar to rheumatoid factor for diagnosis of Rheumatoid Arthritis (RA). Specificity for RA slightly higher than rheumatoid factor. Available only to rheumatologists. | Once every 3 months | |
| 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 transgultaminase | 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 | |