MAYO CLINIC LABORATORIES

First-Line Screening for Autoimmune Liver Disease Algorithm

Assessing a patient with liver disease of unknown origin associated with increased liver enzymes and elevated serum immunoglobulins following exclusion of known liver injury which includes infection-, alcohol-, drug-, genetic-, and metabolic-related causes.

Order ALDG2 / Autoimmune Liver Disease Panel, Serum

POSITIVE RESULT(S)

Antimitochondrial antibody (AMA) positive only

Suggestive of PBC, myositis, or SLE

To aid in differentiation between PBC and SLE, consider ordering
- ADNA1 / Double-Stranded DNA (dsDNA) Antibodies, IgG, Serum
- PBC2 / SP100 and GP210 Antibodies, IgG, Serum
- SM / Smith (Sm) Antibodies, IgG, Serum

Antinuclear antibody (ANA) positive only

Suggestive of AIH, PBC, SARD, or overlap disease

Consider testing for additional analytes based on the guidance provided in the report for the ANA HEp-2 immunofluorescence assay pattern and clinical suspicion AND PBC2 / SP100 and GP210 Antibodies, IgG, Serum

AMA and ANA positive

Suggestive of PBC or PBC overlap with AIH or SARD

Consider testing for additional analytes based on the guidance provided in the report for the ANA HEp-2 immunofluorescence assay pattern and clinical suspicion AND PBC2 / SP100 and GP210 Antibodies, IgG, Serum

Smooth muscle antibody positive/ANA positive or negative

Suggestive of AIH

Consider testing for additional analytes based on the guidance provided in the report for the ANA HEp-2 immunofluorescence assay pattern AND FACT / Filamentous-Actin (F-actin) Antibody, IgG, Serum

NEGATIVE RESULTS

Consider:
- PBC2 / SP100 and GP210 Antibodies, IgG, Serum
- LKM / Liver/Kidney Microsome Type 1 Antibodies, Serum
- FACT / Filamentous-Actin (F-actin) Antibody, IgG, Serum
- ANCA / Cytoplasmic Neutrophil Antibodies, Serum
- Soluble Liver Antigen (SLA) Autoantibody

Clickable PDF
Click on blue tests to view test catalog information

AIH: autoimmune hepatitis
PBC: primary biliary cholangitis
SARD: systemic autoimmune rheumatic disease
SLE: systemic lupus erythematosus

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