

Possible patient presentations:

- Nephrotic-range proteinuria with or without renal insufficiency (nondiabetic)
- Infiltrative cardiomyopathy with restrictive hemodynamics and no ischemic history
- Hepatomegaly with no filling defects visible by imaging
- Nondiabetic peripheral neuropathy
- Fatigue, weight loss, dyspnea, edema, or paresthesias
- Macroglossia
- Classic amyloid purpura
- Atypical myeloma

Order the following tests:

- FLCS / Immunoglobulin Free Light Chains, Serum
- QMPSS / Monoclonal Protein Study, Quantitative, Serum
- MPU / Monoclonal Protein Studies, 24 Hour, Urine
- ALB / Albumin, Serum

Monoclonal protein present?

YES

NO

Bone marrow biopsy and fat biopsy^{1,2}
Consider a Hematology consultation

Amyloid light-chain (AL) amyloidosis diagnosis unlikely

Consider testing for other types of amyloidosis, including wild-type transthyretin amyloidosis (ATTRwt), hereditary amyloidoses, and other types of acquired amyloidoses, that have not been excluded.

YES

NO

Congo red-positive amyloid deposits are present

Negative for amyloid

Order AMPIF / Amyloid Protein Identification, Paraffin, Mass Spectrometry¹

Clinical suspicion
High Low

Consistent with AL amyloidosis

Consistent with ATTR amyloidosis

Consistent with other amyloidoses

Affected organ biopsy

Amyloidosis unlikely

Negative

Consider gene sequencing:
TTRZ / TTR Gene, Full Gene Analysis, Varies

Consider gene sequencing, as appropriate.
Order CGPH / Custom Gene Panel, Hereditary, Next-Generation Sequencing, Varies
Add the appropriate gene list ID with the order:

- APOA1 Gene List ID: CARDIOPLUS-PW7T76
- APOA2 Gene List ID: NEUROLOGY-9C863W
- GSN Gene List ID: NEUROLOGY-GH6K94
- LYZ Gene List ID: NEUROLOGY-P3K319
- FGA Gene List ID: NEUROLOGY-9T6N8N

¹Consider alternative sites, such as gastrointestinal tract, lip, carpal tunnel/ tenosynovium, etc.
²Since fat aspirate specimens are required to be collected in RPMI media, AMPIF / Amyloid Protein Identification, Fat Aspirate, LC-MS/MS testing is only available for Congo-red positive samples from Mayo Clinic sites in Rochester, Arizona, and Florida.