

## DOCUMENTATION

- MoCA Score
- AQ-21 Assessment

## OPTIONAL DOCUMENTATION

- MRI for hippocampal volume and cerebral atrophy (use Neuroreader or Neuroquant)
- Neuropsych testing (include CVLT, Trails B); if on-line evaluation is preferred, use Posit, Lumosity, Cogstate, or Brain Health Report, but in any case, evaluations of memory, executive function, and overall percentile for age are needed. CNS Vital Signs will work as an alternative.
- PiB scan (or other amyloid imaging, such as Amyvid)
- Exclude sleep apnea
- FDG PET
- SPECT scan
- EEG assessment of cholinergic function
- Neurovision (retinal imaging for plaques) or NeuroTrack (eye movement test, via Internet or special equipment, indicative of MTL degeneration)
- Neural exosomes (cathepsin D, Abeta42, p-tau 181, IRS1-pY, IRS1-pS/T ratio)

## LABS - INCLUDED

- ApoE4 status; whole exome, exome chip, or genome.
- Homocysteine
- Hemoglobin A1c, fasting insulin
- Lipid Panel: Total Cholesterol, HDL, Triglycerides, LDL-Cholesterol (calculated), Cholesterol/HDL Ratio (calculated), Non-HDL Cholesterol (calculated)
- Complete Metabolic Panel: Albumin, A/G Ratio, Alkaline Phosphatase, ALT, AST, BUN/Creatinine Ratio, Calcium, Carbon Dioxide, Chloride, Creatinine with GFR Estimated, Globulin, Glucose, Potassium, Sodium, Total Bilirubin, Total Protein, Urea Nitrogen
- Hs-CRP (high sensitivity C-reactive protein)
- Hormone status: estradiol, DHEA-S, total testosterone, free T3, reverse T3, free T4, TSH, progesterone, cortisol
- Vitamin D
- Vitamin B12, folate
- Vitamin E (Vitamin A, E, b-carotenold Panel)
- Heavy Metals Panel: (Hg, Pb, As)
- Zinc
- Copper
- RBC Mg
- MMP9

## OPTIONAL LABS

- HLA-DR/DQ to identify toxin-sensitive haplotypes (Quest Code 15485 and 19526)
- Glutathione
- Heavy Metals: Cd
- VEGF, VIP, ADH
- Hormone status: Pregnenolone, free testosterone
- Vitamin B6, C
- TNF-alpha, IL-6
- C4a (Quest Labs or Bioref—
- both do via Jewish Hospital in Colo., which is most accurate); MSH
- Iron, Ferritin
- Lyme test (Western blot or similar)
- Serum Iodine
- Cyrex Array 2 (indicates GI leak), 3 (gluten sensitivity), 20 (blood-brain barrier) tests. Can do antibodies to LPS for GI leak test.
- Standard urinalysis
- Food sensitivity testing if Cyrex Array 2 is abnormal
- Omega-6:Omega-3 Ratio
- Antibodies to HSV-1
- TGF-beta1
- Ceruloplasmin
- Penicillium notatum
- Penicillium glabrum

*Follow-up tests can be ordered if any of the above show abnormal values, in order to determine the underlying cause(s).*