

**University of Cincinnati Liver Transplant Program
Pre-Transplant Evaluation Laboratory Blood, Urine Test and Vaccine Checklist**

Required laboratory tests:

- CBC with differential
- Renal function panel
- Hepatic function
- PT (INR)
- PTT
- AFP
- Type and screen
- Drug screen, urine

Required laboratory tests (if not already available from outside referral/laboratory):

- Hepatitis A antibody IgG [Note: NOT IgM]
- Hepatitis B surface antigen
- Hepatitis B surface antibody
- Hepatitis B core antibody [Note: NOT IgM]
- Hepatitis C antibody
- TSH
- HIV-1 and HIV-2 (Antibody screen with reflex to Western blot)
- Trepia (syphilis screen)
- CMV IgG antibody
- Epstein Barr (EBV) VCA, IgG
- Toxoplasma antibody, IgG
- Varicella Zoster Virus antibody, IgG [Note: NOT IgM]
- MMR immunity profile.
- Quantiferon Gold
- Iron / TIBC
- Ferritin
- Alpha-1-antitrypsin, total
- Vitamin D, 25-hydroxy
- Hemoglobin A1C
- Lipid profile (cholesterol, triglycerides, HDL, LDL)
- IgA

Required laboratory tests (Disease Specific)

- **Hepatitis B: *if the patient is HepBsAg positive or if diagnosed with hepatitis B:***
 - Hepatitis B DNA quant, by PCR
 - Hepatitis B E antigen
 - Hepatitis B E antibody
 - Hepatitis delta virus antibody

- **Hepatitis C: *if the patient is Hepatitis C Ab positive or if diagnosed with hepatitis C:***
 - Hepatitis C quant, by PCR
 - Hepatitis C genotyping

- **Immune-mediated liver disease: *if the patient is diagnosed with autoimmune hepatitis, primary biliary cirrhosis, or autoimmune cholangitis:***
 - ANA
 - Anti-Smooth Muscle antibody (ASMA)
 - Anti-Mitochondrial antibody (AMA)
 - Immunoglobulin, quantitation

- **Primary sclerosing cholangitis: *if the patient is diagnosed with primary sclerosing cholangitis:***
 - ANCA screen with reflex
 - IgG subclass
 - CA 19-9

- **Alpha-1-antitrypsin deficiency: *if the patient is diagnosed with alpha-1-antitrypsin deficiency or if the A1AT level is low:***
 - Alpha-1-antitrypsin, phenotype

- **Wilson's disease: *if the patient is diagnosed with Wilson's disease***
 - Ceruloplasmin
 - Copper, urine (24 hour collection)

- **Hereditary hemochromatosis: *if the patient carries the diagnosis of hereditary hemochromatosis***
 - Hemochromatosis mutation analysis

- **Cryptogenic cirrhosis: *if the patient has been labeled as having cryptogenic cirrhosis:***
 - ANA
 - Anti-Smooth Muscle antibody (ASMA)
 - Anti-Mitochondrial antibody (AMA)
 - Ceruloplasmin

Vaccinations: *what is required for each patient depends on their lab results*

Hepatitis A: All patients who are negative for antibody to hepatitis A should receive the hepatitis A vaccine (0, 6 months)

Hepatitis B: All patients who are negative for both HepBsAb AND HepBsAg should be vaccinated against hepatitis B (0, 1, and 6 months)

Varicella: Most patients who are negative for antibody to varicella zoster should be vaccinated. Transplant ID will evaluate for vaccination.

Influenza: All patients should be vaccinated annually

Pneumovax: All patients should be vaccinated every 2 – 5 years

Tetanus/Diphtheria : All patients should be vaccinated every 10 years (Tdap then Td booster every 10 yrs)

Neisseria meningitis vaccine: Should be offered to college-age and asplenic patients.

Measles, mumps, rubella vaccine: Patients without documented immunity should be evaluated for vaccination by Transplant ID