HEPATITIS C INFECTED (HCV NAT+) ORGANS INTO HEPATITIS C NEGATIVE RECIPIENTS

Pre-transplant Evaluation:

I. All transplant candidates should be tested for HCV antibodies (HCV Ab)

II. If HCV Ab (+), check HCV RNA Quant (PCR) to evaluate for active HCV infection
   a. If HCV RNA Quant is detectible, refer to hepatology. Hepatology will:
      i. Establish HCV genotype
      ii. Determine stage of fibrosis
      iii. Consider antiviral treatment plan on a patient-by-patient bases
   b. If HCV RNA Quant is undetectable, repeat for confirmation, no further treatment indicated (if prior treatment known, obtain available liver biopsy slides for VUMC official read)

III. If stage 3 fibrosis (bridging fibrosis) or higher, consider relative contraindication for transplant

IV. If patient receives antiviral treatment prior to transplant, defer listing/activation until treatment has been completed

Consideration for Accepting HCV Exposed and/or Infected Donor Organs:

I. Consideration for accepting HCV Ab+ and HCV NAT+ donor organs is at the discretion of each organ program

Education:

I. Pre-transplant teaching completed at the time of evaluation will include information on donors who test positive for HCV Ab and/or positive HCV NAT, implications for the recipient, risks, benefits, and treatment options

II. Evaluation physician will discuss HCV Ab and HCV NAT donor implications during evaluation

III. Patient preference regarding HCV Ab and HCV NAT listing acceptance criteria will be discussed at time of listing

IV. For those that accept HCV NAT+ donor organs, post-transplant education will be provided by the liver transplant team in collaboration with specialty pharmacy including,
but not limited to, treatment regimen, potential side effects, medication interactions, treatment success rates, monitoring, and required follow-up.

Consent:

I. **Consent for listing** to accept HCV Ab+ and/or HCV NAT+ organs is done by the primary organ team either in person or over the phone and is documented in the patient chart.
   a. Consent for listing/accepting HCV Ab+ only is not required and deferred to each organ program.
   b. Verbal consent acceptable, signed consent not required.

II. **Surgical consent** is completed by the primary organ team at time of organ offer, prior to receiving any known HCV NAT+ organ. This consent is included in the transplant surgical consent and is to be uploaded into the patient chart.
   a. Consent for accepting HCV Ab+ donor organs is not required and deferred to each organ program.

Transplant Management:

I. The OPO will provide HCV Ab and HCV NAT testing results for each donor.
II. If available, OPO will provide PCR and genotype testing (not required).
III. The assigned transplant coordinator will indicate in the “Specialty Comments” of the patient’s EMR that the patient received an HCV positive donor and to refer to donor serologies available in the Transplant Episode.
IV. The assigned coordinator will notify the **Liver Transplant Coordinator on call** listed in Synergy of recipients that accept HCV NAT+ donors.

Post-Transplant Management:

I. For those accepting HCV NAT+ organs:
   a. Primary team will order HCV PCR testing on POD#7 or on time of discharge, weekly thereafter.
      i. Add on HCV Genotype when PCR positive
   b. HCV Ab testing not needed.
   c. Discharge education will include counseling regarding virus transmission risk factors, lab testing schedule, and symptoms of acute HCV.
   d. Once HCV PCR returns detectable, refer to Liver Transplant Hepatology (**Liver Transplant Coordinator on call**) for scheduling if not already done.
      i. Patients will be seen as soon as possible and in line with other transplant appointment obligations.
      ii. Treatment for HCV will be initiated by the Hepatologist or Liver Transplant NP following initial consult.
II. Patients who receive HCV Ab+ donors organ follow standard post-transplant testing as outlined in *Post-Transplant Transmission Testing* (i.e., HCV PCR at 4-6 weeks post-transplant)

**Treatment Pathway:**

I. Treatment will be in accordance with current AASLD guidelines and guided by the Hepatologist, Liver Transplant NP, and Transplant Specialty Pharmacy.

II. Once treatment is initiated, follow-up labs will be guided by the ordering liver transplant provider and in accordance with AASLD guidelines. Whenever possible, these labs will be completed with other required transplant lab testing:

- HCV PCR quant 4 weeks after start of treatment
- HCV PCR quant at the end of treatment date (ETR)
- HCV PCR quant 12 weeks after end of treatment date (SVR12)
- HCV PCR quant 24 weeks after end of treatment date (SVR24)

**Treatment Follow-up:**

I. Patient will be seen in Liver Transplant Clinic ~4 weeks after initiation of treatment to monitor compliance and evaluate for any adverse effects. This can be done on a day coinciding with patient’s other routine follow-up appointments.

II. After initial follow-up visit, patients will be seen on an as needed basis—continuing to follow closely with their respective organ program.

**Heart Transplant Specific Considerations:**

I. For patients who develop Hepatitis C Viremia, left heart catheterization with IVUS (Intravascular ultrasound) will be performed within 6 weeks of transplant and again at 1st annual studies, with repeat LHC/IVUS studies performed thereafter at the discretion of the provider

II. If donor NAT +

a. Inpatients will have HCVq drawn weekly during index stay and anytime admitted prior to achieving SVR

b. Outpatients will have HCVq drawn monthly during index stay and anytime admitted prior to achieving SVR