

Selection Criteria Policy – Kidney Transplant	Effective date: 02/2020
	Next Review Date: 02/2023

Purpose: To provide criteria in the selection of patients for kidney transplantation.

Procedure: The following approval criteria will be used in selection committee of patients for kidney transplant. Patients with advanced Chronic Kidney Disease or End Stage Renal Disease may be referred for consideration for renal transplantation by their nephrologist or primary care physician to the VCU Health System's Hume Lee Transplant Center. An initial outpatient evaluation will be scheduled for the patient during which the patient will be evaluated by a multidisciplinary team consisting of transplant nephrologists, transplant surgeons, transplant nurse coordinators, social workers, financial coordinators, pharmacists, and other services as required. During this visit, the patient will receive individualized education regarding transplantation as a treatment option for them and will receive written information specific to this program.

Inclusion Criteria for Adult Kidney Transplantation:

- Chronic irreversible kidney disease as defined by creatinine clearance/calculated GFR <20mL/min
- Pre-emptive transplantation with declining GFR.
- Patient must be medically cleared and be able to tolerate major surgery.
- Patients and their family members/support system must be able to understand the risks and benefits of transplantation, including long-term need for close medical follow-up, life-long need for anti-rejection therapy, and financial responsibilities.
- Must be compliant with treatment plan including dialysis. If noncompliance with the current treatment plan is a recognized problem, the patient will be required to achieve certain goals determined by the transplant program in order to be considered a transplant candidate.

Inclusion Criteria for Pediatric Kidney Transplantation:

- Pediatric candidates with weight >10 Kg.
- Pre-emptive transplant
- Patients must be medically cleared and be able to tolerate major surgery
- Family/support system and patient must be able to understand the risks and benefits of transplantation, including long-term need for close medical follow-up, life-long need for anti-rejection therapy, and financial responsibilities
- Family/support system and patient must work to ensure compliance with the treatment plan as applicable to the pediatric patient. If noncompliance with current treatment plan is a recognized problem, the family/support system and patient will be required to achieve certain goals determined by the transplant program in order to be considered a transplant candidate.
- Expressed interest
- Medical diagnosis must warrant/support kidney transplantation

Absolute Contraindications to Kidney Transplantation:

- Active or untreatable malignancy
- Active infection

- Acute active hepatitis
- Severe peripheral vascular disease not amenable to bypass or angioplasty
- End stage or uncorrectable cardiovascular disease and not a candidate for orthotopic heart transplantation
- End stage or severe pulmonary disease
- End stage liver disease and not a candidate for orthotopic liver transplantation.
- Ongoing noncompliance with medications or with the treatment plan including dialysis prescription
- Insufficient financial or social resources for post transplantation management and success
- Pregnancy
- Significant limitation to recipient's life expectancy, even in the face of transplantation, related to other co-morbid conditions.
- Malnutrition

Patients who have absolute contraindications to kidney transplantation will be notified of this fact and given specific goals if appropriate which they must reach in order to be considered in the future. This information will be likewise relayed to referring physician.

Relative Contraindications to Kidney Transplantation

- Age greater than 70 years
- Pediatric candidates with weight <10 Kg.
- BMI over 40 kg.m²
- Active ongoing substance abuse
- Sickle cell disease
- HIV+
- Recurrent urinary tract infections
- Abnormal genitourinary tract drainage
- Significant pulmonary hypertension
- Cardiovascular history of MI, CABG, or recurrent episodes of CHF
- Peripheral vascular disease
 - Significant aortoiliac occlusive disease
 - Significant calcification of pelvic arterial system
- Uncontrolled mental health disorder
- Inadequate financial or social support
- Advanced COPD
- Prior history of noncompliance with medications or treatment plan including dialysis prescription
- Prior history of substance abuse
- High risk for surgery or anesthesia.
- Crossmatch incompatibility with specific proposed living donor
- Active cigarette smoking
- Autosomal Dominant Polycystic Kidney Disease (ADPKD) with cyst rupture, hematuria, recurrent UTIs, pain or significant nephromegaly
- Hypercoagulable states
- Antiphospholipid antibody positive
- Liver cirrhosis

Patients with relative contraindications may require a more in depth evaluation and referral to specific subspecialists for clearance prior to moving forward with transplantation.

Required Documentation:

- Recent clinical summary, including all current medications and treatment plans
- Informed consent for proposed evaluation process and transplantation
- Laboratory results as ordered by physician
- Blood typing and human leukocyte antigen (HLA) typing
- Serologies: HIV, Hepatitis B panel, hepatitis C by PCR, CMV IgG (cytomegalovirus), EBV IgG (Epstein-Barr), HSV IgG (Herpes), VZV IgG (varicella), RPR
- Recent EKG and chest x-ray
- Cancer screening per American Cancer Society guidelines.
- Psychosocial evaluation performed at transplant center
- Nutritional screening/evaluation by Registered Dietician
- Medication management screening by Transplant Pharmacist.

*Any Patient listed or relisted for any organ including re-transplant after discharge **MUST** complete the evaluation process and will be presented to and approved by selection committee members. The decision will be documented on the selection committee form.*

Additional Evaluations as Indicated:

Gastrointestinal:

- **GI Screening** for all patients with any of the following:
 - Iron deficiency anemia
 - Positive guaiac stools
 - Age over 50
 - When deemed medically necessary based on individual history

Cardiac

- **Cardiac evaluation** for all patients with any of the following:
 - IDDM at any age
 - Age over 50
 - When deemed medically necessary based on individual history

Vascular

- **Carotid Doppler studies** for all patients with any of the following:
 - History of transient ischemic attacks (TIA)
 - CVA
 - Carotid bruits
- **Lower extremity Doppler studies:**
 - History of PVD
 - Abnormal diminished peripheral pulses on examination

Pulmonary Function Tests (PFT)

- History of chronic lung disease

Special Considerations:

1. **Crossmatch incompatibility**

Patients who have identified a potential donor who is cross match incompatible may be considered for a desensitization protocol utilizing intravenous immune globulin (IVIG) and plasmapheresis (PP) and other drugs. Cross matches will be reviewed carefully by our immunologist and suitability for this protocol will be made after further immunological testing and review.

2. HIV Positive

Patients who test positive for HIV may be considered for renal transplantation provided they are negative by PCR testing and they have CD4 counts over 200. They should have no recent history of opportunistic infections. All such patients will be seen by the Infectious Disease specialist who will make specific recommendations for alterations in HAART therapy post transplantation based upon individual resistance patterns, drug intolerance and renal function.

3. Obesity

Patients with BMI of 40 kg/m² or greater will be evaluated on a case by case basis and will be given a target weight with a goal of achieving a BMI of 30 km/m².

4. Hepatitis/Cirrhosis

All patients will be screened for active Hepatitis B and C infection. Those who have evidence of active hepatitis may be referred to Hepatology and a liver biopsy will be performed to assess the extent of liver injury. Patients who have liver cirrhosis may still be candidates for transplantation provided they are approved for future treatment including potential orthotopic liver transplantation. Further evaluation of the cirrhotic patient will be performed to include at a minimum: albumin, liver function tests, platelet count, INR and upper endoscopy to rule out varices. Decisions regarding advisability of performing kidney transplantation alone vs combined liver kidney transplantation will be made with input from Nephrology, Hepatology and Transplant Surgery.

References:

CMS Conditions of Participation
UNOS/OPTN Policies and Bylaws.

Approved:

Signature on File _____

Marlon F. Levy, MD, FACS
David M. Hume Chair in Surgery
Professor and Chairman
Division of Transplant Surgery
Director, Hume Lee Transplant Center
Virginia Commonwealth University Health System

_____ Date

Hume-Lee Transplant Center
Abdominal Transplant Policy and Procedure Manual
Medical College of Virginia Hospitals and Physicians
Virginia Commonwealth University Health System

Signature on File _____

William Maixner, MHA FACHE

Administrator

Hume Lee Transplant Center

Virginia Commonwealth University Health System

_____ Date