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| Selection Criteria Policy-Kidney Transplant | Original Date:<br>06/2007  |
|   | Amendment Date<br>02/2009  |
|   | Review Dates:<br>02/2009, 04/2010,<br>11/2013, 01/2015,<br>6/13/2017, 06/26/2017 |
|   | Effective Date:<br>02/07/2015  |

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

**Procedure:** The following approval criteria will be used in selection of patients for a 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 Medical Center'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, dietician, pharmacy and other services as deemed appropriate. 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 Kidney Transplantation:**

- Chronic irreversible kidney disease as defined by creatinine clearance/calculated GFR <20mL/min (adult candidates only i.e. age >18 years)
- Pre-emptive transplantation for patients with declining GFR.
- Patients 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 the long-term need for close medical follow-up, indefinite need for anti-rejection therapy and financial responsibilities.
- Must be compliant with treatment plan including dialysis: if noncompliance with current treatment plan is a recognized problem then the patient will be required to achieve certain goals determined by the transplant program in order to be considered a transplant candidate.
- Pediatric candidates with weight >10 Kg

**Absolute contraindications to Kidney Transplantation**

- Active or untreatable malignancy
- Active infection
- Untreated HIV infection
- Acute active hepatitis
- Severe peripheral vascular disease not amenable to bypass or angioplasty
- Active ongoing substance abuse (including Marijuana dependence; refer to Marijuana Guideline)
- End stage or uncorrectable cardiovascular disease and not a candidate for orthotopic heart transplant
- End stage or severe pulmonary disease
- End stage liver disease and not a candidate for orthotopic liver transplant

- Ongoing noncompliance with medications or with treatment plan including dialysis prescription
- Insufficient financial or social resources for post transplantation management and success.
- Pregnancy
- Significant limitations to recipient's life expectancy, even in the face of transplantation, related to other co-morbid conditions.
- Severe 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 the referring physician.*

### **Relative Contraindications to Kidney Transplantation**

- Age greater than 70 years
- BMI over 40 kg/m<sup>2</sup>
- Sickle cell disease
- Recurrent urinary tract infections
- Abnormal genitourinary tract drainage
- Significant pulmonary hypertension
- Cardiovascular history of MI, CABG, recurrent episodes of CHF
- Peripheral vascular disease
  - Significant aortoiliac occlusive disease
  - Significant calcification of pelvic arterial system
- Prior history of malignancy
- 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 dependence
- 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 more in-depth evaluation and referral to specific subspecialists for clearance prior to moving forward with transplantation.*

### **Required documentation for presentation before the Selection committee**

- Recent clinical summary, including all current medication and treatment plans
- Informed consent for the 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), Syphilis IgG
- Recent EKG, and chest x-ray
- Results of GYN exam with Pap smear within the past year for females 48 21 or older
- Mammogram for females over 50 within past two years

- Prostate Specific Antigen (PSA) screening in adult males >50 years old
- Psychosocial evaluation performed at transplant center
- PPD/TB testing in high risk groups
- Nutritional screening/evaluation by Registered Dietitian
- Medication management screening by Transplant Pharmacist
- GI Screening for candidates >50 years of age
- Social worker to obtain written medical records to support adherence to dialysis schedule

*Any patient listed or relisted for any organ including re-transplant after discharge **MUST** complete evaluation process and will be presented to and approved by selection committee members. The decision will be documented on the selection committee form. Coordinator/Provider will review all re-graft patients at Selection Committee prior to initiating evaluation.*

#### **Additional Evaluations as Indicated:**

##### **Gastrointestinal**

- **GI screening** for all patients with iron deficiency anemia or positive guaiac stools or age over 50 years or when deemed medically necessary based on individual history

##### **Cardiac**

- **Refer to cardiac pre-evaluation protocol**

##### **Vascular**

- **Carotid Doppler studies** on patients with a history of transient ischemic attacks (TIA), CVA and for patients who have carotid bruits
- **Lower extremity Doppler studies** on patients with a history of PVD, and for those patients with abnormal, diminished peripheral pulses on examination

**Pulmonary function tests (PFT)** for those patients with a history of chronic lung disease

#### **SPECIAL CONSIDERATIONS**

##### **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 immunologic testing and review. Incompatible donor-recipient pairs will be educated about donor exchange depending on blood types and HLA criteria.

##### **HIV Positive**

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

HIV positive candidates will be consulted about receiving HIV positive donor organs. See addendum Hope Act Protocol.

### **Obesity**

Patients with BMI of 35 and 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 Kg/m<sup>2</sup>. Transplantation will not be performed on individuals with BMI over 40.

### **Hepatitis/Cirrhosis**

All patients will be screened for active Hepatitis B and C infection. Those who have evidence of active hepatitis will be referred to Hepatology and liver biopsy will be performed to assess the extent of liver injury. Patients who have 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 the advisability of performing kidney transplant alone vs. combined liver kidney will be made with input from Nephrology, Hepatology and Transplant Surgery.

**Right to appeal** Patients who are deferred for transplant for any reason will be given an option to write a letter of appeal to selection committee for reconsideration. Appointments should be offered to deferred or denied patients for discussion with a team of providers.

### **References:**

CMS Conditions of Participation  
UNOS Policies and Bylaws

### **APPROVED:**

Signature on file \_\_\_\_\_  
Marlon Levy M.D., F.A.C.S.  
David M. Hume Chair in Surgery  
Professor and Chairman,  
Division of Transplant Surgery  
Director, Hume-Lee Transplant Center  
Virginia Commonwealth University Medical Center

06/13/2017 \_\_\_\_\_  
Date

Signature on file \_\_\_\_\_  
Anne L. King, M.D.  
Professor of Medicine and Surgery  
Medical Director, Kidney & Pancreas Transplant Program  
Hume-Lee Transplant Center  
Virginia Commonwealth University Medical Center

06/13/2017 \_\_\_\_\_  
Date

Signature on file \_\_\_\_\_  
Margaret Schaeffer, MS, MSHA, RN  
Administrator & Nursing Director  
Hume-Lee Transplant Center  
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Virginia Commonwealth University Medical Center

06/13/2017 \_\_\_\_\_  
Date