

LUNG TRANSPLANT PATIENT SELECTION CRITERIA

INDICATIONS FOR LUNG TRANSPLANTATION

- COPD
 - FEV1 <25% of predicted value without reversibility
 - And/or PaCO₂ >50mm Hg (6.7 kPA) and/or evidence of chronic respiratory acidosis (pH <7.32)
 - Progressive deterioration with long term oxygen requirements
 - Elevated pulmonary artery pressures and development of right ventricular dilation, strain or low ejection function
- Cystic Fibrosis and other Bronchiectic Diseases
 - FEV1 <30% predicted or rapid progressive respiratory deteriorations with FEV1 >30% predicted (e.g. increasing number of hospitalizations, rapid fall in FEV1, massive hemoptysis, pneumothoraces, and increasing cachexia despite optimal medical management)
 - Resting arterial blood gasses obtained with patient breathing on room air-PaCO₂ >6.7 kPA (50 mmHg); PaO₂ <7.3 kPA (55 mm Hg) or evidence of chronic respiratory acidosis (pH <7.32)
 - Elevated pulmonary artery pressures and development of right ventricular dilation, strain, or low ejection function (Cor pulmonale)
- Idiopathic Pulmonary Fibrosis with progressive disease refractory to optimal medical management
- Systemic illness with associated interstitial lung disease with progressive disease refractory to optimal medical management
- Pulmonary Hypertension with NYHA Class III or IV symptoms refractory to optimal medical therapy
- Pulmonary Hypertension secondary to Congenital Heart Disease - Severe, progressive symptoms with function at NYHA III or NYHA IV level despite optimal medical management
- Combined pulmonary and other organ failure - Candidate must meet all the criteria for selection for lung transplant
- Any patient with acute or chronic hypoxic or hypercapnic respiratory failure or on supplemental oxygen for medically irreversible lung disease with an expected post-transplant five-year survival of >80%

REASONS A PATIENT WOULD NOT BE A CANDIDATE FOR LUNG TRANSPLANTATION

- Age >70
- Lung transplantation should not be offered to adults with a recent history of malignancy. Exception includes a patient with a 5-year disease free interval combined with a low predicted risk (<20%) of recurrence after lung transplantation or non-melanoma skin cancers.
- Significant dysfunction of another major organ system (e.g. heart, liver, kidney, brain, or bone marrow) unless combined organ transplantation can be performed
- Atherosclerotic disease with suspected or confirmed end-organ ischemia or dysfunction
- Severe diffuse coronary artery disease not amenable to revascularization and/or irreversible left sided heart failure with EF<40%
- Acute medical instability including, but not limited to, acute sepsis, myocardial infarction, and liver failure
- Patients with active Hepatitis B or C virus or HIV viremia
- Uncorrectable bleeding diathesis
- Evidence of active mycobacterium tuberculosis infection
- Significant chest wall or spinal deformity expected to cause severe restriction after transplantation

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REASONS A PATIENT WOULD NOT BE A CANDIDATE FOR LUNG TRANSPLANTATION (CONT.)

- Class II obesity (body mass index {BMI} ≥ 35.0 kg/m²)
- Malnutrition (body mass index {BMI} < 16.0 kg/m²)
- Significant esophageal dysmotility with radiology or endoscopically demonstrated esophageal retention of food creating risk for aspiration post-transplant
- Current non-adherence to medical therapy or a history of repeated or prolonged episodes of non-adherence to medical therapy that are perceived to increase the risk of non-adherence after transplantation
- Psychiatric or psychologic conditions associated with the inability to cooperate with the medical/allied health care team and/or adhere with complex medical therapy
- Absence of an adequate or reliable social support system
- SIPAT score ≥ 40 as indicated in psychosocial evaluation
- Severely limited functional status with poor rehabilitation potential
- Active substance abuse or dependence (e.g. alcohol, tobacco, marijuana, or other illicit substance)
- Irreversible neurological conditions that result in poor rehabilitation potential

The transplant team reviews all cases on an individual basis and there may be other medical, surgical or psychosocial reasons that may make patients poor candidates for lung transplant at our institution.