

PA.003.MPC Transplant: Heart-Lung

Maryland Physicians Care considers **Heart-Lung Transplant** for the following indications:

Recipient Criteria ⁽¹⁾:

- The member has no medical, cognitive, or other psychiatric condition that is likely to interfere with their ability to manage the sequelae of the transplant, including complex medication regimens

General Criteria ⁽¹⁾:

- End-stage heart failure and end-stage lung failure
- Meets the institution's selection criteria for heart-lung transplant

Specific Criteria:

Heart-lung transplantation may be medically necessary for members with irreversible, progressively disabling, end-stage cardiopulmonary disease including **any one** of the conditions listed below:

- Complex congenital heart disease **AND** any one of the following ⁽²⁾:
 - Complicated by Eisenmenger's syndrome with irreversible pulmonary hypertension and refractory [NYHA Class III or IV heart failure](#) ⁽³⁾
 - Subsequent operation for failure of original graft
 - Irreversible, uncontrolled pulmonary hypertension (complications that cannot be repaired with conventional surgical approaches to the heart and lungs)
- End-stage lung disease **AND** any one of the following:
 - Refractory left ventricular failure ⁽⁴⁾
 - Objectively documented fibrosis or infarction of the right ventricle with right ventricle failure ⁽⁴⁾
 - Malignant ventricular arrhythmias that are uncontrollable despite optimal pharmacologic or electrophysiologic treatments (including implantable cardioverter-defibrillator) ⁽⁵⁾
- Severe left ventricular heart failure (refractory NYHA Class III or IV heart failure) associated with any one of the following lung diseases classified as end-stage ⁽¹⁾:
 - Chronic obstructive pulmonary disease
 - Severe pulmonary fibrosis
 - Cystic Fibrosis
 - Severe primary pulmonary hypertension
- Irreversible, uncontrollable pulmonary hypertension associated with ⁽²⁾:
 - Refractory NYHA Class III or IV heart failure

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- Pulmonary fibrosis
- Cardiomyopathy and/or severe coronary heart disease

Specific Criteria for HIV-Infected Members

When all of the following conditions are met in addition to the above criteria for recipient, general, and specific criteria above ⁽⁶⁾:

- The member has a life expectancy of at least five years ⁽⁷⁾
- CD4 count ≥ 200 cells/mL during 3 months prior to transplantation
- Undetectable HIV viremia (<50 copies/mL) for six months
- Demonstrated adherence to stable antiretroviral regiment for \geq six months
- Absence of active infection or malignancy
- Absence of chronic wasting or severe malnutrition
- Available antiretroviral treatment options post-transplant
- Appropriate follow-up with providers experienced in management of HIV

Limitations for heart-lung transplant

- Active malignancy or history of malignancy in last 2-5 years ⁽¹⁾
- Members must first undergo stringent physical and psychological evaluation to determine eligibility for transplant. Members should have no other serious medical problems, and they should be psychologically willing to undergo the stressful surgery and postoperative care necessary. ⁽¹⁾
- Idiopathic pulmonary arterial hypertension (IPAH) should not undergo combined heart-lung transplantation unless the left ventricular dysfunction co-exists ⁽⁸⁾
- All other medical and surgical therapies that might be expected to yield both short- and long-term survival comparable to that of transplantation must have been tried or considered.
- Heart Xeno-transplantation for any cardiac condition is considered experimental-investigational and is not covered.

Background

New York Heart Association (NYHA) Grading Scale for Heart Failure ⁽⁹⁾:

- Class I: No limitation of physical activity. Ordinary physical activity does not cause undue fatigue, palpitation, dyspnea (shortness of breath).
- Class II: Slight limitation of physical activity. Comfortable at rest. Ordinary physical activity results in fatigue, palpitation, dyspnea, or chest pain.
- Class III: Marked limitation of physical activity. Comfortable at rest. Less than ordinary activity causes fatigue, palpitation, dyspnea, or chest pain.
- Class IV: Symptoms of heart failure at rest. If any physical activity causes discomfort.

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Codes

CPT/HCPCS Codes

Code	Description
33933	Backbench preparation for cadaver donor heart/lung
33935	Heart-lung transplant with recipient cardiectomy-pneumonectomy

References

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<https://www.heart.org/en/health-topics/heart-failure/what-is-heart-failure/classes-of-heart-failure>

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