

## EVH\_CG\_2700.MPC Transplant: Heart-Lung

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

### General Criteria <sup>(1)</sup>

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

### Specific Criteria

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

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### Specific Criteria for HIV-Infected Members

When **ALL** of the following conditions are met, in addition to the above criteria for general and specific criteria <sup>(6)</sup>:

- Life expectancy of  $\geq 2$  years <sup>(7)</sup>
- CD4 count  $\geq 200$  cells/mL during 3 months prior to transplantation
- Undetectable HIV viremia ( $<50$  copies/mL) for 6 months
- Demonstrated adherence to stable antiretroviral regimen for  $\geq 6$  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

Members must first undergo stringent physical and psychological evaluation to determine eligibility for transplant. 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.

- Active malignancy or history of malignancy in last 2-5 years <sup>(1)</sup>
- Members with serious medical problems and/or who are psychologically unwilling to undergo stressful surgery and necessary postoperative care <sup>(1)</sup>
- Idiopathic pulmonary arterial hypertension (IPAH), unless the left ventricular dysfunction co-exists <sup>(8)</sup>
- Heart xenotransplantation for any cardiac condition

### Background

#### New York Heart Association (NYHA) Grading Scale for Heart Failure <sup>(9)</sup>

- 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. Any physical activity causes discomfort.

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### Codes

CPT/HCPCS Codes	
Code	Description
33933	Backbench standard preparation of cadaver donor heart/lung allograft prior to transplantation, including dissection of allograft from surrounding soft tissues to prepare aorta, superior vena cava, inferior vena cava, and trachea for implantation
33935	Heart-lung transplant with recipient cardiectomy-pneumonectomy

### Policy History

Date	Summary
May 21, 2026	<ul style="list-style-type: none"><li>This guideline was renumbered from PA.003.MPC Transplant: Heart-Lung</li><li>Annual Review - Updated Indications to remove Recipient Criteria; updated General Criteria, Specific Criteria, Specific Criteria for HIV-Infected Members and Limitations Sections; updated 4th bullet of NYHA Grading Scale under Background Section; updated description of procedure code 33933; added Policy History Log; updated References</li></ul>

### References

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