

## Corporate Medical Policy

### Heart-Lung Transplantation

**File Name:** heart\_lung\_transplantation  
**Origination:** 5/1985  
**Last CAP Review:** 6/2011  
**Next CAP Review:** 6/2012  
**Last Review:** 1/2012

#### Description of Procedure or Service

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A combined heart/lung transplant is intended to prolong survival and improve function in patients with end-stage cardiopulmonary disease. The technique involves a coordinated triple operative procedure consisting of procurement of a donor heart-lung block, surgical removal of the heart and lungs of the recipient, and implantation of the heart and lungs into the recipient.

A heart/lung transplant refers to the transplantation of one or both lungs and heart from a single cadaver donor.

**\*\*\*Note: This Medical Policy is complex and technical. For questions concerning the technical language and/or specific clinical indications for its use, please consult your physician.**

#### Policy

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**BCBSNC may provide coverage for a heart/lung transplant on an individual consideration or prior approval basis when it is determined to be medically necessary because the medical criteria and guidelines shown below are met.**

#### Benefits Application

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This medical policy relates only to the services or supplies described herein. Please refer to the Member's Benefit Booklet for availability of benefits. Member's benefits may vary according to benefit design; therefore member benefit language should be reviewed before applying the terms of this medical policy.

Coverage is not provided for organs sold rather than donated to the recipient

#### When Heart-Lung Transplantation is covered

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Human heart/lung transplantation is considered medically necessary for carefully selected patients with end-stage cardiac and pulmonary disease including, but not limited to, one of the following diagnoses:

1. Irreversible primary pulmonary hypertension with heart failure;
2. Non-specific severe pulmonary fibrosis, with severe heart failure;
3. Eisenmenger complex with irreversible pulmonary hypertension and heart failure;

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4. Cystic fibrosis with severe heart failure;
5. Chronic obstructive pulmonary disease with heart failure;
6. Emphysema with severe heart failure;
7. Pulmonary fibrosis with uncontrollable pulmonary hypertension or heart failure.

### **When Heart-Lung Transplantation is not covered**

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Potential contraindications subject to the judgment of the transplant center:

1. Known current malignancy, including metastatic cancer
2. Recent malignancy with high risk of recurrence
3. Untreated systemic infection making immunosuppression unsafe, including chronic infection
4. Other irreversible end-stage disease not attributed to heart or lung disease
5. History of cancer with a moderate risk of recurrence
6. Systemic disease that could be exacerbated by immunosuppression
7. Psychosocial conditions or chemical dependency affecting ability to adhere to therapy

### **Policy Guidelines**

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The literature, consisting of case series and registry data, demonstrates that heart/lung transplantation provides a survival benefit in appropriately selected patients, as compared to the exceedingly poor expected survival without transplant. It may be the only option for some patients with end-stage cardiopulmonary disease. Heart/lung transplant is contraindicated in patients in whom the procedure is expected to be futile due to comorbid disease or in whom post-transplantation care is expected to significantly worsen comorbid conditions.

Only those patients accepted for transplantation by a transplantation center and actively listed for transplant should be considered for prior review. Guidelines should be followed for transplant network or consortiums, if applicable.

Contraindications to heart transplant has been an evolving concern. Individual transplant centers may differ in their guidelines, and individual patient characteristics may vary within a specific condition. In general, heart transplantation is contraindicated in patients who are not expected to survive the procedure, or in whom patient-oriented outcomes, such as morbidity or mortality, are not expected to change due to comorbid conditions unaffected by transplantation e.g., imminently terminal cancer or other disease. Further, consideration is given to conditions in which the necessary immunosuppression would lead to hastened demise, such as active untreated infection. However, stable chronic infections have not always been shown to reduce life expectancy in heart transplant patients.

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## Billing/Coding/Physician Documentation Information

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This policy may apply to the following codes. Inclusion of a code in this section does not guarantee that it will be reimbursed. For further information on reimbursement guidelines, please see Administrative Policies on the Blue Cross Blue Shield of North Carolina web site at [www.bcbsnc.com](http://www.bcbsnc.com). They are listed in the Category Search on the Medical Policy search page.

*Applicable codes: 33930, 33933, 33935, S2152*

BCBSNC may request medical records for determination of medical necessity. When medical records are requested, letters of support and/or explanation are often useful, but are not sufficient documentation unless all specific information needed to make a medical necessity determination is included.

## Scientific Background and Reference Sources

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BCBSA Medical Policy Reference Manual

Recommendations of the Consensus Conference on Candidate Selection for Heart Transplantation 1993, Miller et al. 1995 J Heart Lung Transplant 14:562-571. Relative contraindications include serum creatinine >3 or creatinine clearance under 25 cc/min; and age over 65.

See Selection and Treatment of Candidates for Heart Transplantation, approved by the American Heart Association Science Advisory and Coordinating Committee on July 24, 1995, published in Circulation 1995;92:3593-3612.

Specialty Matched Consultant Advisory Panel 11/1999

Medical Policy Advisory Group 12/2/1999

Specialty Matched Consultant Advisory Panel - 12/2001

BCBSA Medical Policy Reference Manual - 4:2002, 7.03.08

Specialty Matched Consultant Advisory Panel - 11/2003

Specialty Matched Consultant Advisory Panel - 11/2005

BCBSA Medical Policy Reference Manual [Electronic Version]. 7.03.08, 4/25/06

United Network for Organ Sharing (UNOS). Policy 3.7. Organ Distribution: Allocation of Thoracic Organs. UNOS Policies and Bylaws. United Network for Organ Sharing, Alexandria, VA. Revised 6/23/09. Retrieved 8/21/09 from [http://www.unos.org/PoliciesandBylaws2/policies/pdfs/policy\\_9.pdf](http://www.unos.org/PoliciesandBylaws2/policies/pdfs/policy_9.pdf)

BCBSA Medical Policy Reference Manual [Electronic Version]. 7.03.08, 7/9/09

Specialty Matched Consultant Advisory Panel 6/2010

BCBSA Medical Policy Reference Manual [Electronic Version]. 7.03.08, 11/11/10

Specialty Matched Consultant Advisory Panel review 6/2011

BCBSA Medical Policy Reference Manual [Electronic Version]. 7.03.08, 11/10/11

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Medical Director review 1/2012

## Policy Implementation/Update Information

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5/85 Original Policy

8/88 Reviewed: Investigational

8/90 Evaluated: Eligible for coverage

Local Review Dates:

1/93 Reviewed: PCP Physician Advisory Group

11/94 Reviewed: PCP Physician Advisory Group

11/95 Reviewed: PCP Physician Advisory Group

6/96 Evaluated: Policy confirmed. Added specific diagnoses considered for possible coverage and contraindications.

8/97 Reaffirmed

9/99 Reviewed, reformatted, Medical Term Definitions added.

12/99 Reaffirmed, Medical Policy Advisory Group

3/01 System changes.

12/01 Specialty Matched Consultant Advisory Panel review. No change to criteria. Coding format change.

11/03 Biannual review. Specialty Matched Consultant Advisory Panel review. Definition given to morbid obesity. Policy reformatted for consistency.

4/04 Code S2152 added to Billing/Coding section of policy.

1/6/05 Code 33933 added to Billing/Coding section of policy.

1/20/05 Format changes.

11/17/05 Biennial review. Specialty Matched Consultant Advisory Panel review 11/07/05. No change in policy.

11/19/07 Deleted age limitation from the When it is Not Covered section. Specialty Matched Consultant Advisory Panel review meeting 10/29/07. No change in policy statement. (adn)

12/7/09 Specialty Matched Consultant Advisory Panel review 10/30/09. No change in policy statement. (adn)

8/3/2010 Specialty Matched Consultant Advisory Panel review 6/2010. Removed Medical Policy number. References updated. (mco)

7/19/11 Specialty Matched Consultant Advisory Panel review 6/2011. Policy Guidelines updated. The section "When Heart-Lung Transplant is not Covered" has been updated with the following contraindications: "Absolute contra-indications for heart/lung transplants include, but are not

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limited to, the following conditions: Known current malignancy, including metastatic cancer; Recent malignancy with high risk of recurrence; Untreated systemic infection making immunosuppression unsafe, including chronic infection; or Other irreversible end-stage disease not attributed to heart or lung disease. Relative contraindications for heart/lung transplants include, but are not limited to, the following conditions: History of cancer with a moderate risk of recurrence; Systemic disease that could be exacerbated by immunosuppression; or Psychosocial or dependence conditions affecting ability to adhere to therapy” History of non-compliance, BMI, HIV positivity and lack of documentation of non-smoking status removed from contraindications. References updated. (mco)

2/7/12 Revised “When not Covered” section. Absolute and Relative contraindications have been combined and revised to “Potential contraindications subject to the judgment of the transplant center.” References updated. Medical Director review. (mco)

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Medical policy is not an authorization, certification, explanation of benefits or a contract. Benefits and eligibility are determined before medical guidelines and payment guidelines are applied. Benefits are determined by the group contract and subscriber certificate that is in effect at the time services are rendered. This document is solely provided for informational purposes only and is based on research of current medical literature and review of common medical practices in the treatment and diagnosis of disease. Medical practices and knowledge are constantly changing and BCBSNC reserves the right to review and revise its medical policies periodically.