

OPTN

ORGAN PROCUREMENT AND
TRANSPLANTATION NETWORK

Policies

NOT Implemented

Policy 6: Allocation of Hearts and Heart-Lungs

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6.1 Adult Status Assignments and Update Requirements

Each adult heart transplant candidate at least 18 years old at the time of registration is assigned a status that reflects the candidate's medical urgency for transplant. The candidate's transplant program must submit a heart status justification form to the OPTN Contractor to assign a candidate the status for which the candidate qualifies. Transplant programs must assign candidates on the waiting list that are not currently suitable for transplant to the inactive status.

If a candidate's transplant program does not submit a heart status justification form or the status expires and the transplant program does not submit a new heart status justification form, the candidate is assigned to status 6, or status 5 if the candidate is registered for another organ.

When registering a candidate, the transplant program must submit to the OPTN Contractor *all* of the following clinical data:

- Hemodynamic assessment results
- Functional status or exercise testing results
- Heart failure severity or end organ function indicators
- Heart failure therapies
- Mechanical support
- Sensitization risk, including CPRA, peak PRA, and number of prior sternotomies
- Current diagnosis

These clinical data must be submitted every time the transplant program submits a justification form unless a test needed to obtain the data has not been performed since the last justification form was submitted. The transplant program must maintain source documentation for all laboratory values reported to the OPTN Contractor.

6.1.A Adult Heart Status 1 Requirements

To assign a candidate adult status 1, the candidate's transplant program must submit a *Heart Status 1 Justification Form* to the OPTN Contractor. A candidate is not assigned adult status 1 until this form is submitted.

If the candidate is at least 18 years old at the time of registration then the candidate's transplant program may assign the candidate adult status 1 if the candidate has at least *one* of the following conditions:

- Is supported by veno-arterial extracorporeal membrane oxygenation (VA ECMO), according to *Policy 6.1.A.i* below.
- Is supported by a non-dischargeable, surgically implanted, non-endovascular biventricular support device according to *Policy 6.1.A.ii* below.

- Is supported by a mechanical circulatory support device (MCS) and has a life-threatening ventricular arrhythmia according to 6.1.A.iii below.

6.1.A.i Veno-Arterial Extracorporeal Membrane Oxygenation (VA ECMO)

A candidate's transplant program may assign a candidate to adult status 1 if the candidate is admitted to the transplant hospital that registered the candidate on the waiting list, and is supported by VA ECMO for cardiogenic shock as evidenced by *either* of the following:

- Within 7 days prior to VA ECMO support, *all* of the following are true within one 24 hour period:
 - a. Systolic blood pressure less than 90 mmHg
 - b. Cardiac index less than 1.8 L/min/m² if the candidate is not supported by inotropes or less than 2.0 L/min/m² if the candidate is supported by at least one inotrope
 - c. Pulmonary capillary wedge pressure greater than 15 mmHg
- If hemodynamic measurements could not be obtained within 7 days prior to VA ECMO support, at least *one* of the following is true within 24 hours prior to VA ECMO support:
 - CPR was performed on the candidate
 - Systolic blood pressure less than 70 mmHg
 - Arterial lactate greater than 4 mmol/L
 - Aspartate transaminase (AST) or alanine transaminase (ALT) greater than 1,000 U/L

Candidates that meet either of the criteria above will remain in this status for up to 7 days from submission of the *Heart Status 1 Justification Form*. Every 7 days, the transplant program may apply to the regional review board (RRB) to extend the candidate at this status if the candidate remains supported by VA ECMO. The transplant program must provide to the RRB objective evidence of *both* of the following:

1. The candidate demonstrated a contraindication to being supported by a durable device
2. Within 48 hours prior to the status expiring, the transplant program failed at weaning the candidate from VA ECMO as evidenced by at least *one* of the following:
 - Mean arterial pressure (MAP) less than 60 mmHg
 - Cardiac index less than 2.0 L/min/m²
 - Pulmonary capillary wedge pressure greater than 15 mmHg
 - SvO₂ less than 50 percent measured by central venous catheter

The RRB will retrospectively review extension requests. If the candidate is still supported by VA ECMO after 7 days and either the extension request is not granted or the transplant program does not request an extension, then the transplant program may assign the candidate to status 3.

6.1.A.ii Non-dischargeable, Surgically Implanted, Non-Endovascular Biventricular Support Device

A candidate's transplant program may assign a candidate to adult status 1 if the candidate is admitted to the transplant hospital that registered the candidate on the waiting list, is supported by a surgically implanted, non-endovascular biventricular

support device and must remain hospitalized because the device is not FDA-approved for out of hospital use.

This status is valid for up to 14 days from submission of *the Heart Status 1 Justification Form*. This status can be extended by the transplant program every 14 days by submission of another *Heart Status 1 Justification Form*.

6.1.A.iii Mechanical Circulatory Support Device (MCSD) with Life Threatening Ventricular Arrhythmia

A candidate's transplant program may assign a candidate to adult status 1 if the candidate is admitted to the transplant hospital that registered the candidate on the waiting list, is supported by an MCSD, and is experiencing recurrent or sustained ventricular tachycardia or ventricular fibrillation as evidenced by at least *one* of the following:

- Placement of a biventricular mechanical circulatory support device for the treatment of sustained ventricular arrhythmias
- That the patient was not considered a candidate for other treatment alternatives, such as ablation, by an electrophysiologist, and has experienced three or more episodes of ventricular fibrillation or ventricular tachycardia separated by at least an hour, over the previous 14 days that *both*:
 1. Occurred in the setting of normal serum magnesium and potassium levels
 2. Required electrical cardioversion despite receiving continuous intravenous antiarrhythmic therapies

This status is valid for up to 14 days from submission of *the Heart Status 1 Justification Form*. This status can be extended by the transplant program every 14 days by submission of another *Heart Status 1 Justification Form* if the candidate remains hospitalized on continuous intravenous antiarrhythmic therapy.

6.1.B Adult Heart Status 2 Requirements

To assign a candidate adult status 2, the candidate's transplant program must submit a *Heart Status 2 Justification Form* to the OPTN Contractor. A candidate is not assigned adult status 2 until this form is submitted.

If the candidate is at least 18 years old at the time of registration then the candidate's transplant program may assign the candidate to adult status 2 if the candidate has at least *one* of the following conditions:

- Is supported by a non-dischargeable, surgically implanted, non-endovascular left ventricular assist device (LVAD), according to *Policy 6.1.B.i* below.
- Is supported by a total artificial heart (TAH), biventricular assist device (BiVAD), right ventricular assist device (RVAD), or ventricular assist device (VAD) for single ventricle patients, according to *Policy 6.1.B.ii* below.
- Is supported by a mechanical circulatory support device (MCSD) that is malfunctioning, according to *Policy 6.1.B.iii* below.
- Is supported by a percutaneous endovascular mechanical circulatory support device, according to *Policy 6.1.B.iv* below.
- Is supported by an intra-aortic balloon pump (IABP), according to *Policy 6.1.B.v* below.
- Is experiencing recurrent or sustained ventricular tachycardia or ventricular fibrillation according to *Policy 6.1.B.vi* below.

6.1.B.i Non-Dischargeable, Surgically Implanted, Non-Endovascular Left Ventricular Assist Device (LVAD)

A candidate's transplant program may assign a candidate to adult status 2 if the candidate is admitted to the transplant hospital that registered the candidate on the waiting list, is supported by a surgically implanted, non-endovascular LVAD, and must remain hospitalized because the device is not FDA-approved for out of hospital use.

Candidates that meet the criteria above will remain in this status for up to 14 days from submission of *the Heart Status 2 Justification Form*. Every 14 days, the transplant program may apply to the RRB to extend the candidate's registration if the candidate remains supported by the non-dischargeable surgically implanted, non-endovascular LVAD. The transplant program must provide to the RRB objective evidence of *both* of the following:

1. The candidate demonstrated a contraindication to being supported by a durable device
2. Within 48 hours prior to the status expiring, the transplant program failed at weaning the candidate from the non-dischargeable surgically implanted, non-endovascular LVAD as evidenced by at least *one* of the following:
 - Mean arterial pressure (MAP) less than 60 mmHg
 - Cardiac index less than 2.0 L/min/m²
 - Pulmonary capillary wedge pressure greater than 15
 - SvO₂ less than 50 percent measured by central venous catheter

The RRB will retrospectively review extension requests. If the candidate is still supported by the non-dischargeable surgically implanted, non-endovascular LVAD after 14 days and either the extension request is not granted or the transplant program does not request an extension, then the transplant program may assign the candidate to status 3.

6.1.B.ii Total Artificial Heart (TAH), BiVAD, Right Ventricular Assist Device (RVAD), or Ventricular Assist Device (VAD) for Single Ventricle Patients

A candidate's transplant program may assign a candidate to adult status 2 if the candidate is supported by *any* of the following:

- A TAH
- An RVAD alone
- A BiVAD
- A VAD, for single ventricle patients only

This status is valid for up to 14 days from submission of *the Heart Status 2 Justification Form*. This status can be extended by the transplant program every 14 days by submission of another *Heart Status 2 Justification Form*.

6.1.B.iii Mechanical Circulatory Support Device (MCS) with Malfunction

A candidate's transplant program may assign a candidate to adult status 2 if the candidate is admitted to the transplant hospital that registered the candidate on the waiting list and is supported by an MCS that is experiencing device malfunction as evidenced by *all* of the following:

1. Malfunction of at least one of the components of the MCSD
2. Malfunction cannot be fixed without an entire device replacement
3. Malfunction is currently causing inadequate mechanical circulatory support or places the candidate at imminent risk of device stoppage

This status is valid for up to 14 days from submission of *the Heart Status 2 Justification Form*. This status can be extended by the transplant program every 14 days by submission of another *Heart Status 2 Justification Form*.

6.1.B.iv Percutaneous Endovascular Mechanical Circulatory Support Device

A candidate's transplant program may assign a candidate to adult status 2 if the candidate is admitted to the transplant hospital that registered the candidate on the waiting list, and is supported by a percutaneous endovascular mechanical circulatory support device without an oxygenator for cardiogenic shock as evidenced by *either* of the following:

- Within 7 days prior to percutaneous endovascular mechanical circulatory support, *all* of the following are true within one 24 hour period:
 - a. Systolic blood pressure less than 90 mmHg
 - b. Cardiac index less than 1.8 L/min/m² if the candidate is not supported by inotropes or less than 2.0 L/min/m² if the candidate is supported by inotropes
 - c. Pulmonary capillary wedge pressure greater than 15 mmHg
- If hemodynamic measurements could not be obtained within 7 days prior to percutaneous endovascular mechanical circulatory support, at least *one* of the following is true within 24 hours prior to percutaneous endovascular mechanical circulatory support:
 - CPR was performed on the candidate
 - Systolic blood pressure less than 70 mmHg
 - Arterial lactate greater than 4 mmol/L
 - Aspartate transaminase (AST) or alanine transaminase (ALT) greater than 1,000 U/L

Candidates that meet the criteria above will remain in this status for up to 14 days from submission of *the Heart Status 2 Justification Form*. Every 14 days, the transplant program may apply to the RRB to extend the candidate's status if the candidate remains supported by the percutaneous endovascular mechanical circulatory support device. The transplant program must provide to the RRB objective evidence of *both* of the following:

1. The candidate demonstrated a contraindication to being supported by a durable device
2. Within 48 hours prior to the status expiring, the transplant program failed at weaning the candidate from the acute percutaneous endovascular mechanical circulatory support device evidenced by at least *one* of the following:
 - Mean arterial pressure (MAP) less than 60 mmHg
 - Cardiac index less than 2.0 L/min/m²
 - Pulmonary capillary wedge pressure greater than 15 mmHg
 - SvO₂ less than 50 percent measured by central venous catheter

The RRB will retrospectively review extension requests. If the candidate is still supported by the percutaneous endovascular mechanical circulatory support device after 14 days and either the extension request is not granted or the transplant

program does not request an extension, then the transplant program may assign the candidate to status 3.

6.1.B.v Intra-Aortic Balloon Pump (IABP)

A candidate's transplant program may assign a candidate to adult status 2 if the candidate is admitted to the transplant hospital that registered the candidate on the waiting list, and is supported by an IABP for cardiogenic shock as evidenced by *either* of the following:

- Within 7 days prior to IABP support, *all* of the following are true within one 24 hour period:
 - a. Systolic blood pressure less than 90 mmHg
 - b. Cardiac index less than 1.8 L/min/m² if the candidate is not supported by inotropes or less than 2.0 L/min/m² if the candidate is supported by inotropes
 - c. Pulmonary capillary wedge pressure greater than 15 mmHg
- If hemodynamic measurements could not be obtained within 7 days prior to IABP support, at least *one* of the following is true within 24 hours prior to IABP support:
 - CPR was performed on the candidate
 - Systolic blood pressure less than 70 mmHg
 - Arterial lactate greater than 4 mmol/L
 - AST or ALT greater than 1,000 U/L

Candidates that meet the criteria above will remain in this status for up to 14 days from submission of *the Heart Status 2 Justification Form*. Every 14 days, the transplant program may apply to the RRB to extend the candidate's status if the candidate remains supported by the IABP. The transplant program must provide to the RRB objective evidence of *both* of the following:

1. The candidate demonstrated a contraindication to being supported by a durable device
2. Within 48 hours prior to the status expiring, the transplant program failed to wean the candidate from the IABP as evidenced by at least *one* of the following:
 - Mean arterial pressure (MAP) less than 60 mmHg
 - Cardiac index less than 2.0 L/min/m²
 - Pulmonary capillary wedge pressure greater than 15 mmHg
 - SvO₂ less than 50 percent measured by central venous catheter

The RRB will retrospectively review extension requests. If the candidate is still supported by the IABP after 14 days and either the extension request is not granted or the transplant program does not request an extension, then the transplant program may assign the candidate to status 3.

6.1.B.vi Ventricular Tachycardia (VT) or Ventricular Fibrillation (VF)

A candidate's transplant program may assign a candidate to adult status 2 if the candidate is admitted to the transplant hospital that registered the candidate on the waiting list, is not considered a candidate for other treatment alternatives, such as ablation, by an electrophysiologist, and is experiencing recurrent or sustained VT or VF with at least three episodes separated by at least one hour within a period of 14 days. The VT or VF episodes must have *both* of the following:

1. Occurred in the setting of normal serum magnesium and potassium levels
2. Required electrical cardioversion despite receiving intravenous antiarrhythmic therapies

This status is valid for up to 14 days from submission of *the Heart Status 2 Justification Form*. This status can be extended by the transplant program every 14 days by submission of another *Heart Status 2 Justification Form*.

6.1.C Adult Heart Status 3 Requirements

To assign a candidate to adult status 3, the candidate's transplant program must submit a *Heart Status 3 Justification Form* to the OPTN Contractor. A candidate is not assigned adult status 3 until this form is submitted.

If the candidate is at least 18 years old at the time of registration then the candidate's transplant program may assign the candidate adult status 3 if the candidate has at least *one* of the following conditions:

- Is supported by a dischargeable left ventricular assist device and is exercising 30 days of discretionary time, according to *Policy 6.1.C.i* below.
- Is supported by multiple inotropes or a single high dose inotrope and has hemodynamic monitoring, according to *Policy 6.1.C.ii* below.
- Is supported by a mechanical circulatory support device (MCS) with hemolysis, according to *Policy 6.1.C.iii* below.
- Is supported by an MCS with pump thrombosis, according to *Policy 6.1.C.iv* below.
- Is supported by an MCS and has right heart failure, according to *Policy 6.1.C.v* below.
- Is supported by an MCS and has a device infection, according to *Policy 6.1.C.vi* below.
- Is supported by an MCS and has bleeding, according to *Policy 6.1.C.vii* below.
- Is supported by an MCS and has aortic insufficiency, according to *Policy 6.1.C.viii* below.
- Is supported by veno-arterial extracorporeal membrane oxygenation (VA ECMO) after 7 days, according to *Policy 6.1.C.ix* below.
- Is supported by a non-dischargeable, surgically implanted, non-endovascular left ventricular assist device (LVAD) after 14 days, according to *Policy 6.1.C.x* below.
- Is supported by a percutaneous endovascular mechanical circulatory support device after 14 days, according to *Policy 6.1.C.xi* below.
- Is supported by an intra-aortic balloon pump (IABP) after 14 days, according to *Policy 6.1.C.xii* below.

6.1.C.i Dischargeable Left Ventricular Assist Device (LVAD) for Discretionary 30 Days

A candidate's transplant program may assign a candidate to adult status 3 if the candidate is supported by a dischargeable LVAD. The OPTN Contractor maintains a list of OPTN-approved, qualifying devices.

The candidate may be registered as status 3 for 30 days at any point after being implanted with the dischargeable LVAD and once the attending physician determines the candidate is medically stable. Regardless of whether the candidate has a single transplant program registration or multiple transplant program registrations, the candidate receives a total of 30 days discretionary time for each dischargeable LVAD implanted across all registrations. Each day used by any of the transplant programs counts towards the cumulative 30 days.

The 30 days do not have to be consecutive and if the candidate undergoes a procedure to receive another replacement dischargeable LVAD, then the candidate qualifies for a new term of 30 days. When a candidate receives a replacement device, the 30 day period begins again, and the candidate cannot use any time remaining from the previous period.

6.1.C.ii Multiple Inotropes or a Single High Dose Inotrope and Hemodynamic Monitoring

A candidate's transplant program may assign a candidate to adult status 3 if the candidate is admitted to the hospital that registered the candidate on the waiting list, and within 7 days prior to inotrope administration or while on inotropes meets *all* of the following:

1. Has *one* of the following:
 - Invasive pulmonary artery catheter
 - Daily hemodynamic monitoring to measure cardiac output and left ventricular filling pressures
2. Is in cardiogenic shock, as evidenced by *all* of the following within one 24 hour period:
 - a. Systolic blood pressure less than 90 mmHg
 - b. Pulmonary Capillary Wedge Pressure greater than 15 mmHg
 - c. Cardiac index of *either*:
 - Less than 1.8 L/min/m² for candidates without inotropic or mechanical support within 7 days prior to inotrope administration
 - Less than 2.2 L/min/m² for candidates with inotropic or mechanical support
3. Is supported by *one* of the following:
 - A continuous infusion of *at least one* high-dose intravenous inotrope:
 - Dobutamine greater than or equal to 7.5 mcg/kg/min
 - Milrinone greater than or equal to 0.50 mcg/kg/min
 - Epinephrine greater than or equal to 0.02 mcg/kg/min
 - A continuous infusion of *at least two* intravenous inotropes:
 - Dobutamine greater than or equal to 3 mcg/kg/min
 - Milrinone greater than or equal to 0.25 mcg/kg/min
 - Epinephrine greater than or equal to 0.01 mcg/kg/min
 - Dopamine greater than or equal to 3 mcg/kg/min

This status is valid for up to 14 days from submission of *the Heart Status 3 Justification Form*. After the initial 14 days, this status can be extended by the transplant program every 14 days by submission of another *Heart Status 3 Justification Form* if the candidate remains admitted to the hospital that registered the candidate on the waiting list, and the candidate remains supported by ongoing use of a qualifying inotrope therapy and meets *all* of the following:

1. *One* of the following hemodynamic monitoring:
 - Invasive pulmonary artery catheter
 - Daily hemodynamic monitoring to measure cardiac output and left ventricular filling pressures
2. Within 48 hours prior to the status expiring, must meet *either* of the following:
 - Cardiac index less than 2.2 L/min/m² on the current medical regimen
 - Failed attempt to wean the inotrope support documented by at least *one* of the following:
 - Cardiac index less than 2.2 L/min/m² during dose reduction
 - Increase in serum creatinine by 20 percent over the value immediately prior to, and within 24 hours of, inotrope dose reduction
 - Increase in arterial lactate to greater than 2.5 mmol/L
 - SvO₂ less than 50 percent measured by central venous catheter

6.1.C.iii Mechanical Circulatory Support Device (MCSD) with Hemolysis

A candidate's transplant program may assign a candidate to adult status 3 if the candidate is supported by an MCSD and is not experiencing device malfunction, but is experiencing hemolysis, as evidenced by *both* of the following:

1. Two separate samples collected within 48 hours of each other confirming markers of active hemolysis as evidenced by *at least two* of the following criteria:
 - Blood lactate dehydrogenase (LDH) at least 2.5 times the upper limit of normal at the laboratory reference range
 - Plasma free hemoglobin greater than 20 mg/dL
 - Hemoglobinuria
2. Documentation of at least one attempt to treat the condition using an intravenous anticoagulant, intravenous anti-platelet agent, or thrombolytic, with persistent or recurrent hemolysis

This status is valid for up to 14 days from submission of *the Heart Status 3 Justification Form*. After the initial 14 days, this status can be extended by the transplant program every 14 days by submission of another *Heart Status 3 Justification Form*.

6.1.C.iv Mechanical Circulatory Support Device (MCSD) with Pump Thrombosis

A candidate's transplant program may assign a candidate to adult status 3 if the candidate is supported by an MCSD and is experiencing pump thrombosis as evidenced by at least *one* of the following:

- Visually detected thrombus in a paracorporeal ventricular assist device (VAD)
- Transient ischemic attack, stroke, or peripheral thromboembolic event, with non-invasive testing to exclude *both*:
 1. Intracardiac thrombus in all candidates
 2. Significant carotid artery disease in candidates with a neurological event

This status is valid for up to 14 days from submission of *the Heart Status 3 Justification Form*. After the initial 14 days, this status can be extended by the transplant program every 14 days by submission of another *Heart Status 3 Justification Form*.

6.1.C.v Mechanical Circulatory Support Device (MCSD) with Right Heart Failure

A candidate's transplant program may assign a candidate to adult status 3 if the candidate is supported by an MCSD and has at least moderate right ventricular malfunction in the absence of left ventricular assist device (LVAD) malfunction, and *both* of the following:

1. Has been treated with at least one of the following therapies for at least 14 consecutive days, and requires ongoing treatment with at least *one* of the following therapies:
 - Dobutamine greater than or equal to 5 mcg/kg/min
 - Dopamine greater than or equal to 4 mcg/kg/min
 - Epinephrine greater than or equal to 0.05 mcg/kg/min
 - Inhaled nitric oxide
 - Intravenous prostacyclin

- Milrinone greater than or equal to 0.35 mcg/kg/min
2. Has, within 7 days prior to initiation of any of the therapies above, pulmonary capillary wedge pressure less than 20 mmHg and central venous pressure greater than 18 mmHg within one 24 hour period.

This status is valid for up to 14 days from submission of *the Heart Status 3 Justification Form*. After the initial 14 days, this status can be extended by the transplant program every 14 days by submission of another *Heart Status 3 Justification Form*.

6.1.C.vi Mechanical Circulatory Support Device (MCSD) with Device Infection

A candidate's transplant program may assign a candidate to adult status 3 if the candidate is supported by an MCSD and is experiencing a pump-related local or systemic infection, with *at least one* of the symptoms according to *Table 6-1: Evidence of Device Infection* below.

Table 6-1: Evidence of Device Infection

If the candidate has evidence of:	Then this status is valid for up to:
Erythema and pain along the driveline, with either leukocytosis or a 50 percent increase in white blood cell count from the last recorded white blood cell count, and <i>either</i> : <ul style="list-style-type: none"> • Positive bacterial or fungal cultures from the driveline exit site within the last 14 days • A culture-positive fluid collection between the driveline exit site and the device 	14 days from submission of <i>the Heart Status 3 Justification Form</i> .
Debridement of the driveline with positive cultures from sites between the driveline exit site and the device	14 days from submission of <i>the Heart Status 3 Justification Form</i> .
Bacteremia treated with antibiotics	42 days from submission of <i>the Heart Status 3 Justification Form</i> .
Recurrent bacteremia that recurs from the same organism within four weeks of completing antibiotic treatment to which the bacteria is susceptible	90 days from submission of <i>the Heart Status 3 Justification Form</i> .
Positive culture of material from the pump pocket of an implanted device	90 days from submission of <i>the Heart Status 3 Justification Form</i> .

After the initial qualifying time period, this status can be extended by the transplant program by submission of another *Heart Status 3 Justification Form*.

6.1.C.vii Mechanical Circulatory Support Device (MCSD) with Mucosal Bleeding

A candidate's transplant program may assign a candidate to adult status 3 if the candidate is admitted to the transplant hospital that registered the candidate on the waiting list, is supported by an MCSD, has been hospitalized for mucosal bleeding at least two times within the past six months, excluding the candidate's hospitalization

for implantation of the MCSD, and meets the requirements according to *Table 6-2: Evidence of Mucosal Bleeding* below:

Table 6-2: Evidence of Mucosal Bleeding

If <i>all</i> of the following occurred:	Then this status is valid for <i>either</i> :
<ol style="list-style-type: none"> 1. The candidate received blood transfusions of at least two units of packed red blood cells per hospitalization during at least two hospitalizations for mucosal bleeding 2. The candidate's international normalized ratio (INR) was less than 3.0 at the time of at least one of the bleeds 3. The candidate's hematocrit upon admission is less than or equal to 0.20 or decreased by 20 percent or more relative to the last measured value at any time during the bleeding episode 	<ul style="list-style-type: none"> • Up to 14 days from submission of <i>the Heart Status 3 Justification Form</i>, if the candidate has been hospitalized for mucosal bleeding at least two times within the past six months • Up to 90 days from submission of <i>the Heart Status 3 Justification Form</i>, if the candidate has been hospitalized for mucosal bleeding at least three times within the past six months

After the initial qualifying time period, this status can be extended by the transplant program by submission of another *Heart Status 3 Justification Form*.

6.1.C.viii Mechanical Circulatory Support Device (MCSD) with Aortic Insufficiency (AI)

A candidate's transplant program may assign a candidate to adult status 3 if the candidate is supported by an MCSD and is not exhibiting evidence of device malfunction, but is experiencing AI, with *all* of the following:

1. At least moderate AI by any imaging modality in the setting of the mean arterial pressure (MAP) less than or equal to 80 mmHg
2. Pulmonary capillary wedge pressure greater than 20 mmHg
3. New York Heart Association (NYHA) Class III-IV symptoms

This status is valid for up to 90 days from submission of *the Heart Status 3 Justification Form*. After the initial 90 days, this status can be extended by the transplant program every 90 days by submission of another *Heart Status 3 Justification Form*.

6.1.C.ix VA ECMO after 7 Days

A candidate's transplant program may assign a candidate to adult status 3 if the candidate is admitted to the transplant hospital that registered the candidate on the waiting list, is supported by VA ECMO, and has already been assigned to status 1 according to *Policy 6.1.A.i: Veno-Arterial Extracorporeal Membrane Oxygenation (VA ECMO)* for 7 days.

This status is valid for up to 7 days from submission of *the Heart Status 3 Justification Form*. After the initial 7 days, this status can be extended by the transplant program every 7 days by submission of another *Heart Status 3 Justification Form*.

6.1.C.x Non-Dischargeable, Surgically Implanted, Non-Endovascular Left Ventricular Assist Device (LVAD) after 14 Days

A candidate's transplant program may assign a candidate to adult status 3 if the candidate is admitted to the transplant hospital that registered the candidate on the waiting list, is supported by a non-dischargeable, surgically implanted, non-endovascular left ventricular assist device (LVAD) and has already been assigned to status 2 according to *Policy 6.1.B.i: Non-Dischargeable, Surgically Implanted, Non-Endovascular Left Ventricular Assist Device (LVAD)* for 14 days.

This status is valid for up to 14 days from submission of the *Heart Status 3 Justification Form*. After the initial 14 days, this status can be extended by the transplant program every 14 days by submission of another *Heart Status 3 Justification Form*.

6.1.C.xi Percutaneous Endovascular Mechanical Circulatory Support Device after 14 Days

A candidate's transplant program may assign a candidate to adult status 3 if the candidate is admitted to the transplant hospital that registered the candidate on the waiting list, is supported by a percutaneous endovascular mechanical circulatory support device, and has already been assigned to status 2 according to *Policy 6.1.B.iv: Percutaneous Endovascular Mechanical Circulatory Support Device* for 14 days.

This status is valid for up to 14 days from submission of the *Heart Status 3 Justification Form*. After the initial 14 days, this status can be extended by the transplant program every 14 days by submission of another *Heart Status 3 Justification Form*.

6.1.C.xii Intra-Aortic Balloon Pump (IABP) after 14 Days

A candidate's transplant program may assign a candidate to adult status 3 if the candidate is admitted to the transplant hospital that registered the candidate on the waiting list, is supported by an IABP, and has already been assigned to status 2 according to *Policy 6.1.B.v: Intra-Aortic Balloon Pump (IABP)* for 14 days.

This status is valid for up to 14 days from submission of the *Heart Status 3 Justification Form*. After the initial 14 days, this status can be extended by the transplant program every 14 days by submission of another *Heart Status 3 Justification Form*.

6.1.D Adult Heart Status 4 Requirements

To assign a candidate adult status 4, the candidate's transplant program must submit a *Heart Status 4 Justification Form* to the OPTN Contractor. A candidate is not assigned adult status 4 until this form is submitted.

If the candidate is at least 18 years old at the time of registration then the candidate's transplant program may assign the candidate adult status 4 if the candidate has at least *one* of the following conditions:

- Is supported by a dischargeable left ventricular assist device (LVAD), according to *Policy 6.1.D.i* below.

- Is supported by inotropes without continuous hemodynamic monitoring, according to *Policy 6.1.D.ii* below.
- Is diagnosed with congenital heart disease, according to *Policy 6.1.D.iii* below.
- Is diagnosed with ischemic heart disease with intractable angina, according to *Policy 6.1.D.iv* below.
- Is diagnosed with amyloidosis, hypertrophic cardiomyopathy or restrictive cardiomyopathy, according to *Policy 6.1.D.v* below.
- Is a re-transplant, according to *Policy 6.1.D.vi* below.

6.1.D.i Dischargeable Left Ventricular Assist Device (LVAD) without Discretionary 30 Days

A candidate's transplant program may assign a candidate to adult status 4 if the candidate is supported by a dischargeable LVAD. The OPTN Contractor maintains a list of OPTN-approved, qualifying devices.

This status is valid for up to 90 days from submission of *the Heart Status 4 Justification Form*. After the initial 90 days, this status can be extended by the transplant program every 90 days by submission of another *Heart Status 4 Justification Form*.

6.1.D.ii Inotropes without Hemodynamic Monitoring

A candidate's transplant program may assign a candidate to adult status 4 if the candidate is supported by a continuous infusion of a positive inotropic agent, and meets *all* of the following:

1. Cardiac index of less than 2.2 L/min/m² within 7 days prior to submission of the *Heart Status 4 Status Justification Form*
2. Pulmonary Capillary Wedge Pressure greater than 15 mmHg
3. Requires at least *one* of the following intravenous inotropes:
 - Dobutamine greater than or equal to 3 mcg/kg/min
 - Milrinone greater than or equal to 0.25 mcg/kg/min
 - Epinephrine greater than or equal to 0.01 mcg/kg/min
 - Dopamine greater than or equal to 3 mcg/kg/min

This status is valid for up to 90 days from submission of *the Heart Status 4 Justification Form*. After the initial 90 days, this status can be extended by the transplant program every 90 days by submission of another *Heart Status 4 Justification Form*.

6.1.D.iii Congenital Heart Disease

A candidate's transplant program may assign a candidate to adult status 4 if the candidate is diagnosed with a hemodynamically significant congenital heart disease. The OPTN Contractor maintains a list of OPTN-approved qualifying congenital heart disease diagnoses.

This status is valid for up to 90 days from submission of *the Heart Status 4 Justification Form*. After the initial 90 days, this status can be extended by the transplant program every 90 days by submission of another *Heart Status 4 Justification Form*.

6.1.D.iv Ischemic Heart Disease with Intractable Angina

A candidate's transplant program may assign a candidate to adult status 4 if the candidate is diagnosed with ischemic heart disease and has intractable angina, with *all* of the following:

1. Coronary artery disease
2. Canadian Cardiovascular Society Grade IV angina pectoris that cannot be treated by a combination of medical therapy, and percutaneous or surgical revascularization
3. Myocardial ischemia shown by imaging

This status is valid for up to 90 days from submission of *the Heart Status 4 Justification Form*. After the initial 90 days, this status can be extended by the transplant program every 90 days by submission of another *Heart Status 4 Justification Form*.

6.1.D.v Amyloidosis, or Hypertrophic or Restrictive Cardiomyopathy

A candidate's transplant program may assign a candidate to adult status 4 if the candidate is diagnosed with amyloidosis, hypertrophic cardiomyopathy or restrictive cardiomyopathy, with at least *one* of the following:

- Canadian Cardiovascular Society Grade IV angina pectoris that cannot be controlled by medical therapy
- New York Heart Association (NYHA) Class III-IV symptoms with *either*:
 - Cardiac index less than 2.2 L/min/m²
 - Left or right atrial pressure, left or right ventricular end-diastolic pressure, or pulmonary capillary wedge pressure greater than 20 mmHg
- Ventricular tachycardia lasting at least 30 seconds
- Ventricular fibrillation
- Ventricular arrhythmia requiring electrical cardioversion
- Sudden cardiac death

This status is valid for up to 90 days from submission of *the Heart Status 4 Justification Form*. After the initial 90 days, this status can be extended by the transplant program every 90 days by submission of another *Heart Status 4 Justification Form*.

6.1.D.vi Re-transplant

A candidate's transplant program may assign a candidate to adult status 4 if the candidate has a previous heart transplant, and there is evidence of International Society of Heart and Lung Transplantation (ISHLT) coronary allograft vasculopathy (CAV) grade 2-3, or New York Heart Association (NYHA) Class III-IV heart failure symptoms.

This status is valid for up to 90 days from submission of *the Heart Status 4 Justification Form*. After the initial 90 days, this status can be extended by the transplant program every 90 days by submission of another *Heart Status 4 Justification Form*.

6.1.E Adult Heart Status 5 Requirements

If the candidate is at least 18 years old at the time of registration then the candidate's transplant program may assign the candidate to adult status 5 if the candidate is registered on the heart waiting list, and is also registered on the waiting list for at least one other organ at the same hospital.

This status is valid for up to 180 days from submission of *the Heart Status 5 Justification Form* as long as the candidate is registered for another organ at the same hospital. After the initial 180 days, this status can be extended by the transplant program every 180 days by submission of another *Heart Status 5 Justification Form* as long as the candidate is registered for another organ at the same hospital.

6.1.F Adult Heart Status 6 Requirements

If the candidate is at least 18 years old at the time of registration and is suitable for transplant, then the transplant program may assign the candidate to adult status 6.

This status is valid for up to 180 days from submission of *the Heart Status 6 Justification Form* as long as the candidate remains suitable for transplant. After the initial 180 days, this status can be extended by the transplant program every 180 days by submission of another *Heart Status 6 Justification Form* as long as the candidate remains suitable for transplant.

6.2 Pediatric Status Assignments and Update Requirements

Heart candidates less than 18 years old at the time of registration may be assigned any of the following:

- Pediatric status 1A
- Pediatric status 1B
- Pediatric status 2
- Inactive status

A candidate registered on the waiting list before turning 18 years old remains eligible for pediatric status until the candidate has been removed from the waiting list.

6.2.A Pediatric Heart Status 1A Requirements

To register a candidate as pediatric status 1A, the candidate's transplant program must submit a *Heart Status 1A Justification Form* to the OPTN Contractor. A candidate is not classified as pediatric status 1A until this form is submitted.

The candidate's transplant program may assign the candidate pediatric status 1A if the candidate is less than 18 years old at the time of registration and meets at least *one* of the following criteria:

1. Requires continuous mechanical ventilation and is admitted to the hospital that registered the candidate.
2. Requires assistance of an intra-aortic balloon pump and is admitted to the hospital that registered the candidate.
3. Has ductal dependent pulmonary or systemic circulation, with ductal patency maintained by stent or prostaglandin infusion, and is admitted to the transplant hospital that registered the candidate.
4. Has a hemodynamically significant congenital heart disease diagnosis, requires infusion of multiple intravenous inotropes or a high dose of a single intravenous inotrope, and is admitted to the transplant hospital that registered the candidate. The OPTN Contractor maintains a list of OPTN-approved congenital heart disease diagnoses and qualifying inotropes and doses that qualify a candidate for pediatric status 1A.
5. Requires assistance of a mechanical circulatory support device.

Pediatric status 1A is valid for 14 days from the date of the candidate's initial registration as pediatric status 1A. After the initial 14 days, status 1A must be recertified by the transplant program every 14 days to extend the status 1A registration.

When a candidate's pediatric status 1A expires, the candidate will be assigned pediatric status 1B. Within 24 hours of the status change, the transplant program must report to the OPTN Contractor the criterion that qualifies the candidate to be registered as status 1B. The transplant program must classify the candidate as pediatric status 2 or inactive status if the candidate's medical condition does not qualify for pediatric status 1B.

6.2.B Pediatric Heart Status 1B Requirements

To assign a candidate pediatric heart status 1B, the candidate's transplant program must submit a *Heart Status 1B Justification Form* to the OPTN Contractor. A candidate is not assigned pediatric status 1B until this form is submitted.

The candidate's transplant program may assign the candidate pediatric status 1B if the candidate is less than 18 years old at the time of registration and meets at least *one* of the following criteria:

1. Requires infusion of one or more inotropic agents but does not qualify for pediatric status 1A. The OPTN Contractor maintains a list of the OPTN-approved status 1B inotropic agents and doses.
2. Is less than one year old at the time of the candidate's initial registration and has a diagnosis of hypertrophic or restrictive cardiomyopathy.

The candidate may retain pediatric status 1B for an unlimited period and this status does not require any recertification, unless the candidate's medical condition changes and the criteria used to justify that candidate's status are no longer accurate as described in *Policy 6.2*.

6.2.C Pediatric Heart Status 2 Requirements

If the candidate is less than 18 years old at the time of registration and does not meet the criteria for pediatric status 1A or 1B but is suitable for transplant, then the candidate may be assigned pediatric status 2.

A candidate's pediatric status 2 does not require any recertification.

6.2.D Inactive Adult and Pediatric Candidates

If an adult or pediatric candidate is temporarily unsuitable for transplant, then the candidate's transplant program may assign the candidate inactive status and the candidate will not receive any heart offers.

6.3 Status Updates

If a candidate's medical condition changes and the criteria used to justify that candidate's status is no longer accurate, then the candidate's transplant program must update the candidate's status and report the updated information to the OPTN Contractor within 24 hours of the change in medical condition.

6.4 Adult and Pediatric Status Exceptions

A heart candidate can receive a status by qualifying for an exception according to *Table 6-3* below.

Table 6-3: Exception Qualification and Periods

Requested Status:	Qualification:	Initial Review	Duration:	Extensions:
Adult status 1	<ol style="list-style-type: none"> 1. Candidate is admitted to the transplant hospital that registered the candidate on the waiting list 2. Transplant physician believes, using acceptable medical criteria, that a heart candidate has an urgency and potential for benefit comparable to that of other candidates at the requested status 	RRBs retrospectively review requests for status 1 exceptions	14 days	<ul style="list-style-type: none"> • Require RRB approval for each successive 14 day period • RRB will review and decide extension requests retrospectively
Adult status 2	<ol style="list-style-type: none"> 1. Candidate is admitted to the transplant hospital that registered the candidate on the waiting list 2. Transplant physician believes, using acceptable medical criteria, that a heart candidate has an urgency and potential for benefit comparable to that of other candidates at the requested status 	RRBs retrospectively review requests for status 2 exceptions	14 days	<ul style="list-style-type: none"> • Require RRB approval for each successive 14 day period • RRB will review and decide extension requests retrospectively
Adult status 3	<ol style="list-style-type: none"> 1. Candidate is admitted to the transplant hospital that registered the candidate on the waiting list 2. Transplant physician believes, using acceptable medical criteria, that a heart candidate has an urgency and potential for benefit comparable to that of other candidates at the requested status 	RRBs retrospectively review requests for status 3 exceptions	14 days	<ul style="list-style-type: none"> • Require RRB approval for each successive 14 day period • RRB will review and decide extension requests retrospectively
Adult status 4	Transplant physician believes, using acceptable medical criteria, that a heart candidate has an urgency and potential for benefit comparable to that of other candidates at the requested status	RRBs retrospectively review requests for status 4 exceptions	90 days	<ul style="list-style-type: none"> • Require RRB approval for each successive 90 day period • RRB will review and decide extension requests retrospectively
Pediatric status 1A	<ul style="list-style-type: none"> • Candidate is admitted to the transplant hospital that registered the candidate on the waiting list 	RRBs retrospectively review requests for Status 1A-exceptions	14 days	<ul style="list-style-type: none"> • Require RRB approval for each successive 14 day period

Requested Status:	Qualification:	Initial Review	Duration:	Extensions:
	<ul style="list-style-type: none"> Transplant physician believes, using acceptable medical criteria, that a heart candidate has an urgency and potential for benefit comparable to that of other candidates at the requested status 			<ul style="list-style-type: none"> RRB will review and decide extension requests retrospectively If no extension request is submitted, the candidate will be assigned pediatric status 1B
Pediatric status 1B	Transplant physician believes, using acceptable medical criteria, that a heart candidate has an urgency and potential for benefit comparable to that of other candidates at the requested status	RRBs retrospectively review requests for Status 1B exceptions	Indefinite	<ul style="list-style-type: none"> Not required as long as candidate's medical condition remains the same

The candidate's transplant physician must submit a justification form to the OPTN Contractor with the requested status and the rationale for granting the status exception.

6.4.A RRB and Committee Review of Status Exceptions

The heart RRB reviews applications for adult and pediatric status exceptions and extensions retrospectively.

If the candidate is transplanted and the RRB does not approve the initial exception or extension request or any appeal, then the case will be referred to the Thoracic Committee. If the Thoracic Committee agrees with the RRB's decision, then the Thoracic Committee may refer the case to Membership & Professional Standards Committee (MPSC) for review according to *Appendix L* of the OPTN Bylaws.

6.4.A.i. RRB Appeals

If the RRB denies an exception or extension request, the candidate's transplant program must either appeal to the RRB within 1 day of receiving notification of the RRB denial, or assign the candidate to the status for which the candidate qualifies within 1 day of receiving notification of the RRB denial.

6.4.A.ii Committee Appeals

If the RRB denies the appeal, the candidate's transplant program must within 1 day of receiving notification of the denied RRB appeal either appeal to the Thoracic Organ Transplantation Committee or assign the candidate to the status for which the candidate qualifies. If the Thoracic Committee agrees with the RRB's decision, the candidate's transplant program must assign the candidate to the status for which the candidate qualifies within 1 day of receiving notification of the denied Committee appeal. If the transplant program does not assign the candidate to the status for which the candidate qualifies within 1 day of receiving notification of the denied Committee appeal, then the Committee will refer the case to the MPSC.

6.4.B Exceptions to Allocation for Sensitized Patients

An OPO may allocate a heart to sensitized candidates within a DSA out of sequence within a status as defined in *Policy 6.6: Heart Allocation Classifications and Rankings* if *all* of the following are true:

1. The candidate's transplant surgeon or physician determines that the candidate's antibodies would react adversely to certain human leukocyte antigens (HLA).
2. All heart transplant programs and the OPO within the DSA agree to allocate a heart from a compatible deceased donor to the sensitized candidate.
3. The candidate's transplant program, all heart transplant programs, and the OPO within the DSA agree upon the level of sensitization at which a candidate qualifies for the sensitization exception.

The sensitized candidate can only be prioritized ahead of candidates with the same status and within the same DSA. Sensitization alone does not qualify a candidate to be assigned any status exception as described in *Policy 6.4: Adult and Pediatric Status Exceptions* above.

6.5 Waiting Time

Waiting time for heart candidates begins when the candidate is first registered as an active heart candidate on the waiting list, and is calculated within each heart status.

If a candidate's status is upgraded, waiting time accrued while assigned to a lower status is not transferred to the higher status. Conversely, waiting time accrued while assigned at a higher status is transferred to a lower status if the candidate is assigned to a lower status.

Waiting time does not accrue while the candidate is inactive.

6.6 Heart Allocation Classifications and Rankings

6.6.A Allocation of Hearts by Blood Type

Within each heart status and geographical zone classification, hearts are first allocated to primary blood type candidates then to secondary blood type candidates according to the blood type matching requirements in *Table 6-4* below.

Table 6-4: Blood Type Matching Prioritization for Heart Allocation

Hearts from Deceased Donors with:	Are Allocated to Primary Candidates defined as:	Then to Secondary Candidates, defined as:
Blood Type O	Blood type O or blood type B	Blood type A or blood type AB
Blood Type A	Blood type A or blood type AB	Not applicable
Blood Type B	Blood type B or blood type AB	Not applicable
Blood Type AB	Blood type AB	Not applicable

Pediatric candidates that are less than one year old at the time of the match run, including candidates eligible to receive a heart from an intended blood group incompatible deceased donor, will be classified as a primary blood type match candidate.

Pediatric candidates that are at least one year of age at the time of the match run but registered before their second birthday and are eligible to receive a heart from an intended blood group incompatible deceased donor will be classified as a secondary blood type match candidate, unless they are a primary blood type match candidate according to *Table 6-4*.

6.6.B Eligibility for Intended Blood Group Incompatible Offers for Deceased Donor Hearts

The candidate will be eligible for intended blood group incompatible heart offers if the candidate meets at least *one* of the following conditions:

1. Candidate is less than one year old at the time of the match run, and meets *both* of the following:
 - a. Is registered as status 1A or 1B.
 - b. Has reported isohemagglutinin titer information for A or B blood type antigens to the OPTN Contractor within the last 30 days.
2. Candidate is at least one year old at the time of the match run, and meets all of the following:
 - a. Is registered prior to turning two years old.
 - b. Is registered as status 1A or 1B.
 - c. Has reported to the OPTN Contractor isohemagglutinin titers less than or equal to 1:16 for A or B blood type antigens from a blood sample collected within the last 30 days. The candidate must not have received treatments that may have reduced isohemagglutinin titers to 1:16 or less within 30 days of when this blood sample was collected.

Accurate isohemagglutinin titers must be reported for candidates eligible to accept an intended blood group incompatible heart according to *Table 6-5* below, at all of the following times:

1. Upon initially reporting that a candidate is willing to accept an intended blood group incompatible heart.
2. Every 30 days after initially reporting that a candidate is willing to accept an intended blood group incompatible heart.

Table 6-5: Isohemagglutinin Titer Reporting Requirements for a Candidate Who is Willing to Receive an Intended Blood Group Incompatible Heart

If the candidate's blood type is:	Then the transplant program must report the following isohemagglutinin titers to the OPTN Contractor:
A	Anti-B
B	Anti-A
O	Anti-A and Anti-B

Accurate isohemagglutinin titers must be reported for recipients of an intended incompatible blood type heart, according to *Table 6-6*, as follows:

1. At transplant from a blood sample taken within 24 hours prior to transplant.
2. If graft loss occurs within one year after transplant from the most recent blood sample, if available.
3. If recipient death occurs within one year after transplant from the most recent blood sample, if available.

Table 6-6: Isohemagglutinin Titer Reporting Requirements for a Recipient of an Intended Blood Group Incompatible Heart

Deceased donor's blood type:	Recipient's blood type:	Isohemagglutinin titer reporting requirement:
A	B or O	Anti-A
B	A or O	Anti-B
AB	A	Anti-B
AB	B	Anti-A
AB	O	Anti-A and Anti-B

If a laboratory provides more than one isohemagglutinin titer value for a tested blood sample, the transplant program must report to the OPTN Contractor the highest titer value.

6.6.C Sorting Within Each Classification

Candidates are sorted within each classification by the total amount of waiting time that the candidate has accumulated at that status, according to *Policy 6.5: Waiting Time*.

6.6.D Allocation of Hearts from Donors at Least 18 years Old

Hearts from deceased donors at least 18 years old are allocated to candidates according to *Table 6-7* below.

Table 6-7: Allocation of Hearts from Deceased Donors At Least 18 Years Old

Classification	Candidates that are within the:	And are:
1	OPO's DSA or Zone A	Adult status 1 or pediatric status 1A and primary blood type match with the donor
2	OPO's DSA or Zone A	Adult status 1 or pediatric status 1A and secondary blood type match with the donor
3	OPO's DSA or Zone A	Adult status 2 and primary blood type match with the donor
4	OPO's DSA or Zone A	Adult status 2 and secondary blood type match with the donor
5	OPO's DSA	Adult status 3 or pediatric status 1B and primary blood type match with the donor
6	OPO's DSA	Adult status 3 or pediatric status 1B and secondary blood type match with the donor
7	Zone B	Adult status 1 or pediatric status 1A and primary blood type match with the donor
8	Zone B	Adult status 1 or pediatric status 1A and secondary blood type match with the donor
9	Zone B	Adult status 2 and primary blood type match with the donor
10	Zone B	Adult status 2 and secondary blood type match with the donor

Classification	Candidates that are within the:	And are:
11	OPO's DSA	Adult status 4 and primary blood type match with the donor
12	OPO's DSA	Adult status 4 and secondary blood type match with the donor
13	Zone A	Adult status 3 or pediatric status 1B and primary blood type match with the donor
14	Zone A	Adult status 3 or pediatric status 1B and secondary blood type match with the donor
15	OPO's DSA	Adult status 5 and primary blood type match with the donor
16	OPO's DSA	Adult status 5 and secondary blood type match with the donor
17	Zone B	Adult status 3 or pediatric status 1B and primary blood type match with the donor
18	Zone B	Adult status 3 or pediatric status 1B and secondary blood type match with the donor
19	OPO's DSA	Adult status 6 or pediatric status 2 and primary blood type match with the donor
20	OPO's DSA	Adult status 6 and pediatric status 2 and secondary blood type match with the donor
21	Zone C	Adult status 1 or pediatric status 1A and primary blood type match with the donor
22	Zone C	Adult status 1 or pediatric status 1A and secondary blood type match with the donor
23	Zone C	Adult status 2 and primary blood type match with the donor
24	Zone C	Adult status 2 and secondary blood type match with the donor
25	Zone C	Adult status 3 or pediatric status 1B and primary blood type match with the donor
26	Zone C	Adult status 3 or pediatric status 1B and secondary blood type match with the donor
27	Zone A	Adult status 4 and primary blood type match with the donor
28	Zone A	Adult status 4 and secondary blood type match with the donor
29	Zone A	Adult status 5 and primary blood type match with the donor

Classification	Candidates that are within the:	And are:
30	Zone A	Adult status 5 and secondary blood type match with the donor
31	Zone A	Adult status 6 or pediatric status 2 and primary blood type match with the donor
32	Zone A	Adult status 6 or pediatric status 2 and secondary blood type match with the donor
33	Zone D	Adult status 1 or pediatric status 1A and primary blood type match with the donor
34	Zone D	Adult status 1 or pediatric status 1A and secondary blood type match with the donor
35	Zone D	Adult status 2 and primary blood type match with the donor
36	Zone D	Adult status 2 and secondary blood type match with the donor
37	Zone D	Adult status 3 or pediatric status 1B and primary blood type match with the donor
38	Zone D	Adult status 3 or pediatric status 1B and secondary blood type match with the donor
39	Zone B	Adult status 4 and primary blood type match with the donor
40	Zone B	Adult status 4 and secondary blood type match with the donor
41	Zone B	Adult status 5 and primary blood type match with the donor
42	Zone B	Adult status 5 and secondary blood type match with the donor
43	Zone B	Adult status 6 or pediatric status 2 and primary blood type match with the donor
44	Zone B	Adult status 6 or pediatric status 2 and secondary blood type match with the donor
45	Zone E	Adult status 1 or pediatric status 1A and primary blood type match with the donor
46	Zone E	Adult status 1 or pediatric status 1A and secondary blood type match with the donor
47	Zone E	Adult status 2 and primary blood type match with the donor
48	Zone E	Adult status 2 and secondary blood type match with the donor

Classification	Candidates that are within the:	And are:
49	Zone E	Adult status 3 or pediatric status 1B and primary blood type match with the donor
50	Zone E	Adult status 3 or pediatric status 1B and secondary blood type match with the donor
51	Zone C	Adult status 4 and primary blood type match with the donor
52	Zone C	Adult status 4 and secondary blood type match with the donor
53	Zone C	Adult status 5 and primary blood type match with the donor
54	Zone C	Adult status 5 and secondary blood type match with the donor
55	Zone C	Adult status 6 or pediatric status 2 and primary blood type match with the donor
56	Zone C	Adult status 6 or pediatric status 2 and secondary blood type match with the donor
57	Zone D	Adult status 4 and primary blood type match with the donor
58	Zone D	Adult status 4 and secondary blood type match with the donor
59	Zone D	Adult status 5 and primary blood type match with the donor
60	Zone D	Adult status 5 and secondary blood type match with the donor
61	Zone D	Adult status 6 or pediatric status 2 and primary blood type match with the donor
62	Zone D	Adult status 6 or pediatric status 2 and secondary blood type match with the donor
63	Zone E	Adult status 4 and primary blood type match with the donor
64	Zone E	Adult status 4 and secondary blood type match with the donor
65	Zone E	Adult status 5 and primary blood type match with the donor
66	Zone E	Adult status 5 and secondary blood type match with the donor
67	Zone E	Adult status 6 or pediatric status 2 and primary blood type match with the donor

Classification	Candidates that are within the:	And are:
68	Zone E	Adult status 6 or pediatric status 2 and secondary blood type match with the donor

6.6.E Allocation of Hearts from Donors Less Than 18 Years Old

A heart from a pediatric donor will be allocated to a pediatric heart candidate by status and geographical location before being allocated to a candidate at least 18 years old according to *Table 6-8* below.

Table 6-8: Allocation of Hearts from Donors Less Than 18 Years Old

Classification	Candidates that are within the:	And are:
1	OPO's DSA or Zone A	Pediatric status 1A and primary blood type match with the donor
2	OPO's DSA or Zone A	Pediatric status 1A and secondary blood type match with the donor
3	OPO's DSA	Adult status 1 and primary blood type match with the donor
4	OPO's DSA	Adult status 1 and secondary blood type match with the donor
5	OPO's DSA	Adult status 2 and primary blood type match with the donor
6	OPO's DSA	Adult status 2 and secondary blood type match with the donor
7	OPO's DSA or Zone A	Pediatric status 1B and primary blood type match with the donor
8	OPO's DSA or Zone A	Pediatric status 1B and secondary blood type match with the donor
9	Zone A	Adult status 1 and primary blood type match with the donor
10	Zone A	Adult status 1 and secondary blood type match with the donor
11	Zone A	Adult status 2 and primary blood type match with the donor
12	Zone A	Adult status 2 and secondary blood type match with the donor
13	OPO's DSA	Adult status 3 and primary blood type match with the donor
14	OPO's DSA	Adult status 3 and secondary blood type match with the donor

Classification	Candidates that are within the:	And are:
15	OPO's DSA	Adult status 4 and primary blood type match with the donor
16	OPO's DSA	Adult status 4 and secondary blood type match with the donor
17	OPO's DSA	Adult status 5 and primary blood type match with the donor
18	OPO's DSA	Adult status 5 and secondary blood type match with the donor
19	Zone A	Adult status 3 and primary blood type match with the donor
20	Zone A	Adult status 3 and secondary blood type match with the donor
21	Zone A	Adult status 4 and primary blood type match with the donor
22	Zone A	Adult status 4 and secondary blood type match with the donor
23	Zone A	Adult status 5 and primary blood type match with the donor
24	Zone A	Adult Status 5 and secondary blood type match with the donor
25	OPO's DSA	Pediatric status 2 and primary blood type match with the donor
26	OPO's DSA	Pediatric status 2 and secondary blood type match with the donor
27	OPO's DSA	Adult status 6 and primary blood type match with the donor
28	OPO's DSA	Adult status 6 and secondary blood type match with the donor
29	Zone B	Pediatric status 1A and primary blood type match with the donor
30	Zone B	Pediatric status 1A and secondary blood type match with the donor
31	Zone B	Adult status 1 and primary blood type match with the donor
32	Zone B	Adult status 1 and secondary blood type match with the donor
33	Zone B	Adult status 2 and primary blood type match with the donor

Classification	Candidates that are within the:	And are:
34	Zone B	Adult status 2 and secondary blood type match with the donor
35	Zone B	Pediatric status 1B and primary blood type match with the donor
36	Zone B	Pediatric status 1B and secondary blood type match with the donor
37	Zone B	Adult status 3 and primary blood type match with the donor
38	Zone B	Adult status 3 and secondary blood type match with the donor
39	Zone B	Adult status 4 and primary blood type match with the donor
40	Zone B	Adult status 4 and secondary blood type match with the donor
41	Zone B	Adult status 5 and primary blood type match with the donor
42	Zone B	Adult status 5 and secondary blood type match with the donor
43	Zone A	Pediatric status 2 and primary blood type match with the donor
44	Zone A	Pediatric status 2 and secondary blood type match with the donor
45	Zone A	Adult status 6 and primary blood type match with the donor
46	Zone A	Adult status 6 and secondary blood type match with the donor
47	Zone B	Pediatric status 2 and primary blood type match with the donor
48	Zone B	Pediatric status 2 and secondary blood type match with the donor
49	Zone B	Adult status 6 and primary blood type match with the donor
50	Zone B	Adult status 6 and secondary blood type match with the donor
51	Zone C	Pediatric status 1A and primary blood type match with the donor
52	Zone C	Pediatric status 1A and secondary blood type match with the donor

Classification	Candidates that are within the:	And are:
53	Zone C	Adult status 1 and primary blood type match with the donor
54	Zone C	Adult status 1 and secondary blood type match with the donor
55	Zone C	Adult status 2 and primary blood type match with the donor
56	Zone C	Adult status 2 and secondary blood type match with the donor
57	Zone C	Pediatric status 1B and primary blood type match with the donor
58	Zone C	Pediatric status 1B and secondary blood type match with the donor
59	Zone C	Adult status 3 and primary blood type match with the donor
60	Zone C	Adult status 3 and secondary blood type match with the donor
61	Zone C	Adult status 4 and primary blood type match with the donor
62	Zone C	Adult status 4 and secondary blood type match with the donor
63	Zone C	Adult status 5 and primary blood type match with the donor
64	Zone C	Adult status 5 and secondary blood type match with the donor
65	Zone C	Pediatric status 2 and primary blood type match with the donor
66	Zone C	Pediatric status 2 and secondary blood type match with the donor
67	Zone C	Adult status 6 and primary blood type match with the donor
68	Zone C	Adult status 6 and secondary blood type match with the donor
69	Zone D	Pediatric status 1A and primary blood type match with the donor
70	Zone D	Pediatric status 1A and secondary blood type match with the donor
71	Zone D	Adult status 1 and primary blood type match with the donor

Classification	Candidates that are within the:	And are:
72	Zone D	Adult status 1 and secondary blood type match with the donor
73	Zone D	Adult status 2 and primary blood type match with the donor
74	Zone D	Adult status 2 and secondary blood type match with the donor
75	Zone D	Pediatric status 1B and primary blood type match with the donor
76	Zone D	Pediatric status 1B and secondary blood type match with the donor
77	Zone D	Adult status 3 and primary blood type match with the donor
78	Zone D	Adult status 3 and secondary blood type match with the donor
79	Zone D	Adult status 4 and primary blood type match with the donor
80	Zone D	Adult status 4 and secondary blood type match with the donor
81	Zone D	Adult status 5 and primary blood type match with the donor
82	Zone D	Adult status 5 and secondary blood type match with the donor
83	Zone D	Pediatric status 2 and primary blood type match with the donor
84	Zone D	Pediatric status 2 and secondary blood type match with the donor
85	Zone D	Adult status 6 and primary blood type match with the donor
86	Zone D	Adult status 6 and secondary blood type match with the donor
87	Zone E	Pediatric status 1A and primary blood type match with the donor
88	Zone E	Pediatric status 1A and secondary blood type match with the donor
89	Zone E	Adult status 1 and primary blood type match with the donor
90	Zone E	Adult status 1 and secondary blood type match with the donor

Classification	Candidates that are within the:	And are:
91	Zone E	Adult status 2 and primary blood type match with the donor
92	Zone E	Adult status 2 and secondary blood type match with the donor
93	Zone E	Pediatric status 1B and primary blood type match with the donor
94	Zone E	Pediatric status 1B and secondary blood type match with the donor
95	Zone E	Adult status 3 and primary blood type match with the donor
96	Zone E	Adult status 3 and secondary blood type match with the donor
97	Zone E	Adult status 4 and primary blood type match with the donor
98	Zone E	Adult status 4 and secondary blood type match with the donor
99	Zone E	Adult status 5 and primary blood type match with the donor
100	Zone E	Adult status 5 and secondary blood type match with the donor
101	Zone E	Pediatric status 2 and primary blood type match with the donor
102	Zone E	Pediatric status 2 and secondary blood type match with the donor
103	Zone E	Adult status 6 and primary blood type match with the donor
104	Zone E	Adult status 6 and secondary blood type match with the donor

6.6.F Allocation of Heart-Lungs

If a host OPO is offering a heart and a lung from the same deceased donor, then the host OPO must offer the heart and the lung according to *Policy 6.6.F.i: Allocation of Heart-Lungs from Deceased Donors at Least 18 Years Old* or *Policy 6.6.F.ii: Allocation of Heart-Lungs from Deceased Donors Less Than 18 Years Old*.

The blood type matching requirements described in *Policy 6.6.A: Allocation of Hearts by Blood Type* apply to heart-lung candidates when the candidates appear on the heart match run. The blood type matching requirements in *Policy 10.4.B: Allocation of Lungs by Blood Type* apply to heart-lung candidates when the candidates appear on the lung match run.

6.6.F.i Allocation of Heart-Lungs from Deceased Donors at Least 18 Years Old

If a heart or heart-lung potential transplant recipient (PTR) requires a lung, the OPO must offer the lungs from the same deceased donor to the heart or heart-lung PTR according to *Policy 6.6.D: Allocation of Hearts from Donors at Least 18 Years Old*.

If a lung or heart-lung PTR in allocation classifications 1 through 12 according to *Policy 10.4.C: Allocation of Lungs From Deceased Donors at Least 18 Years Old* requires a heart, the OPO cannot allocate the heart from the same deceased donor to the lung or heart-lung PTR until after the heart has been offered to all heart and heart-lung PTRs in allocation classifications 1 through 4 according to *Policy 6.6.D: Allocation of Hearts from Donors at Least 18 Years Old*.

6.6.F.ii Allocation of Heart-Lungs from Deceased Donors Less Than 18 Years Old

If a heart or heart-lung potential transplant recipient (PTR) requires a lung, the OPO must offer the lungs from the same deceased donor to the heart or heart-lung PTR according to *Policy 6.6.E: Allocation of Hearts from Donors Less Than 18 Years Old*.

If a lung or heart-lung PTR in allocation classifications 1 through 10 according to *Policy 10.4.D: Allocation of Lungs From Deceased Donors Less Than 18 Years Old* requires a heart, the OPO cannot allocate the heart from the same deceased donor to the lung or heart-lung PTR until after the heart has been offered to all heart and heart-lung PTRs in allocation classifications 1 through 12 according to *Policy 6.6.E: Allocation of Hearts from Donors Less Than 18 Years Old*.

NOT IMPLEMENTED

