# **Pediatric Heart Lung Candidate Registration**

The fields on the Heart/Lung Candidate Registration form contain demographic and basic clinical information about candidates on the national waiting list.

### Add new candidate registration

**<u>Center</u>**: Verify the transplant hospital name.

Organ: Select organ to register.

### Candidate Add

**<u>Center</u>**: Verify the transplant hospital name.

Organ Registration: Verify organ type.

**SSN:** Enter the candidate's social security number.

*Note:* SSN cannot:

Contain 00 in the 4th and 5th place (e.g., XXX-00-XXXX is invalid)

Contain 0000 in the last 4 places (e.g., XXX-XX-0000 is invalid)

Begin with 666

**<u>Confirm SSN</u>**: Re-enter candidate SSN. A green check mark indicates that the data matches. **<u>Age Group</u>**: Select age group (adult or pediatric).

### **Provider Information**

**<u>Transplant Hospital</u>**: Verify the transplant hospital name.

**<u>24 Hour Contact Phone Number</u>**: Verify the transplant center phone number. This is a **required** field.

### **Demographic Information**

**SSN**: Enter the candidate's social security number.

*Note:* SSN cannot:

Contain 00 in the 4th and 5th place (e.g., XXX-00-XXXX is invalid)

Contain 0000 in the last 4 places (e.g., XXX-XX-0000 is invalid)

Begin with 666

**<u>Confirm SSN</u>**: Re-enter candidate SSN. A green check mark indicates that the data matches.

Last Name: Enter the last name of the candidate. This is a required field.

**First Name:** Enter the first name of the candidate. This is a **required** field.

MI: Enter the candidate's middle initial.

**Date of birth:** Enter the candidate's date of birth. This is a **required** field.

**Confirm date of birth:** Re-enter candidate date of birth. A green check mark indicates that the data matches.

**<u>Birth sex</u>**: Indicate if the patient is Male or Female. Report patient sex (male or female), based on biologic and physiologic traits at birth. This is a **required** field.

**<u>Center Patient ID</u>**: Enter the candidate's patient identification number that is assigned by your center, if applicable.

**State of Permanent Residence:** Select the full name of the state where the candidate's home is located.

**<u>Permanent Zip Code</u>**: Enter the 5-digit or 9-digit U.S. postal zip code for the address where the candidate's home is located. *Note:* Make corrections to an incorrect permanent zip code on the Transplant Candidate Registration (TCR) form in TIEDI®. This field cannot be updated from the active list.

**Ethnicity:** The Revisions to the Standards for the Classification of Federal Data on Race and Ethnicity (Office of Management and Budget (OMB) <u>Statistical Policy Directive No. 15</u>) define the minimum standards for collecting and presenting data on race and ethnicity for all Federal reporting. The OPTN collection of ethnicity is aligned to this standard.

OMB defines ethnicity to be whether a person self-identifies as Hispanic origin or not. For this reason, ethnicity is broken out in two categories, (1) Hispanic or Latino or (2) Not Hispanic or Latino. Select one ethnicity category or select 'Ethnicity Not Reported' if the candidate did not self-identify. This field is **required**.

**Hispanic or Latino** – A person of Cuban, Mexican, Puerto Rican, South or Central American, or other Spanish culture or origin, regardless of race.

### Not Hispanic or Latino

### **Ethnicity Not Reported**

**Race:** The Revisions to the Standards for the Classification of Federal Data on Race and Ethnicity (Office of Management and Budget (OMB) <u>Statistical Policy Directive No. 15</u>) define the minimum standards for collecting and presenting data on race and ethnicity for all Federal reporting. The OPTN collection of race is aligned to this standard. OMB defines race as a person's self-identification with one or more social groups.

An individual can select one or more race categories (1) White, (2) Black or African American, (3) Asian, (4) American Indian or Alaska Native, (5) Native Hawaiian or Other Pacific Islander. Select 'Race Not Reported' if the candidate's race is not reported. This field is **required**.

*Note:* A person may report multiple races. Persons reporting Hispanic or Latino ethnicity may report themselves as any race category or report no race at all.

Select one or more race sub-categories or origins. Select 'Other Origin' if origin is not listed. Select 'Origin Not Reported' if the origin was not self-identified by the person.

**White** – A person having origins in any of the original peoples of Europe, the Middle East, or North Africa.

European Descent Arab or Middle Eastern North African (non-Black) Other Origin

### **Origin Not Reported**

**Black or African American** – A person having origins in any of the Black racial groups of Africa.

- African American
- African (Continental)
- West Indian
- Haitian
- Other Origin

### **Origin Not Reported**

**American Indian or Alaska Native** – A person having origins in any of the original peoples of North and South America (including Central America) and who maintains tribal affiliation or community attachment.

- American Indian
- Eskimo
- Aleutian
- Alaska Indian
- **Other Origin**

### **Origin Not Reported**

Asian – A person having origins in any of the original peoples of the Far East, Southeast Asia, or the Indian subcontinent including, for example, Cambodia, China, India, Japan, Korea, Malaysia, Pakistan, the Philippine Islands, Thailand, and Vietnam.

### Asian Indian/Indian Sub-Continent

- Chinese
- Filipino

### Japanese

Korean

### Vietnamese

**Other Origin** 

### **Origin Not Reported**

**Native Hawaiian or Other Pacific Islander** – A person having origins in any of the original peoples of Hawaii, Guam, Samoa, or other Pacific Islands.

### Native Hawaiian

### **Guamanian or Chamorro**

Samoan

### **Other Origin**

### **Origin Not Reported**

Race Not Reported – Select if person did not self-identify a race category or origin.

**Titer Data** 

<u>Most Recent Anti-A Titer</u>: If the candidate has an ABO blood type of B, select the most recent anti-A titer value from the drop-down list, then enter the corresponding **Sample Date**. This is a **required** field.

<u>Most Recent Anti-B Titer</u>: If the candidate has an ABO blood type of A, select the most recent Anti-B titer value from the drop-down list, then enter the corresponding **Sample Date**. This is a **required** field.

Has candidate received any treatments that may have reduced the titer values to 1:16 or less within 30 days of when the blood sample was collected?: Indicate whether the candidate has or has not received treatments by selecting Yes or No. This is a required field.

### **Clinical Information**

ABO: Select the candidate's blood type. This is a required field.

*Note:* A2 is used as shorthand for any blood type A subtype other than A1 (i.e., non-A1, negative for A1). A2B is used as shorthand for any blood type AB subtype other than A1B (i.e., non-A1B, negative for A1B). Policy **requires** at least two (2) separate blood typings prior to listing. Policy also **requires** you to review all known available blood type source documents to verify the candidate's blood type. See <u>OPTN Policies</u> for additional information. Use the search feature to locate specific policy information on ABO Typing.

O A B AB Z (in Utero Only)

<u>Accept an Intended Blood Group Incompatible Organ?</u>: Indicate whether the candidate will accept an incompatible blood type by selecting **Yes** or **No**. This field is for pediatric candidates less than 2 years old at time of registration.

*Note:* For candidates with ABO type AB, you must select **No**.

**<u>Height</u>**: Enter the height of the candidate in the appropriate space, in feet and inches or centimeters. The height must fall between 0 and 7 feet or 1 and 241 centimeters. This is a **required** field.

**Date:** Enter the date the candidate's height was measured. This is a **required** field.

**Weight:** Enter the weight of the candidate in the appropriate space, in pounds or kilograms. Weight must be updated every 6 months in order to keep the candidate BMI current. The weight must fall between 0 and 650 pounds or 0 and 295 kilograms. This is a **required** field.

**<u>Date</u>**: Enter the date the candidate's weight was measured. If the evaluation date has expired, the least beneficial value for height and weight will be used to calculate the candidate's lung composite allocation score. This is a **required** field.

*Note:* If candidate height or weight values are missing, the lung composite allocation score calculation will use a substituted value of 100 kg/m<sup>2</sup> for the BMI.

**<u>BMI</u> (Body Mass Index):** The candidate's BMI will display. For candidates 18 years old or younger, at the time of listing, UNet<sup>SM</sup> will generate and display calculated percentiles based on the 2000 CDC growth charts.

### HLA

**HLA:** Histocompatibility antigens are currently not required when adding candidates for extra renal organs (LI, IN, HR, HL, and LU) to the active list. If histocompatibility antigens are entered, at least one value is required for each antigen (**A**, **B**, **Bw4**, **Bw6**, and **DR**). The order in which the antigens are entered does not affect the matching and screening process.

Click Confirm HLA and re-enter HLA information in Confirm HLA section.

### **Organ Information**

**<u>Candidate Medical Urgency Status</u>**: Indicate the candidate's medical urgency status. If one of the Active statuses is selected, the candidate is eligible to appear on a UNet match run. If **Temporarily inactive** is selected, the candidate is non-eligible to appear on the UNet match run. This is a **required** field.

Select one of the following for pediatric candidates:

Status 1A Status 1B Status 2 Temporarily Inactive

**Inactive reason:** Select the reason the candidate is inactive.

Inactive Reason Code	Description	
1	Candidate cannot be contacted	
2	Candidate choice	
3	Candidate work-up incomplete	
4	Insurance issues	
5	Medical non-compliance	
6	Inappropriate substance use	
7	Temporarily too sick	
8	Temporarily too well	
9	Weight currently inappropriate for transplant	
10	Transplanted - removal pending UNET data correction	
11	Inactivation due to VAD implantation and/or VAD complication	
12	TX Pending	

13	Physician/Surgeon unavailable
14	Candidate for living donor transplant only
15	Administrative: Waiting time/ped-adult adjustment
16	COVID-19 Precaution

*Note:* The inactive reason **TX'ed - removal pending UNet data correction** is only to be used when a transplant center removed the incorrect candidate from Waitlist due to transplant and is waiting for UNOS to correct the data so that the correct candidate can be removed with the right donor ID. Candidates should not be set to inactive for this reason for more than 5 days.

Heart Diagnosis Code: Indicate the candidate's heart diagnosis code. This is a required field.

Lung Diagnosis Code: Indicate the candidate's lung diagnosis code. This is a required field.

**Indicate reason for change in diagnosis:** If the diagnosis code is changed, this field will display and is required. Indicate the reason that the diagnosis needs to be changed.

*Note:* Only enter actual test and evaluation data in this section. Do not enter estimated values below.

**NYHA Functional Classification:** If the patient has pulmonary hypertension as a primary diagnosis, select the patient's New York Heart Association (NYHA) classification. The NYHA classification classifies patients in one of four categories based on their limitations during physical activity; the imitations/symptoms are in regards to normal breathing and varying degrees in shortness of breath and/or angina pain.

**Class I** – No symptoms and no limitation in ordinary physical activity, e.g., shortness of breath

when walking, climbing stairs, etc.

 $\ensuremath{\text{Class II}}$  – Mild symptoms (mild shortness of breath and/or angina) and slight limitation during

ordinary activity.

**Class III** – Marked limitation in activity due to symptoms, even during less-thanordinary activity, e.g., walking short distances (20–100 m). Comfortable only at rest.

**Class IV** – Severe limitations. Experiences symptoms even while at rest. Mostly bedbound

patients.

Eval Date: Enter the date when this information was obtained.

**Brain Natriuretic Peptide Test:** Enter the candidate's BNP or NT-proBNP lab values in pg/mL.

**Definition:** BNP (B-type natriuretic peptide) and NT-proBNP (N-terminal pro-BNP) are fragments cleaved from proBNP (pro B-type natriuretic peptide) that is secreted by cardiomyocytes in response to stretch.

**Test Date:** Enter the date when this information was obtained.

<u>Pericardial Effusion</u>: If the patient is currently experiencing pericardial effusion as detected on echocardiogram, select **Yes**. If not select **No**.

**Definition:** Pericardial effusion refers to increased fluid within the pericardial sac which can cause circulatory compromise by compression of the heart; most often caused by inflammation, infection, malignancy, and uremia.

**Eval Date:** Enter the date when this information was obtained.

**Functional Status:** Select the applicable status from the drop-down list. Functional status is a way to measure the effects that lung disease may have on a person's ability to perform routine daily tasks. Enter the **Eval Date** when this information was obtained. This field must be updated every 6 months from the time the candidate was added to the Waitlist. If the field is incomplete or has expired, the least beneficial value will be used to calculate the candidate's lung composite allocation score.

### Performs activities of daily living with NO assistance Performs activities of daily living with SOME assistance Performs activities of daily living with TOTAL assistance

**<u>Diabetes</u>**: If the candidate has **Diabetes**, select the option to indicate insulin dependency. If the candidate does not have diabetes, select **Not Diabetic**. A patient should *not* be considered as having diabetes based on a diagnosis of gestational diabetes only. Enter the **Eval Date** when this information was obtained.

## Treated with insulin Not treated with insulin Not diabetic

**Assisted Ventilation:** Indicate the type of assisted ventilation the candidate requires. If the candidate does not require assisted ventilation, select **No assisted ventilation needed**. These fields must be updated every 6 months from the time the candidate was added to the Waitlist. If the fields are incomplete or the evaluation date has expired, the least beneficial value will be used to calculate the candidate's lung allocation score. Use of average volume-assured pressure support (AVAPS) should be reported as **intermittent mechanical**.

Eval Date: Enter the date when this information was obtained.

**Requires Supplemental O**<sub>2</sub>: If the patient requires supplemental oxygen, indicate when supplemental oxygen is required and what type of oxygen supply system is used (face mask, high flow nasal cannula, nasal cannula, reservoir cannula, BiPAP, CPAP, continuous mechanical – hospitalized, continuous mechanical – not hospitalized, intermittent mechanical – hospitalized, or intermittent mechanical – not hospitalized). A high flow nasal cannula is a device that allows for independent titration of L/min and FiO2. Enter the amount needed in L/min (the value must fall between 0.25 and 100) or in percent (the value must fall between 22 and 100). For the purposes of calculating the patient's composite allocation score, a substituted value of 26.33 will be used for any values entered over 26.33. Use of average volume-assured pressure support (AVAPS) should be reported as intermittent mechanical.

### At rest (not moving or exerting oneself)

### With exercise

### With sleep

**Six minute walk distance:** Enter the distance the candidate is able to walk in six minutes in feet. The distance walked is a measure of functional status. The normal range is between 0 and 3000, although a value outside of this range may be entered. Enter the **Test Date** when this information was obtained. These fields must be updated every 6 months from the time the

candidate was added to the Waitlist. If they are incomplete or expired, the least beneficial value will be used to calculate the candidate's lung composite allocation score.

**Massive hemoptysis:** If the patient has experienced massive hemoptysis in the last year, enter the number of times experienced.

**Definition:** Hemoptysis is the coughing up of blood or bloody sputum from the lungs or airway. For adult patients, massive hemoptysis is defined as acute bleeding of  $\geq$ 240 mL in a 24-hour period or recurrent bleeding of >100 mL each day for more than two days. For pediatric patients, massive hemoptysis is defined as acute bleeding of  $\geq$ 8 mL/kg at once or recurrent bleeding over several days equaling 8 mL/kg or more.

**<u>Eval Date</u>**: Enter the date when this information was obtained.

**Exacerbations:** Enter the number of times within the last year from the date of entry that the patient has experienced an exacerbation.

<u>On continuous intravenous antibiotics for longer than 60 days in the last year</u>: Select checkbox if patient has been on continuous intravenous antibiotics for longer than 60 days in the last year.

**<u>Microbiology</u>**: If the patient has a history of infection (either within the last year or more than one year ago) with a multi-drug resistant (MDR) organism select the type of organism. MDR is defined as resistance to at least one agent in three or more antimicrobial classes. If the history of infection is not listed below, it does not need to be reported.

Burkholderia cenocepacia (genomovar III)

Burkholderia gladioli

MDR or Pan-R gram negative bacteria

Mycobacterium abscessus

Scedosporium/Pseudallescheria species complex/Lomentospora

Eval Date: Enter the date when this information was obtained.

Most Recent Heart Catheterization Date: Enter the date of the candidate's most recent heart catheterization.

**Pulmonary Artery Systolic Pressure:** Enter the pulmonary artery systolic pressure in mmHg. The normal range is between 10 and 120, although a value outside of this range may be entered.

**Pulmonary Artery Diastolic Pressure:** Enter the candidate's pulmonary artery diastolic pressure in mmHg. The expected value range is 5 - 40 mmHg; although the absolute value range is 0 - 110 mm Hg may be entered. **Definition:** The minimum arterial pressure during relaxation and dilatation of the ventricles of the heart when the ventricles fill with blood.

<u>Mean Pulmonary Artery Pressure</u>: Enter the mean pulmonary artery pressure in mmHg. The normal range is between 5 and 80, although a value outside of this range may be entered.

*Note:* The formula used to obtain Mean Pulmonary Artery Pressure is:

Mean Pulmonary Artery Pressure = ((Systolic Pressure – Diastolic Pressure)/3) + Diastolic Pressure

**Pulmonary Capillary Wedge Mean**: Enter the mean pulmonary capillary wedge pressure in mmHg. The normal range is between 5 and 20, although a value outside of this range may be entered.

**<u>Cardiac Output (CO)</u>**: Enter the candidate's cardiac output in L/min. The expected value range is 2 - 8 L/min; although the absolute value range is 0.2 - 15 L/min may be entered.

**Definition:** The volume of blood pumped out of the heart. Cardiac output is expressed as volume of blood per unit time or liters per minute. Cardiac output can be calculated using the Fick method (oxygen consumption divided by arteriovenous oxygen difference) or by the thermodilution technique, using a Swan-Ganz catheter.

<u>Cardiac Index (CI)</u>: Enter the candidate's cardiac index in  $L/min/m^2$ . The absolute value range is 0 - 50  $L/min/m^2$  may be entered. **Definition:** The amount of blood ejected by the heart in a unit of time divided by the body surface area. It is usually expressed in liters per minute per square meter.

**<u>Right Atrial Pressure (RAP)</u>**: Enter the patient's mean right atrial pressure in mmHg. The mean should be calculated from measurements taken by right heart catheterization within the last year.

**Definition:** Right atrial pressure refers to blood pressure in the right atrium of the heart.

**Pulmonary Vascular Resistance (PVR)**: Enter the pulmonary vascular resistance in dynes/sec/cm5 or in Wood units (mmHg/L/min).

**<u>Central Venous Pressure (CVP)</u>**: Enter the candidate's central venous pressure in mmHg. The expected value range is 0 - 15 mmHg; although the absolute value range is 0 - 50 mmHg. **Definition:** The venous pressure as measured at the right atrium, done by means of a catheter introduced through the median cubital vein to the superior vena cava with the distal end of the catheter being attached to a manometer.

**Hgb/Hct Test Date:** Enter the **Test date** in the standard 8-digit MM/DD/YYYY format in the space provided. The date cannot precede the candidate's date of birth.

**Hemoglobin (Hgb):** Enter the candidate's hemoglobin in g/dL. The expected value range is 7–18 g/dL; although the absolute value range is 5–30 g/dL. **Definition:** The oxygen-carrying molecule in red blood cells.

**Hematocrit (Hct)**: Enter the candidate's hematocrit in %. The expected value range is 25 - 50%; although the absolute value range is 0–75%. **Definition**: The proportion of the blood that consists of packed red blood cells. The hematocrit is expressed as a percentage by volume. The red cells are packed by centrifugation. For example, a hematocrit of 25% means that there are 25 milliliters of red blood cells in 100 milliliters of blood. The red cells make up a quarter of the blood.

<u>Preliminary Crossmatch Required</u>: Select Yes, if a preliminary cross-match is required. If it is not, select No.

**Number of previous Heart/Lung Transplants:** Indicate the number of candidate's previous heart/lung transplants. This field is **required**.

### **Organ Information – Blood Gas Information**

**<u>Date</u>**: Enter the date of the candidate's blood gas test in the standard 8-digit MM/DD/YYYYY format. The date cannot precede the candidate's date of birth.

Time: Enter the time of the candidate's blood gas test.

**Blood Gas Test Type:** Select the blood gas test type from the drop-down list. UNet will convert a venous or capillary value to estimate an arterial value: a capillary value will equal an arterial value and UNet will subtract 6 mmHg from a venous value to equal and arterial value.

### Arterial Capillary Venous

**<u>pH</u>**: Enter the candidate's pH. The expected value range is 7.3–7.5; although the absolute value range is 5–10. **Definition:** A measure of the alkalinity or acidity of arterial blood.  $CO_2$  acts as an acid in the blood and  $HCO_3$  acts as a base in the blood. If the kidneys are not producing enough  $HCO_3$ , then the brain will tell the lungs to increase the respiratory rate in an effort to expel more  $CO_2$ . Some candidates with chronic lung disease will always have more  $CO_2$  than normal in their blood because the gas exchange units in the lungs are impaired. To compensate for a high  $CO_2$ , the body will produce more  $HCO_3$  than normal to try to achieve a balanced pH. If the pH is too high or low, enzymes will stop functioning.

**PCO**<sub>2</sub>: Enter the candidate's partial pressure of carbon dioxide in mmHg. The expected value range is 25–60 mmHg; although the absolute value range is 10–200 mmHg. The normal clinical value of  $PCO_2$  is 40 mmHg. UNet will substitute this normal clinical value in the lung composite allocation score calculation when the value of current  $PCO_2$  is expired. **Definition:** Partial pressure of  $CO_2$  in blood. Indicates adequacy of ventilations.

**PO<sub>2</sub>:** Enter the candidate's PO<sub>2</sub> test result.

**Supplemental O**<sub>2</sub> at time of test?: Select Yes, if the candidate's supplemental O<sub>2</sub> at time of test. If it is not, select No.

<u>**O**</u><sub>2</sub><u>**Amount (L/min or %)**</u>: The amount in L/min absolute value range is 0.25-26.3. The percent absolute value range is 22-100.

### **Organ Information – Serum Creatinine**

**Serum Creatinine:** Enter the serum creatinine value. The value must fall between 0.1 to 40 mg/dl. Enter the **Date** and **Time** when this information was obtained. These fields must be updated every 6 months from the time the candidate was added to the Waitlist. If they are incomplete or expired, the policy default value will be used to calculate the candidate's lung composite allocation score.

### Organ Information – Total Bilirubin

**Total Bilirubin**: Enter the total bilirubin value. The value must fall between 0 to 50 mg/dl. Enter the **Date** and **Time** when this information was obtained. These fields must be updated every 6 months from the time the candidate was added to the Waitlist. If they are incomplete or expired, the policy default value will be used to calculate the candidate's lung composite allocation score.

### **Organ Information - Pulmonary Function Test**

Enter the **Date** and **Time** of the pulmonary function test.

<u>Actual Forced Vital Capacity (FVC)</u>: Enter the candidate's Actual FVC in liters. This is a lung function test that measures the maximum amount of air you can breathe out after breathing in as deeply as possible. This amount may be lower in patients with lung disease. The normal range is between 0.2 and 10, although a value outside of this range may be entered.

**<u>Pre Bronchodilator Actual FEV</u>**<sub>1</sub>**:** Enter the candidate's pre-bronchodilator actual Forced Expiratory Volume in 1 second. The expected value range is 0.2–5 liters; although the absolute value range is 0–20 liters may be entered.

### Organ Information - Diffusing Capacity of the Lungs for Carbon Monoxide (DLCO) Test

**Diffusing Capacity of the Lungs for Carbon Monoxide (DLCO):** Enter the value of the diffusing capacity of the lungs for carbon monoxide in mL/min/mmHg, obtained from a pulmonary function test. Do not enter values corrected for hemoglobin or alveolar volume. If the patient cannot perform this test due to their medical status, select checkbox for "Too sick to perform DLCO test?"

**Definition:** Diffusing capacity of the lungs for carbon monoxide is a measurement to assess the lungs' ability to transfer gas from inspired air to the bloodstream.

### **Justification Form Status 1A**

To qualify for status 1A, the patient must either meet at least one of the criteria below (select all that apply) or an exception request must be submitted to the NHRB for review.

### By criteria:

Is admitted to the transplant hospital that registered the candidate on the waiting list and:

- · Requires continuous mechanical ventilation
- Requires assistance of an intra-aortic balloon pump
- Has ductal dependant pulmonary or system circulation, with ductal patency maintain by stent or prostaglandin infusion
- Has a hemodynamically significant congenital heart disease diagnosis, and requires infusion of multiple intravenous inotropes or a high dose of single intravenous inotrope

### Congenital Heart Disease Diagnosis (Check all that apply)

- Atrial Isomerism/Heterotaxy
- Atrioventricular Septal Defect
- Congenitally Corrected Transposition (L-TGA)
- Double Outlet Right Ventricle
- Ebstein's Anomaly
- Hypoplastic Left Heart Syndrome
- Other left Heart Valvar/Structural Hypoplasia
- Pulmonary Atresia with Intact Ventricular Septum
- Single Ventricle
- Tetralogy of Fallot
- Transposition of the Great Arteries
- Truncus Arteriosus
- Ventricular Septal Defect(s)
- Other

### **IV Inotropic Support**

Requires infusion of a single high-dose intravenous inotrope (i.e., dobutamine greater than or equal to 7.5 mcg/kg/min, milrinone greater than or equal to 0.50 mcg/kg/min, dopamine greater than or equal to 7.5 mcg/kg/min, or epinephrine greater than or equal to 0.02 mcg/kg/min) or multiple intravenous inotropes.

Enter a dosage value for at least one of the inotropes below:

**Dobutamine:** Enter the value in mcg/kg/min. The normal therapeutic range falls between 1 to 30.

**Dopamine:** Enter the value in mcg/kg/min. The normal therapeutic range falls between 1 to 30.

**Milrinone:** Enter the value in mcg/kg/min. The normal therapeutic range falls between 0.1 to 3.

**Epinephrine:** Enter the value in mcg/kg/min. The normal therapeutic range falls between 0.01 to 10.

**Norepinephrine (Levophed):** Ener the value in mcg/kg/min. The normal therapeutic range falls between 0.1 to 10. *Note:* Acceptable as a justification for this criterion only if administered with one or more of the inotropes listed above.

### **Vasoactive Support**

The following medicines are not eligible for meeting the single high-dose criteria, but are necessary for evaluating patient suitability.

**IV Nitroglycerin:** Enter the value in mcg/kg/min. The normal therapeutic range falls between 1 to 30.

**Nesiritide (Natrecor):** Enter the value in mcg/kg/min. The normal therapeutic range falls between 0.0005 to 0.05.

**Nitroprusside (Nipride, Nitropress):** Enter the value in mcg/kg/min. The normal therapeutic range falls between 0.05 to 10.

**Phenylephrine (Neo-Synephrine):** Enter the value in mcg/kg/min. The normal therapeutic range falls between 0.1 to 10.

**Vasopressin (Pitressin):** Enter the value in units/min. The normal therapeutic range falls between 0.1 to 10.

May or may not be admitted to the transplant hospital that registered the candidate on the waiting list and requires assistance of a mechanical circulatory support device

### By exception:

If the candidate is admitted to the transplant hospital that registered the candidate on the waiting list and the 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 registered status.

**Justification narrative:** Enter a clinical narrative which supports the eligibility of the candidate for an exceptional case. Maximum of 5000 characters.

**Transplant physician name**: Enter the name of the candidate's surgeon/physician. This is a **required** field.

**Transplant physician NPI:** Enter the NPI of the candidate's surgeon/physician. This is a **required** field.

**<u>Email decision to</u>**: Enter at least one and up to three email addresses to receive notification of the outcome of the vote. Including up to three email addresses may be important to account for time off or out-of-office. This is a **required** field.

### **Justification Form Status 1B**

To qualify for status 1B, the patient must either meet at least one of the criteria below (select all that apply) or an exception request must be submitted to the NHRB for review.

### By criteria:

- 1. Requires infusion of one or more inotropic agents but does not qualify for pediatric status 1A.
- 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.
  - Hypertrophic cardiomyopathy
  - Restrictive cardiomyopathy

### By exception:

For those candidates that do not meet the criteria above and for whom the transplant physician believes, using acceptable medical criteria, that the candidate has an urgency and potential for benefit comparable to that of the other status 1B candidates, an exception may be requested and the narrative below will be reviewed by the National Heart Review Board.

**Justification narrative:** Enter a clinical narrative which supports the eligibility of the candidate for an exceptional case. Maximum of 5000 characters.

**Transplant physician name:** Enter the name of the candidate's surgeon/physician. This is a **required** field.

**Transplant physician NPI:** Enter the NPI of the candidate's surgeon/physician. This is a **required** field.

**Email decision to:** Enter at least one and up to three email addresses to receive notification of the outcome of the vote. Including up to three email addresses may be important to account for time off or out-of-office. This is a **required** field.

### Additional Organs

Check any additional organs that the candidate may need. Checking organ(s) within this section will not register the candidate on the checked organ waiting list. You will need to complete a registration and verify the accuracy of donor acceptance criteria for each additional organ checked.

Kidney Pancreas Pancreas Islet Intestine Heart Liver Lung

### **Donor Characteristics**

<u>Minimum acceptable donor age</u>: Enter the minimum donor age that the candidate can accept. The age must fall between 0 and 99 years. This field is **required**.

**Maximum acceptable donor age:** Enter the maximum donor age that the candidate can accept. The age must fall between 0 and 99 years. The maximum value must only be entered in months if the minimum value is also entered in months (e.g., you are able enter that you will accept donors from 3 months to 3 years in age, but you may NOT enter that you would accept a donor from 1 year to 36 months in age). This field is **required**.

<u>Minimum acceptable donor height</u>: Enter the minimum donor height that the candidate can accept in inches (in) or centimeters (cm). The height must fall between 0 to 305 inches, or 0 to 305 centimeters. The minimum acceptable donor height must be equal to or no more than 12 in. less than the candidate's listing height. This field is **required**.

<u>Maximum acceptable donor height</u>: Enter the maximum donor height that the candidate can accept in inches (in) or centimeters (cm). The height must fall between 0 to 305 inches, or 0 to 305 centimeters. The maximum acceptable donor height must be equal to or no more than 12 in. greater than the candidate's listing height. This field is **required**.

<u>Minimum acceptable donor weight</u>: Enter the minimum donor weight that the candidate can accept. The weight must be a whole number that falls between 0 and 440 pounds, or 0 and 200 kilograms. The minimum acceptable donor weight should be no more than 30 percent (30%) below the candidate's listing weight. To eliminate the possibility of conversion or rounding issues, the match system deducts .5 kg when comparing this value to the donor weight. This field is **required**.

**Maximum acceptable donor weight:** Enter the maximum donor weight that the candidate can accept. The weight must be a whole number that falls between 0 and 440 pounds, or 0 and 200 kilograms. The maximum acceptable donor weight must be more than the candidate's listing weight, and must be greater than the minimum acceptable donor weight. To eliminate the possibility of conversion or rounding issues, the match system adds .5 kg when comparing this value to the donor weight. This field is **required**.

**Donor birth sex requirements:** Select whether the matching donor must be **male**, **female**, or **either** birth sex (male or female).

<u>Accept DCD donor</u>: Select **Yes** if the candidate will accept a DCD (Donation after Circulatory Death) donor. If not, select **No**. Donation after Circulatory Death (DCD) describes the organ recovery process that may occur following death by irreversible cessation of circulatory and respiratory functions. A DCD donor may also be called a non-heartbeating, asystolic, or donation after cardiac death donor. This field is **required**.

### **Medical and Social History**

Accept a donor with a history of coronary artery disease?: Select Yes if the candidate will accept a donor with a history of coronary artery disease. If not, select No.

<u>Accept a donor with cigarette use > 20 pack years ever?</u>: Select Yes if the candidate will accept a donor with cigarette use more than 20 pack years ever. If not, select No. Donor cigarette use does not include vaping or e-cigarette usage.

### Infectious Diseases

Accept a Hepatitis B Core antibody positive donor?: Select Yes if the candidate will accept a Hepatitis B core antibody positive donor. If not, select No. This field is required.

<u>Accept an HBV NAT positive donor</u>: Select **Yes** if the candidate will accept an HBV NAT positive donor. If not, select **No** This field is **required**.

<u>Accept an HCV antibody positive donor</u>: Select **Yes** if the candidate will accept an HCV antibody positive donor. If not, select **No**. This field is **required**.

<u>Accept an HCV NAT positive donor</u>: Select Yes if the candidate will accept an HCV NAT positive donor. If not, select No. This field is **required**.

#### Recovery

<u>Maximum miles the organ or recovery team will travel</u>: Enter the maximum miles the candidate's organ or recovery team will travel to obtain an organ. The number must fall between 0 and 9,999 miles. This field is **required**.

The matching system calculates mileage between the donor hospital and the recipient center based on the hospitals' zip codes. This distance is measured in nautical miles (a measure of flight distance), not in statute miles (a measurement of driving distance).

Nautical Miles	Statute Miles
250	287.7
500	575.4
1000	1150.8
1500	1726.2
2000	2301.6
2500	2876.9

#### **Conversion Table for Nautical and Statute Miles**

#### **Unacceptable Antigens**

<u>Select all A unacceptable antigens</u>: Select the candidate's A unacceptable antigens, if applicable. Make your selections from the left-hand column and click the arrow to add or remove them to the right-hand column.

<u>Select all B unacceptable antigens</u>: Select the candidate's B unacceptable antigens, if applicable. Make your selections from the left-hand column and click the arrow to add or remove them to the right-hand column.

<u>Select BW unacceptable antigen</u>: Select the candidate's BW unacceptable antigen, if applicable. Make your selections from the left-hand column and click the arrow to add or remove them to the right-hand column.

<u>Select all C unacceptable antigens</u>: Select the candidate's C unacceptable antigens, if applicable. Make your selections from the left-hand column and click the arrow to add or remove them to the right-hand column.

<u>Select all DR unacceptable antigens</u>: Select the candidate's DR unacceptable antigens, if applicable. Make your selections from the left-hand column and click the arrow to add or remove them to the right-hand column.

<u>Select all DR 51/52/53 unacceptable antigens</u>: Select the candidate's DR 51, 52 and 53 unacceptable antigens, if applicable. Make your selections from the left-hand column and click the arrow to add or remove them to the right-hand column.

<u>Select all DQB1 unacceptable antigens</u>: Select the candidate's DQB1 unacceptable antigens, if applicable. Make your selections from the left-hand column and click the arrow to add or remove them to the right-hand column.

<u>Select all DQA1 unacceptable antigens</u>: Select the candidate's DQA1 unacceptable antigens, if applicable. Make your selections from the left-hand column and click the arrow to add or remove them to the right-hand column.

<u>Select all DPB1 unacceptable antigens</u>: Select the candidate's DPB1 unacceptable antigens, if applicable. Make your selections from the left-hand column and click the arrow to add or remove them to the right-hand column.

<u>Select all DPB1 unacceptable epitopes</u>: Select the candidate's DPB1 unacceptable epitopes, if applicable. Make your selections from the left-hand column and click the arrow to add or remove them to the right-hand column.

<u>Select all DPA1 unacceptable antigens</u>: Select the candidate's DPA1 unacceptable antigens, if applicable. Make your selections from the left-hand column and click the arrow to add or remove them to the right-hand column.

### Verify ABO

Select the candidate's ABO. Policy **requires** at least two (2) separate blood typings prior to listing. Policy also **requires** you to review all known available blood type source documents to verify the candidate's blood type.

**Public Burden Statement:** The private, non-profit Organ Procurement and Transplantation Network (OPTN) collects this information in order to perform the following OPTN functions: to assess whether applicants meet OPTN Bylaw requirements for membership in the OPTN; and to monitor compliance of member organizations with OPTN Obligations. An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number. The OMB control number for this information collection is 0915-0157 and it is valid until XX/XX/202X. This information collection is required to obtain or retain a benefit per 42 CFR §121.11(b)(2). All data collected will be subject to Privacy Act protection (Privacy Act System of Records #09-15-0055). Data collected by the private non-profit OPTN also are well protected by a number of the Contractor's security features. The Contractor's security system meets or exceeds the requirements as prescribed by OMB Circular A-130, Appendix III, Security of Federal Automated Information Systems, and the Departments Automated Information Systems Security Program Handbook. The public reporting burden for this collection of information is

estimated to average 0.27 hours per response, including the time for reviewing instructions, searching existing data sources, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to HRSA Information Collection Clearance Officer, 5600 Fishers Lane, Room 14N39, Rockville, Maryland, 20857 or paperwork@hrsa.gov.