

# *Super-urgent/ Urgent Heart Recipient Registration*

## Directions for completion

- 1 This is a single copy, four-page form.
- 2 Please ensure all sections are completed in full.
- 3 **Do not use this form to register non-urgent cases** as all patients registered through this form will be registered as super-urgent or urgent. To register non-urgent heart patients use ODT Online or return a completed Heart/Lung Recipient Registration form (FRM4847) to ODT Hub: Information Services, NHS Blood and Transplant.
- 4 If completing by hand, please use BLOCK CAPITALS. When complete, please email all pages of this form to [odthub.operations@nhsbt.nhs.uk](mailto:odthub.operations@nhsbt.nhs.uk) and [odthuboperations.shiftmanagers@nhsbt.nhs.uk](mailto:odthuboperations.shiftmanagers@nhsbt.nhs.uk) and then call 0117 975 7580 to confirm that the information has been sent. The original should be retained for your files.
- 5 If using the electronic version of the form please open a blank form, complete details, then click "Make Read Only" before selecting the "Submit Form" button which will automatically generate an email to [odthub.operations@nhsbt.nhs.uk](mailto:odthub.operations@nhsbt.nhs.uk) and [odthuboperations.shiftmanagers@nhsbt.nhs.uk](mailto:odthuboperations.shiftmanagers@nhsbt.nhs.uk) with the form attached. Send the email, then call 0117 975 7580 to confirm that the information has been sent. Save the original form for your record.

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## HEART DISEASE

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### Primary disease

- 10 - Coronary heart disease
- 13 - Valvular heart disease
- 14 - Congenital heart disease
- 41 - Dilated cardiomyopathy - idiopathic
- 42 - Dilated cardiomyopathy - familial
- 43 - Dilated cardiomyopathy - myocarditis
- 44 - Dilated cardiomyopathy - alcohol
- 45 - Dilated cardiomyopathy - post partum
- 46 - Dilated cardiomyopathy - adriamycin
- 49 - Dilated cardiomyopathy - other, please specify
- 50 - Hypertrophic cardiomyopathy
- 51 - Restrictive cardiomyopathy
- 19 - Other heart disease - please specify

### Retransplantation

- 31 - Acute rejection
- 32 - Coronary occlusive disease
- 35 - Non-specific graft failure
- 38 - Allograft vascular disease

### General

- 98 - Other, please specify
- 99 - Unknown

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## INDICATION FOR SUPER-URGENT/URGENT HEART REGISTRATION

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### SUPER-URGENT PATIENTS

- 11 - Category 11 - Adult or Small Adult patient on temporary ventricular assist device (VAD) or veno-arterial extra-corporeal membrane oxygenation (VA-ECMO) support.
- 12 - Category 12 - Agreed by CTAG (Heart) Adjudication Panel and evidence of agreement emailed to NHSBT, and either:
  - a) on intra-aortic balloon pump (IABP)
  - b) at imminent risk of dying or irreversible complications. Meets criteria for urgent listing but is not suitable for long-term VAD and/or other exceptional circumstances
  - c) Paediatric patient on VA-ECMO where agreed by other paediatric transplant centre and the CTAG Chair or deputy.

### URGENT ADULT PATIENTS

- 21 - Category 21 - Adult inpatient with advanced heart failure requiring continuous inotrope therapy and/or IABP support **AND** with a cardiac index of  $<2.0\text{L}/\text{min}/\text{m}^2$  **AND** at least one of the following sub-categories:
  - a) cardiogenic shock: blood lactate  $>2.0\text{mmol}/\text{L}$  **AND** clinical evidence of hypoperfusion
  - b) cardiorenal or hepatic indication:  $\text{eGFR} <40\text{ml}/\text{min}/1.73\text{m}^2$  **AND/OR** bilirubin  $>2\times$  upper limit of normal ( $40\mu\text{mol}/\text{L}$ )
  - c) adverse pulmonary haemodynamics: transpulmonary gradient (TPG)  $>12\text{mmHg}$  **AND/OR** pulmonary vascular resistance (PVR)  $>4\text{WU}$  at baseline, despite conventional medical therapy, leading to the use of inotropes and resulting in improvement in TPG and PVR, in patients where durable LVAD therapy is not preferred.
- 22 - Category 22 - Adult long-term VAD or total artificial heart (TAH) patient, agreed by CTAG (Heart) Adjudication Panel and evidence of agreement emailed to NHSBT, with one of the following complications:
  - a) right ventricular failure dependent on inotropes
  - b) recurrent systemic infection related to VAD/TAH
  - c) other VAD/TAH issues including recurrent or refractory VAD/TAH thrombosis.
- 23 - Category 23 - Exceptionally sick adult patient - high risk of dying or having an irreversible complication but does not meet urgent listing criteria. Agreed by CTAG (Heart) Adjudication Panel and evidence of agreement emailed to NHSBT.
- 31 - Category 31 - Adult congenital heart disease (ACHD) arrhythmia patients - Refractory arrhythmia ( $>1$  hospital admission over last 3 months with haemodynamic instability or associated with kidney or liver dysfunction).
- 32 - Category 32 - ACHD patients with no option for conventional escalation of therapy - Inpatients unsuitable for inotropes and/or VAD with one of the following:
  - a) bilirubin and transaminases  $>2\times$  normal
  - b) deteriorating renal function ( $\text{eGFR} <50\text{ml}/\text{min}/1.73\text{m}^2$ , or 20% reduction from baseline)
  - c) requirement for dialysis/CVVH for fluid or electrolyte management
  - d) recurrent admissions ( $>3$  in preceding 3 months) with episodes of right heart failure or protein losing enteropathy requiring ascites drainage.

**URGENT PAEDIATRIC PATIENTS**

For any urgent listing there must be agreement between the two paediatric centres. This should involve the clinical leads or in their absence an appointed deputy. If there is disagreement this should be noted at the time of discussion with the chair of CTAG.

- 51 - Category 51 - Paediatric with short-term mechanical circulatory support device (MCSD): Mechanical circulatory support for acute haemodynamic decompensation using a short-term right, left or bi-ventricular device (including Berlin Heart), implanted as a specific bridge-to-transplantation. VA-ECMO not included; these patients qualify for super-urgent listing under Category 11.
- 52 - Category 52 - Paediatric with MCSD with device-related complications: Mechanical circulatory support with objective medical evidence of significant device-related complications such as thrombo-embolism, device infection, mechanical failure and/or life-threatening ventricular arrhythmias. Panel reactive antibody sensitisation does not qualify for urgent registration in this criterion.
- 54 - Category 54 - Paediatric with VA-ECMO: Mechanical circulatory support using extra-corporeal membrane oxygenation as a specific bridge-to-transplantation (not approved for super-urgent listing).
- 55 - Category 55 - Paediatric >15kg on high-dose inotropes: Patients >15kg on continuous central infusion of a high dose intravenous inotrope.
- 56 - Category 56 - Paediatric ≤15kg on ventilation and inotropes: Patients ≤15kg who are ventilated and on inotropes.
- 59 - Category 59 - Paediatric, Other: Paediatric patients outside the criteria listed above, but for whom the patient's transplant physicians believe urgent listing is justified using acceptable medical criteria not included above. Approval for listing under this category is as follows:
  - a) For paediatric patients whereby a maximum acceptable donor size has been specified to be <160 cm in height and <60kg in weight, their eligibility for registering under this category must be discussed and agreed by the other paediatric transplant centre and the CTAG Chair or deputy and evidence of agreement emailed to NHSBT.
  - b) For paediatric patients whereby a maximum acceptable donor size has been specified to be ≥160 cm in height or ≥60kg in weight, their eligibility for registering under this category must be discussed and agreed by the other paediatric transplant centre and the CTAG (Heart) Adjudication panel via the Chair or deputy and evidence of agreement emailed to NHSBT.

Super-urgent/Urgent Heart Recipient Registration

Section 1

We have a SUPER-URGENT/URGENT Heart Recipient to register with you

Which scheme do you wish to register this recipient on? *Urgent = U*  *Super-urgent = S*  Does this recipient also require lungs? *No = 1*  *Yes = 2*

The following patients require approval from the CTAG Adjudication Panel in order for the registration to be processed:

- Urgent heart-lung registrations
- Urgent heart-liver registrations
- Super-urgent category 12 registrations
- Urgent adult registrations under category 22 or 23
- Urgent paediatric registrations under category 59
- Small adult registrations weighing 30-40kg
- Urgent or super-urgent re-transplant registrations

Was approval given? *Not applicable = 1*  *Yes = 2*   
(not entered onto NTxD)

Date approval given (not entered onto NTxD)

RECIPIENT DETAILS

Section 2

Centre code     Transplant centre  ODT Recipient number       *(NHSBT to complete)*

Date of birth

Sex *Male = 1*  *Female = 2*

Blood group including, where known, subtypes of A ABO    *Neg = N*  *Pos = P*  *Unknown = U*  Rh

Adult and paediatric patients meeting the following criteria will NOT be eligible:

- Patients from countries outside Group 1
- Patients within 24 hours of cardiopulmonary bypass and unstable
- Patients who have had an identifiable new neurological event who remain unconscious and obtunded with a likely permanent and significant neurological deficit e.g. hemiparesis/plegia
- Acute uncontrolled sepsis

In addition, adult patients meeting the following criteria will NOT be eligible:

- Oliguric acute renal failure
- Patients who are on short-term LVADs in the acute phase who are outside the stability criteria stated in Category 11
- Patients who are both ventilated and on dialysis (including filtration)

VIROLOGY *Negative = 1* *Positive = 2* *Not tested = 7* *Unknown = 9* CMV (IgG) status  HCV status  HIV status

HbSAg status  If HbSAg positive, HbCAb *Negative = 1* *Positive = 2*

Other virus status  If other virus, please specify

REGISTRATION DETAILS

Section 3

Has this patient received any previous heart transplants? *No = 1*  *Yes = 2*  *Unknown = 9*

Specify donor ABO criteria *Compatible = 2*  *Any = 3*  Specification of 'Any' donor ABO (code 3) is only permitted for paediatric patients registered at paediatric transplant centres and may result in offers of hearts from incompatible blood group donors.

Code the recipient's primary disease or reason for retransplantation *(See codes inside cover)*    **3**    If code 19, 49 or 98, please specify

Is this a congenital disease? *No = 1*  *Yes = 2*

PHYSICAL CHARACTERISTICS

|        | Recipient  | Donor minimum  | Donor maximum  |  |
|--------|--|--|--|--|
| Height | <input type="text"/> <input type="text"/> <input type="text"/> cm                        | <input type="text"/> <input type="text"/> <input type="text"/> cm                        | <input type="text"/> <input type="text"/> <input type="text"/> cm                        | For all patients, specify the acceptable donor minimum and maximum height range and/or donor minimum and maximum weight range – registrations will only be accepted if at least one of these ranges is provided. |
| Weight | <input type="text"/> <input type="text"/> <input type="text"/> . <input type="text"/> kg | <input type="text"/> <input type="text"/> <input type="text"/> . <input type="text"/> kg | <input type="text"/> <input type="text"/> <input type="text"/> . <input type="text"/> kg |  |

If an adult with weight > 30kg and ≤40kg, Do you wish to register this patient as a small adult? *No = 1*  *Yes = 2*  A small adult is defined as being a patient weighing 30kg or less, though a centre may register a small adult weighing 40kg or less when there are specific reasons to justify inclusion in this priority group and if agreed by the CTAG (Heart) Adjudication Panel.

Do you want to register a paediatric patient on the urgent or super-urgent adult list? *No = 1*  *Yes = 2*  If "Yes" is selected then the patient will be treated as an adult in the adult donor and paediatric donor heart allocation sequences and will not get priority access to paediatric donor hearts. This is at the centre's discretion and the patient should meet urgent or super-urgent adult listing criteria

Your centre code should be quoted on all pages

Super-urgent/Urgent Heart Recipient Registration

Centre code       Transplant centre  ODT Recipient number       (NHSBT to complete)

| INDICATION FOR REGISTRATION  | Section 4   |
|--|---|
| <p><b>For ALL patients specify the CATEGORY for super-urgent/urgent registration</b> (See codes inside cover) <input type="text"/> <input type="text"/></p> <p><b>SUPER-URGENT PATIENTS</b></p> <p>If <b>Category 11:</b> Adult or Small Adult on temporary VAD or VA-ECMO support, specify which <span style="float: right;">Temporary VAD = 1<br/>VA-ECMO = 2</span> <input type="text"/></p> <p>If <b>Category 12:</b> Other super-urgent patients / paediatric super-urgent patients,<br/>Specify which <span style="float: right;">On IABP support = 1<br/>Imminent risk of dying/irreversible complications = 2<br/>Paediatric on VA-ECMO = 3</span> <input type="text"/></p> <p>Agreed by CTAG (Heart) Adjudication Panel and evidence of agreement emailed to NHSBT <span style="float: right;">No = 1<br/>Yes = 2</span> <input type="text"/></p> <p><b>URGENT ADULT PATIENTS</b></p> <p>If <b>Category 21:</b> Adult inpatient requiring inotrope therapy and/or IABP support,</p> <p>On intravenous inotropes <span style="float: right;">No = 1<br/>Yes = 2</span> <input type="text"/></p> <p>On IABP support <span style="float: right;">No = 1<br/>Yes = 2</span> <input type="text"/></p> <p>Cardiogenic shock (blood lactate &gt;2.0mmol/L and clinical evidence of hypoperfusion) <span style="float: right;">No = 1<br/>Yes = 2</span> <input type="text"/></p> <p>Cardiorenal or hepatic indication (eGFR &lt;40ml/min/1.73m<sup>2</sup> and/or bilirubin &gt;2x upper limit of normal) <span style="float: right;">No = 1<br/>Yes = 2</span> <input type="text"/></p> <p>Adverse pulmonary haemodynamics (TPG&gt;12mmHg and/or PVR &gt;4WU at baseline despite conventional medical therapy, leading to the use of inotropes and resulting in improvement in TPG and PVR, in patients where durable LVAD therapy is not preferred) <span style="float: right;">No = 1<br/>Yes = 2</span> <input type="text"/></p> <p>If <b>Category 22:</b> Long-term VAD or TAH patient with complications,<br/>Specify complication <span style="float: right;">Right ventricular failure dependent on inotropes = 1<br/>Recurrent systemic infection related to VAD/TAH = 2<br/>Other VAD/TAH issues including recurrent or refractory VAD/TAH thrombosis = 3</span> <input type="text"/></p> <p>Agreed by CTAG (Heart) Adjudication Panel and evidence of agreement emailed to NHSBT <span style="float: right;">No = 1<br/>Yes = 2</span> <input type="text"/></p> <p>If <b>Category 23:</b> Exceptionally sick patient - high risk of dying or having an irreversible complication but does not meet urgent listing criteria,<br/>Agreed by CTAG (Heart) Adjudication Panel and evidence of agreement emailed to NHSBT <span style="float: right;">No = 1<br/>Yes = 2</span> <input type="text"/></p> <p>If <b>Category 31:</b> ACHD arrhythmia patients,</p> <p>AST <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> U/L</p> <p>ALT <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> U/L</p> <p>Number of hospital admissions over last 3 months <input type="text"/> <input type="text"/></p> <p>If <b>Category 32:</b> ACHD patients with no option for conventional escalation of therapy,<br/>Specify justification <span style="float: right;">Bilirubin and transaminases &gt; 2x normal = 1<br/>Deteriorating renal function = 2<br/>Requirement for dialysis/ CVVH for fluid or electrolyte management = 3<br/>Recurrent admissions with episodes of right heart failure or protein losing enteropathy requiring ascites drainage = 4</span> <input type="text"/> ml/min/1.73m<sup>2</sup></p> <p>If code 2, eGFR <input type="text"/> <input type="text"/></p> <p>If code 3, specify treatment <span style="float: right;">Dialysis = 1<br/>CVVH = 2</span> <input type="text"/></p> <p>If code 4, no. of hospital admissions over last 3 months <input type="text"/> <input type="text"/> No. of episodes of ascites drainage <input type="text"/> <input type="text"/></p> <p><b>URGENT PAEDIATRIC PATIENTS</b></p> <p>If <b>Category 59:</b> Paediatric patients who do not meet urgent listing criteria but for whom the patient's transplant physicians believe urgent listing is justified,</p> <p>a) If maximum acceptable donor size specified to be &lt;160 cm in height and &lt;60kg in weight<br/>Agreed by the other paediatric transplant centre and the CTAG Chair or deputy and evidence of agreement emailed to NHSBT <span style="float: right;">No = 1<br/>Yes = 2</span> <input type="text"/></p> <p>b) If maximum acceptable donor size specified to be ≥160 cm in height or ≥60kg in weight<br/>Agreed by the other paediatric transplant centre and the CTAG (Heart) Adjudication panel via the Chair or deputy and evidence of agreement emailed to NHSBT <span style="float: right;">No = 1<br/>Yes = 2</span> <input type="text"/></p> | <p>Note: super-urgent category 12, urgent adult categories 22 and 23, and urgent paediatric category 59 require approval from the CTAG Adjudication Panel</p> |

Your centre code should be quoted on all pages

Super-urgent/Urgent Heart Recipient Registration

Centre code  Transplant centre  ODT Recipient number   
(NHSBT to complete)

| CLINICAL STATUS AND INVESTIGATION RESULTS   |  | Section 5  |
|---|--|--|
| Is the patient an inpatient? <span style="float: right;">No = 1<br/>Yes = 2</span> <input type="checkbox"/>   |  | Serum creatinine <small>Not measured = 7777</small> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> μmol/l                 |
| If YES,<br>Date of hospital admission <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <b>2 0</b> <input type="text"/> <input type="text"/>          |  | Haemoglobin <small>Not measured = 77.7</small> <input type="text"/> <input type="text"/> . <input type="text"/> g/dl   |
| Level of care <span style="float: right;">Level 0 = 0<br/>Level 1 = 1<br/>Level 2 = 2<br/>Level 3 = 3</span> <input type="checkbox"/>   |  | White cell count <small>Not measured = 777.7</small> <input type="text"/> <input type="text"/> <input type="text"/> . <input type="text"/> x10 <sup>9</sup> /l |
| Does the patient have a documented cardiac index of <2 l/min/m <sup>2</sup> before supportive treatment? <span style="float: right;">No = 1<br/>Yes = 2</span> <input type="checkbox"/> |  | Serum bilirubin <small>Not measured = 777</small> <input type="text"/> <input type="text"/> <input type="text"/> μmol/l  |
| VAD <span style="float: right;">None = 1<br/>Left = 2<br/>Right = 3<br/>Both = 4</span> <input type="checkbox"/>  |  | C-reactive protein <small>Not measured = 777</small> <input type="text"/> <input type="text"/> <input type="text"/> mg/l                                       |
| ECMO <span style="float: right;">No = 1<br/>Yes = 2</span> <input type="checkbox"/>   |  |  |
| IABP <span style="float: right;">No = 1<br/>Yes = 2</span> <input type="checkbox"/>   |  |  |

| DRUG THERAPY  |                   | Section 6  |
|---|-------------------|--|
| Dopamine <span style="float: right;">No = 1<br/>Yes = 2</span> <input type="checkbox"/>     | If YES, give dose | <small>Unknown = 99.9</small> <input type="text"/> <input type="text"/> . <input type="text"/> μg/kg/min |
| Dobutamine <span style="float: right;">No = 1<br/>Yes = 2</span> <input type="checkbox"/>   | If YES, give dose | <small>Unknown = 99.9</small> <input type="text"/> <input type="text"/> . <input type="text"/> μg/kg/min |
| Epinephrine <span style="float: right;">No = 1<br/>Yes = 2</span> <input type="checkbox"/>  | If YES, give dose | <small>Unknown = 9.99</small> <input type="text"/> . <input type="text"/> <input type="text"/> μg/kg/min |
| Milrinone <span style="float: right;">No = 1<br/>Yes = 2</span> <input type="checkbox"/>    | If YES, give dose | <small>Unknown = 9.9</small> <input type="text"/> . <input type="text"/> μg/kg/min                       |
| Enoximone <span style="float: right;">No = 1<br/>Yes = 2</span> <input type="checkbox"/>    | If YES, give dose | <small>Unknown = 99</small> <input type="text"/> <input type="text"/> μg/kg/min                          |
| Levosimendan <span style="float: right;">No = 1<br/>Yes = 2</span> <input type="checkbox"/> | If YES, give dose | <small>Unknown = 99</small> <input type="text"/> <input type="text"/> μg/kg/min                          |
| Other drug therapy <input style="width:100%; height: 80px;" type="text"/>                   |                   |  |

| CONFIRMATION OF ELIGIBILITY                              |  | Section 7 |
|--|--|-----------|
| Name of Consultant confirming eligibility for the scheme | <input style="width:100%;" type="text"/>   |           |
| Form completed by  | <input style="width:100%;" type="text"/>   |           |
| Contact telephone number                                 | <input style="width:100%;" type="text"/>   |           |
| Signature  | <input style="width:100%;" type="text"/>   |           |
| Date   | <input type="text"/> <input type="text"/> <input type="text"/> <b>2 0</b> <input type="text"/> <input type="text"/> <input type="text"/> |           |

**Super-urgent/Urgent Heart Recipient Registration**

Centre code  Transplant centre  ODT Recipient number   
(NHSBT to complete)

**CONFIDENTIAL RECIPIENT DETAILS**

**Section 8**

Recipient surname  Please print

Recipient forename(s)  Please print

NHS number

Hospital number

Country of permanent residence  Please print

If UK or Republic of Ireland (ROI), permanent address

Postcode (IR99 9IR for ROI address)

Group status Group 1 = 1  Group 2 = 2

Ethnic origin White = 1 Asian or Asian British = 2 Black or Black British = 3 Chinese = 4 Mixed, please specify = 6 Other, please specify = 7 Unknown = 9

If code 6 or 7, please specify

**FOR HUB OPERATIONS USE ONLY**

**Section 9**

| ACTION                                    | INITIALS  |
|---|---|
| Call received and form details confirmed: | <input type="text"/>  |
| Scanned with PID and without PID:         | <input type="text"/>  |
| Page one sent:                            | <input type="text"/>  |
| Fax/Email sent:                           | <input type="text"/>  |
| Copy saved registration in F drive:       | <input type="text"/>  |
| Passed to manager:                        | <input type="text"/>  |
| First entry:                              |   |
| Name                                      | <input type="text"/>  |
| Signature                                 | <input type="text"/>  |
| Date                                      | <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> 2 0 <input type="text"/> <input type="text"/> |
| Second entry:                             |   |
| Name                                      | <input type="text"/>  |
| Signature                                 | <input type="text"/>  |
| Date                                      | <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> 2 0 <input type="text"/> <input type="text"/> |