

**SPECIALISED COMMISSIONING - CLINICAL EVIDENCE EVALUATION  
CRITERIA FOR CLINICAL COMMISSIONING POLICY PROPOSITION**

URN: 1803

TITLE: Extra corporeal membrane oxygenation (ECMO) as a bridge to transplant

CRG: Specialised Respiratory

NPOC: Internal Medicine

Date: 17/10/18

| This policy is being considered for:  | For routine commissioning   | X | Not for routine commissioning |  |
|---|---|---|-------------------------------|--|
| Is the population described in the policy similar to that in the evidence reviewed, including subgroups?  | Yes.  |   |                               |  |
| Is the intervention described in the policy similar to the intervention for which evidence is presented in the evidence review?                       | Yes.  |   |                               |  |
| Are the comparators in the evidence reviewed plausible clinical alternatives within the NHS and are they suitable for informing policy development?   | The comparator was mechanical ventilation.  |   |                               |  |
| Are the clinical benefits described in the evidence review likely to apply to the eligible population and/or subgroups in the policy?                 | Outcomes were poorer in the comparator group.   |   |                               |  |
| Are the clinical harms described in the evidence review likely to apply to the eligible and /or ineligible population and/or subgroups in the policy? | Length of stay following transplant was significantly worse for those on ECMO compared to the comparator group.   |   |                               |  |
| The Panel should provide advice on matters relating to the evidence base and policy development and   | <p>The Panel noted that:</p> <ul style="list-style-type: none"> <li>• The supply of lungs does not meet need and that approximately 25% of patients on the waiting list die from respiratory failure before a suitable donor</li> </ul> |   |                               |  |

prioritisation. Advice may cover:

- Balance between benefits and harms
- Quality and uncertainty in the evidence base
- Challenges in the clinical interpretation and applicability of policy in clinical practice
- Challenges in ensuring policy is applied appropriately
- Likely changes in the pathway of care and therapeutic advances that may result in the need for policy review.

becomes available or are removed from the waiting list because they become too ill to receive a lung transplant

- Panel were informed that some potential donor lungs are discarded because they are not matched to patients awaiting transplant within the period that the donor organ is viable for transplant
- It was not clear whether providing rapidly deteriorating patients ECMO would result in any increase in the proportion of donor organs utilised for transplant and thus lead to an overall increase in lung transplants.
- It was not clear how the provision of ECMO to rapidly deteriorating patients and their prioritisation by NHS Blood and Transplant (NHS BT) onto its Super Urgent Lung Allocation Scheme (SULAS) which gives priority to critically ill patients awaiting transplants would affect the distribution of organs to patients on the waiting list.
- It was not clear how the use of ECMO and prioritisation by NHS BT could affect how organs are distributed across the population of waiting patients. Would patients experiencing a slow decline in lung function be disadvantaged compared with those experiencing rapid decline?
- Could the routine commissioning of ECMO lead to an increase in use of NHS resources, change the distribution of organs across the population in need, but ultimately not increase the total number of patients receiving and benefiting from a lung transplant?

Clinical Panel recognised the clinical need and the difficult clinical situation which may arise for patients with rapid deterioration for whom ECMO can provide a bridge to transplant. Clinical Panel were uncertain whether the group of patients likely to experience a rapid deterioration in their lung function were significantly different from the whole population of patients awaiting transplant. Panel would like to understand more about this population and whether it would alter the distribution of lung transplantation across populations by underlying disease. Organ allocation is the responsibility of NHS BT and clinical panel therefore requested that NHS BT is asked what the anticipated impact would be in the distribution of lungs for transplant if ECMO becomes routinely commissioned. Are there any equality or inequality aspects that need to be taken into account? This information will assist Clinical Panel

|                    |  |   |  |
|--------------------|--|---|--|
|                    | <p>is assessing the net benefit to the population of patients in need of lung transplantation.</p> <p>This information will be helpful to support an informed prioritisation process to ensure that there is a clear understanding on the estimated net benefit to the eligible individuals and to the population of patients awaiting lung transplant as a whole. This would most helpfully take the form of a formal letter or paper from NHS BT to accompany the amended policy proposition when it returns to Panel, in December 2018 at the latest, if at all possible.</p> |   |  |
| Overall conclusion | This is a proposition for routine commissioning and  | Should proceed for routine commissioning                        | Should return to Panel by December 2018. |
|                    |  | Should be reversed and proceed as not for routine commissioning |  |
|                    | This is a proposition for not routine commissioning and  | Should proceed for not routine commissioning                    |  |
|                    |  | Should be reconsidered by the PWG                               |  |

Report approved by:

David Black  
Deputy Medical Director, Specialised Services  
14 November 2018

Post meeting note

NHS Blood and Transplant were asked to report on the impact of super urgent listing and the anticipated impact of the distribution of lungs for transplant if ECMO becomes routinely commissioned. A short report was produced by representative from the following for submission to Clinical Panel.

- The Cardiothoracic Advisory Group
- Organ Donation and Transplantation
- Statistics & Clinical Studies, NHS Blood and Transplant