ARC Lung Passport

Directions for completion

1. This is a twelve-page single copy form to be completed for all lungs that have undergone assessment at an ARC. This is a supplementary form and all other forms (i.e. HTA A, HTA B, RTI) should be completed as well.

2. Section 1a (pages 3-4) should be completed by hand at the ARC. This information, which includes the core assessment data, needs to be scanned and sent to NHSBT Hub Operations as it is completed because it contributes to the key clinical decision making pathway. Email to **odthub.operations@nhsbt.nhs.uk** with “ARC Passport” and the section number in the title.

3. Section 1b (pages 5-7) should be completed by hand at the ARC and sent to the hub operations once the ARC process is completed. Email to **odthub.operations@nhsbt.nhs.uk** with “ARC Passport” and the section number in the title.

4. The hard copy forms need to accompany the lungs for the onward journey to the transplant centre.

5. Section 2 (pages 8-10) is to be completed by hand at the accepting transplant centre when the lungs are received, transplanted, for the recipient post-operative details in ITU, and for the recipient details at 24-hours follow-up. Scan and email to **ARCInformationOfficers@nhsbt.nhs.uk** with “ARC Passport” and the section number in the title within 1 working day of completion.

6. Section 3 (pages 11-12) is to be completed at the accepting transplant centre for the recipient details at 30-days follow-up. Scan and email to **ARCInformationOfficers@nhsbt.nhs.uk** with “ARC Passport” and the section number in the title within 1 working day of completion.

7. A scanned copy of each section should be retained by the centre completing it as part of the transplant records.

ARC Lung Passport

Directions for completion - continued

Eligibility Scoring System

1. Donor History
    a. Possible donor PE
    b. Multiple blood transfusions
    c. Smoking history >20 pack years with borderline systemic blood gases
2. Lung Imaging
    a. Chest SR or CT findings prohibitive to standard transplantation
    b. Significant ateclectasis
    c. Generalised oedema
    d. Focal consolidation
    e. Infiltrates of unclear cause
3. Lung Function
    a. Systemic PaO2 < 40 kPa (on 100% FiO2 & 8 cmsH2O PEEP)
    b. Selective PV gas < 30 kPa (on 100% FiO2 & 8 cmsH2O PEEP)
    c. Sustained peak airway pressure > 30 cmH2O on target tidal volumes
    d. Deteriorating systemic PaO2 over time
4. Lung Inspection
    a. Failed lung deflation test in absence of visible bullae/emphysema
    b. Persistent atelectasis despite active recruitment manoeuvres
    c. Inflammation or soiling of the airway at Bronchosocpy
    d. Recurrent but not prohibitive secretions in the distal airway after adequate bronchial toilet
    e. Unsatisfactory palpation of the lungs (undetermined masses, nodules or oedema)
    f. Unsatisfactory inspection of lungs after procurement and administration of second retrograde preservation flush
5. DCD Donor
    a. Functional Warm Ischaemic Time (FWIT*) > 60 minutes but < 120 minutes
    b. Undergoing Abdominal –NRP with any additional concerns about lung flush or function

    *FWIT defined as time from Systolic BP <50mmHg and/or systemic saturations below 70% to start of organ flush

ARC Lung Passport

Section 1a

ODT Donor Number | Donor DOB (dd/mm/yyyy) | Donor Hospital

DONOR DETAILS

ARC Location | Lead ARC Surgeon

Received by (name) | *Refer to eligibility scoring system in directions for completion* | Primary indication for EVLP | Secondary indication for EVLP

Deemed suitable for EVLP? *No = 1, Yes = 2* | If no, what was the final outcome? *Used for research = 1, Disposed of = 2, Reoffered via fast track = 3*

If no, give details: (e.g. comments on damage/condition)

Sufficient tissues for EVLP collected at retrieval? Trachea *No = 1, Yes = 2* | Vascular Cuff *No = 1, Yes = 2* | Pericardium *No = 1, Yes = 2* | Thoracic Aorta *No = 1, Yes = 2*

Comments on collected tissues:

Flushed prior to EVLP? *No = 1, Yes = 2*

If yes, what solution was used? *Perfadex = 1, Steen = 2*

Litres used

Was there any damage made to the lungs whilst being put on EVLP? *No = 1, Yes = 2*

If yes, give details

XMAT link sent to Transplant Centre? *No = 1, Yes = 2*

TIMINGS (USE 24 HOUR CLOCK)

Date/time of organ arrival	D D	M M	2 0 Y Y	at (24hr)	H H :	M M
Date/time in theatre/EVLP facility			2 0	at (24hr)	:	
Date/time out of organ transport box			2 0	at (24hr)	:	
Date/time of visual assessment on arrival			2 0	at (24hr)	:	
Date/time into 10°C fridge (if used)			2 0	at (24hr)	:	
Date/time out of 10°C fridge (if used)			2 0	at (24hr)	:	
Date/time cannulation started			2 0	at (24hr)	:	
Date/time instrumented on EVLP			2 0	at (24hr)	:	
Date/time perfusion started			2 0	at (24hr)	:	
Date/time ventilation started			2 0	at (24hr)	:	
Date/time of 1st recruitment			2 0	at (24hr)	:	
Date/time of 2nd recruitment			2 0	at (24hr)	:	
Date/time of 3rd recruitment			2 0	at (24hr)	:	
Date/time of 4th recruitment			2 0	at (24hr)	:	

ARC Lung Passport

Section 1a

ODT Donor Number | | | | | | |

EVLP Machine ID

Perfusate level at the start

PERFUSION DATA

		Baseline		Hour 1		Hour 2		Hour 3		Hour 4	
Core assessment data	PaP (mmHg)										
	LaP (mmHg)										
	PEEP (cmH2O)										
	Ppeak (cmH2O)										
	Pplat (cmH2O)										
	Pmean (cmH2O)										
	Cdyn (mL/cmH2O)										
	Cstat (mL/cmH2O)										
	Glucose (g/l)										
	Lactate (mmol)										
	STEEN Lost (mls/hr)										
	Vti (mL)										
	Vte (mL)										
	PVR (dynes*sec*cm^-5)										
	Lung Weight (g)										
	Perfusate Flow (litres per minute)										
	Target Flow										
	FiO2 (%)										
		PA	LA	PA	LA	PA	LA	PA	LA	PA	LA
	Temp (°C)										
	pH										
	pO2 (kPa)										
	pCO2 (kPa)										
	BE										
	HCO3										
	Delta LA - PA pO2 (kPa)										
	Delta PO2/FiO2 (mmHg)										
Optional	*Left superior vein PaO2										
	*Left inferior vein PaO2										
	*Right superior vein PaO2										
	*Right inferior vein PaO2										

ARC Lung Passport

Section 1b

ODT Donor Number | | | | | | |

Donor DOB (dd/mm/yyyy) | | | | | | | | |

Donor Hospital

Drug:	Dose:	Batch number:	Expiry Date:	Date/Time given:	Prescribed by:	Administered by:

ARC Lung Passport

Section 1b

ODT Donor Number | | | | | | |

PERFUSION FLUIDS

Perfusate Pre-EVLP

Brand of perfusate

Total perfusate used (L)

Perfusate batch numbers:	Expiry date:

Perfusate During EVLP

Brand of perfusate

Total perfusate used (L)

Perfusate batch numbers:	Expiry date:

Perfusate Post-EVLP

Brand of perfusate

Total perfusate used (L)

Perfusate batch numbers:	Expiry date:

ARC Lung Passport

Section 1b

ODT Donor Number | | | | | | |

ORGAN ASSESSMENT EXCHANGE

ARC Clincian

Recipient Centre Clincian

Were the lungs inspected remotely? *No = 1 Yes = 2*

Were the lungs accepted for transplant? *No = 1 Yes = 2*

If no, why?

If no, give final outcome *Used for research= = 1 Disposed of = 2 Reoffered via fast track = 3 Other = 4*

If other, please specify

Was there any damage made to the lungs whilst coming off EVLP? *No = 1 Yes = 2*

If yes, give details

Were there any issues with the perfusion device? *No = 1 Yes = 2*

If yes, give details

TIMINGS (USE 24 HOUR CLOCK)

Date/time of final assessment on EVLP	D	D	M	M	2	0	Y	Y	at (24hr)	H	H	:	M	M		
Date/time of clinician-to-clinician call to discuss results					2	0			at (24hr)			:				
Date/time taken off EVLP					2	0			at (24hr)			:				
Date/time into organ transport box					2	0			at (24hr)			:				

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Section 2

ODT Donor Number | Donor DOB (dd/mm/yyyy) | Donor Hospital

TRANSPLANT CENTRE LOCATION DATA

Transplant Centre | Lead Surgeon

Received by (name)

Deemed suitable for transplant? *No = 1, Yes = 2*

Were the lungs transplanted? *No = 1, Yes = 2*

If no, what was the final outcome? *Used for research = 1, Disposed of = 2, Reoffered via fast track = 3*

If the lungs were not used, why?

Lungs re-entering 10°C fridge during operation *Left = 1, Right = 2, Block = 3, None = 4*

TIMINGS (USE 24 HOUR CLOCK)

Date/time of organ arrival	D	D	M	M	2	0	Y	Y	at (24hr)	H	H	:	M	M
Date/time in theatre/EVLP facility					2	0			at (24hr)			:		
Date/time out of organ transport box					2	0			at (24hr)			:		
Date/time of visual assessment on arrival					2	0			at (24hr)			:		
Date/time into 10°C fridge (if used)					2	0			at (24hr)			:		
Date/time out of 10°C fridge (if used)					2	0			at (24hr)			:		
Date/time knife to skin					2	0			at (24hr)			:		
Date/time lungs reentering 10°C fridge (if used)					2	0			at (24hr)			:		
Date/time out of 10°C fridge (if used)					2	0			at (24hr)			:		

ARC Lung Passport

Section 2

ODT Donor Number

RECIPIENT DETAILS

Recipient ID

Recipient DOB (dd/mm/yyyy)

Transplant centre

Height cm

Blood group

Weight . kg

Disease category

Is the recipient an inpatient? *No = 1 Yes = 2*

If yes, how many days?

If yes, what location? *General = 1 ITU = 2 HDU = 3 Other = 4*

If other, please specify

Pre-transplant hypertension? *No = 1 Yes = 2*

Oxygen dependent? *No = 1 Yes = 2*

If yes, how much oxygen?(litres per minute)

Extra-corporeal lung support? *No = 1 Yes = 2*

If yes, how many days?

Waiting list *General = 1 ITU = 2 HDU = 3 Other = 4*

RECIPIENT DETAILS (POST-OPERATIVE)

Inotropic Support (within first 4 hours of ITU arrival)

Dopamine mcg/kg/min

Noradrenaline . mcg/kg/min

Vasopressin units/hr

Milrinone mcg/kg/min

Adrenaline . mcg/kg/min

GTN mg/hr

Nitric Oxide use duration hours

Maximum Nitric Oxide dose ppm

Ventilation Parameters (within first 4 hours of ITU arrival)

Mode

Respiratory rate bpm

FiO2 %

PaO2/FiO2 ratio mmHg

PEEP cmH2O

P Support

Tidal volumes range mL – mL

ARC Lung Passport

Section 2

ODT Donor Number | | | | | | |

Recipient ID | | | | | | |

Transplant centre

RECIPIENT 24-HOUR FOLLOW-UP

Please complete this section 24-hours after transplant

Recipient died? *No = 1 Yes = 2* | |

If yes, date of death: | | | | | 2 | 0 | | |

Extra-corporeal lung support post-transplantation? *No = 1 Yes = 2* | |

Total intubation time | | hours

Reintubation *No = 1 Yes = 2* | |

ECMO used? *No = 1 Yes = 2* | |

Ventilation support post-transplant? *No = 1 Yes = 2* | |

If yes, duration of ventilation support | | hours

If yes: *VA = 1 VV = 2* | |

Surgical re-exploration? *No = 1 Yes = 2* | |

Bronchoscopy post-transplant report:

ARC Lung Passport

Section 3

ODT Donor Number

Donor DOB (dd/mm/yyyy)

Donor Hospital

Recipient ID

Recipient DOB (dd/mm/yyyy)

Transplant centre

RECIPIENT 30-DAY FOLLOW-UP

Please complete this section 30-days after transplant

Recipient died? *No = 1 Yes = 2*

If yes, date of death: 2 0

Extra-corporeal lung support post-transplantation? *No = 1 Yes = 2*

Total intubation time hours

Reintubation *No = 1 Yes = 2*

Tracheostomy *No = 1 Yes = 2*

Duration days

Surgical re-exploration? *No = 1 Yes = 2*

Ventilation support post-transplant? *No = 1 Yes = 2*

If yes, duration of ventilation support: days

Duration of time on ICU: days

ECMO used? *No = 1 Yes = 2*

If yes: *VA = 1 VV = 2*

Airway stenosis present in bronchoscopy post-transplant? *No = 1 Yes = 2*

If yes, give details:

X-Ray post-transplant:

LFT post-transplant:

ARC Lung Passport

Section 3

ODT Donor Number | | | | | | |

Recipient ID | | | | | | |

Transplant centre

RECIPIENT 30-DAY FOLLOW-UP - PRIMARY GRAFT DYSFUNCTION DATA

Please complete this section 30-days after transplant

PGD Grade	Radiographic ifiltrates (consistent with oedema)	PaO2/FiO2 (kPa)~
0	Absent	Any
1	Present	>40
2	Present	26.7-40
3*	Present	<26.7

**If on ECMO support for respiratory failure then automatically becomes grade 3 PGD*

~Use worse reading if multiple are available

PGD grading 0-6 hours: ☐

CXR report

PGD grading 24 hours: ☐

CXR report

PGD grading 48 hours: ☐

CXR report

PGD grading 72 hours: ☐

CXR report