

## NHS BLOOD AND TRANSPLANT

### CARDIOTHORACIC ADVISORY GROUP – LUNG

#### ANALYSIS OF LUNG OFFERS FROM OLDER DONORS

##### BACKGROUND

- 1 In January 2018, the lung donor offering criteria was extended up to 74 years (74 years and 364 days) for both DBD and DCD, where the donor was a lifetime non-smoker or had not smoked for 10 years or longer. Before this the upper age limit was 64 for DCD donors and 69 for DBD donors.
- 2 This report presents a short summary of lung offers from DBD donors over 69 years of age and DCD donors over 64 years of age between January and December 2018. Utilisation rates (transplanted out of offered) across different age groups for both lungs and hearts are also presented for potential donors during the analysis period.

##### RESULTS

- 3 Between 8 January and 31 December 2018, lungs were offered from 31 potential DBD donors aged 70-74 and from 61 potential DCD donors aged 65-74. Three (9.7%) of the 31 pairs of DBD lungs were transplanted (two donors were aged 71 and one was 74, the transplanting centres were Harefield and Newcastle and the recipients were aged 50 or older), while none of the 61 pairs of DCD lungs were transplanted. Of the 89 pairs of lungs that were not used the most common primary reasons for decline recorded were poor function (27%), age (24%) and history (22%).
- 4 Of the 92 donors in the extended age range, 33 (36%) had smoked in their lifetime and 59 (64%) had not. Of those that had smoked, 30 stopped smoking more than 10 years before donation, one smoked within 5 years of donation (DCD aged 65), one up to the time of donation (DBD aged 71) and one had incomplete smoking history (DCD aged 70).
- 5 The 92 donors generated 275 offers, with between 1 and 8 offers (mean 3) per donor.
- 6 **Table 1** and **Table 2** present a breakdown of the lung utilisation rates across age groups for DBD donor lungs and DCD donor lungs offered during the analysis period, respectively. For comparison, **Table 3** shows the number of donors whose heart was offered in the time period and the proportion transplanted. Note that the upper age limit for DBD heart donation is currently 64 years of age.

##### CONCLUSION

- 7 Since the age criteria for lung offering was extended there have been 92 donors offered for lung donation that were within the extended age range; a mean of 8 donors per month, generating a total of 275 offers. Only three (3%) of these donors were utilised for lung donation and these were all DBD donors.
- 8 Members are asked whether the upper age limit should be reduced back to previous limits, in particular for DCD where no donors over 64 have been utilised over the last year.

<b>Table 1                    Number of DBD donors offered and utilised for lung donation, 8 January – 31 December 2018</b>			
<b>Donor age</b>	<b>Number of donors offered</b>	<b>Number of donors utilised<sup>1</sup></b>	<b>%</b>
<40 years	190	58	30.5
40-49	150	32	21.3
50-59	175	37	21.1
60-69	124	18	14.5
70-74	31 <sup>2</sup>	3	9.7
<b>Total</b>	<b>670</b>	<b>148</b>	<b>22.1</b>

<sup>1</sup> At least one lung accepted and transplanted  
<sup>2</sup> One donor, aged 71, had smoked up to the time of donation

<b>Table 2                    Number of DCD donors offered and utilised for lung donation, 8 January – 31 December 2018</b>			
<b>Donor age</b>	<b>Number of donors offered</b>	<b>Number of donors utilised<sup>1</sup></b>	<b>%</b>
<40 years	87	16	18.4
40-49	72	4	5.6
50-59	111	12	10.8
60-64	47	6	12.8
65-74	61 <sup>2</sup>	0	0.0
<b>Total</b>	<b>378</b>	<b>38</b>	<b>10.0</b>

<sup>1</sup> At least one lung accepted and transplanted  
<sup>2</sup> One donor, aged 65, had smoked within the last 5 years and one, aged 70, had incomplete smoking history

<b>Table 3                    Number of DBD donors offered and utilised for heart donation, 8 January – 31 December 2018</b>			
<b>Donor age</b>	<b>Number of donors offered</b>	<b>Number of donors utilised</b>	<b>%</b>
<40 years	198	104	52.5
40-49	149	31	20.8
50-59	188	23	12.2
60-64	67	3	4.5
65-70	2 <sup>2</sup>	0	0.0
<b>Total</b>	<b>604</b>	<b>161</b>	<b>26.7</b>

<sup>1</sup> Offered outside of criteria, aged 69 and 70