

NHS BLOOD AND TRANSPLANT

CARDIOTHORACIC ADVISORY GROUP – LUNG

SUMMARY OF CUSUM MONITORING OF OUTCOMES FOLLOWING LUNG TRANSPLANTATION

INTRODUCTION

- 1 NHSBT monitors short-term patient outcomes following organ transplantation through centre specific cumulative sum (CUSUM) analyses. These are undertaken monthly for cardiothoracic transplantation. These 'within centre' analyses enable prompt detection of any changes in mortality rates, providing external assurance and enabling centres to compare current outcomes with their own past performance to assist in internal auditing.
- 2 The methods used in the analysis are based on CUSUM monitoring and compare current outcome rates with an expected rate.
- 3 Each month, CUSUM monitoring reports on 90-day mortality following lung transplantation are produced and sent to each centre. This paper summarises the results of these reports for the six month period since the last Cardiothoracic Advisory Group meeting. Where signals have occurred, actions that were taken and lessons learnt are noted.
- 4 In October 2014, it was decided that heart-lung block transplants would be excluded from the lung transplant CUSUM monitoring reports.
- 5 In April 2021 the baseline period used to calculate the expected mortality rates was updated to include transplants performed between 1 January 2015 and 31 December 2018 whilst the start of the monitoring period was moved to 1 January 2019.

RESULTS

- 6 **Table 1** shows that over the six month period since the last Cardiothoracic Advisory Group meeting there have been no signals in lung transplantation CUSUM reporting.

Table 1 Summary of CUSUM analysis results				
Month CUSUM report issued	No. reports issued	No. signals	No. signals requiring investigation	No. investigations outstanding
March 2021	6	0	0	0
April 2021	6	0	0	0
May 2021	6	0	0	0
June 2021	6	0	0	0
July 2021	6	0	0	0
August 2021	6	0	0	0
Total	36	0	0	0

CONCLUSION

- 7 Over the six month period since the last Cardiothoracic Advisory Group meeting there have been no signals in lung transplantation CUSUM reporting.