

NHS BLOOD AND TRANSPLANT

CARDIOTHORACIC ADVISORY GROUP

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 Cumulative Sum (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 seven 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 and are hence not considered in this paper.

RESULTS

- 5 **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
April 2016	5	0	0	0
May 2016	5	0	0	0
June 2016	5	0	0	0
July 2016	5	0	0	0
August 2016	5	0	0	0
September 2016	5	0	0	0
Total	30	0	0	0

CONCLUSION

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