

NHS BLOOD AND TRANSPLANT

CARDIOTHORACIC ADVISORY GROUP – HEART

SUMMARY OF CUSUM MONITORING OF OUTCOMES FOLLOWING HEART 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 30-day mortality following heart 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 May 2018 changes were made to the CUSUMs as agreed at CTAG in April 2018. The baseline period used to calculate the expected mortality rates was updated to include transplants performed between 1 January 2013 and 31 December 2016 whilst the start of the monitoring period was moved to 1 January 2017. Additionally, DCD heart transplants are included in the CUSUM monitoring but excluded from the expected mortality rates.

RESULTS

- 5 **Table 1** shows that over the six month period since the last Cardiothoracic Advisory Group meeting there have been no signals in heart 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
September 2018	7	0	0	0
October 2018	7	0	0	0
November 2018	7	0	0	0
December 2018	7	0	0	0
January 2019	7	0	0	0
February 2019	7	0	0	0
Total	42	0	0	0

CONCLUSION

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