

NHS BLOOD AND TRANSPLANT

CARDIOTHORACIC ADVISORY GROUP

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 November 2014, it was decided that DCD heart transplants would be excluded from the heart transplant CUSUM monitoring reports.

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 |
| October 2016 | 6 | 0 | 0 | 0 |
| November 2016 | 6 | 0 | 0 | 0 |
| December 2016 | 6 | 0 | 0 | 0 |
| January 2017 | 6 | 0 | 0 | 0 |
| February 2017 | 6 | 0 | 0 | 0 |
| March 2017 | 6 | 0 | 0 | 0 |
| Total | 36 | 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.