

NHS BLOOD AND TRANSPLANT

LIVER ADVISORY GROUP

SUMMARY OF CUSUM MONITORING OF OUTCOMES FOLLOWING LIVER TRANSPLANTATION

INTRODUCTION

1. NHSBT monitors short-term patient outcomes following organ transplantation through centre specific cumulative sum (CUSUM) analyses. These are undertaken monthly for liver 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. CUSUM monitoring compares current outcome rates with an expected rate.
2. Each month, CUSUM monitoring reports on 90-day mortality following liver transplantation are produced and sent to each centre. This paper summarises the results of these reports for the six month period since the last Liver Advisory Group meeting. Where signals have occurred, actions that were taken and lessons learnt are noted.

RESULTS

3. **Table 1** shows that over the six month period since the last Liver Advisory Group meeting there have been no signals in liver transplantation CUSUM reporting.

Table 1 Summary of CUSUM signals since October 2016				
Month CUSUM report issued	No. reports issues	No. signals	No. signals requiring investigation	No. investigations outstanding
October	7	0	0	0
November	7	0	0	0
December	7	0	0	0
January	7	0	0	0
February	7	0	0	0
March	7	0	0	0
Total	42	0	0	0

CONCLUSION

4. Over the six month period since the last Liver Advisory Group meeting there have been no signals in liver transplantation CUSUM reporting.
5. The developments to liver CUSUM methodology presented to LAG members at [LAG\(16\)24](#) and endorsed in November 2016, will be implemented by NHSBT in the near future.

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