

Implementation of CELOX™ Haemostatic Agent versus Balloon Tamponade in the Management of Postpartum Haemorrhage

A Comparative Analysis from a Tertiary Maternity Unit

BACKGROUND

Postpartum haemorrhage (PPH) remains a significant cause of maternal mortality and morbidity in the UK. According to the MBRRACE-UK 2024 report, obstetric bleeding accounts for **7% of maternal deaths**, emphasising the critical importance of effective second-line interventions.

OBJECTIVE

Evaluate the effectiveness of CELOX™ haemostatic agent versus balloon tamponade in controlling PPH through comparison across several clinical outcomes including:

- estimated blood loss
- haemoglobin drop
- transfusion requirements
- time to achieve haemostasis

Secondary objectives included:

- Assessment of efficacy for specific causes of PPH (atony, trauma, combined causes)
- Determine safety profiles through complication and infection rates
- Identify optimal patient selection criteria for each intervention
- Evaluation of clinician experience

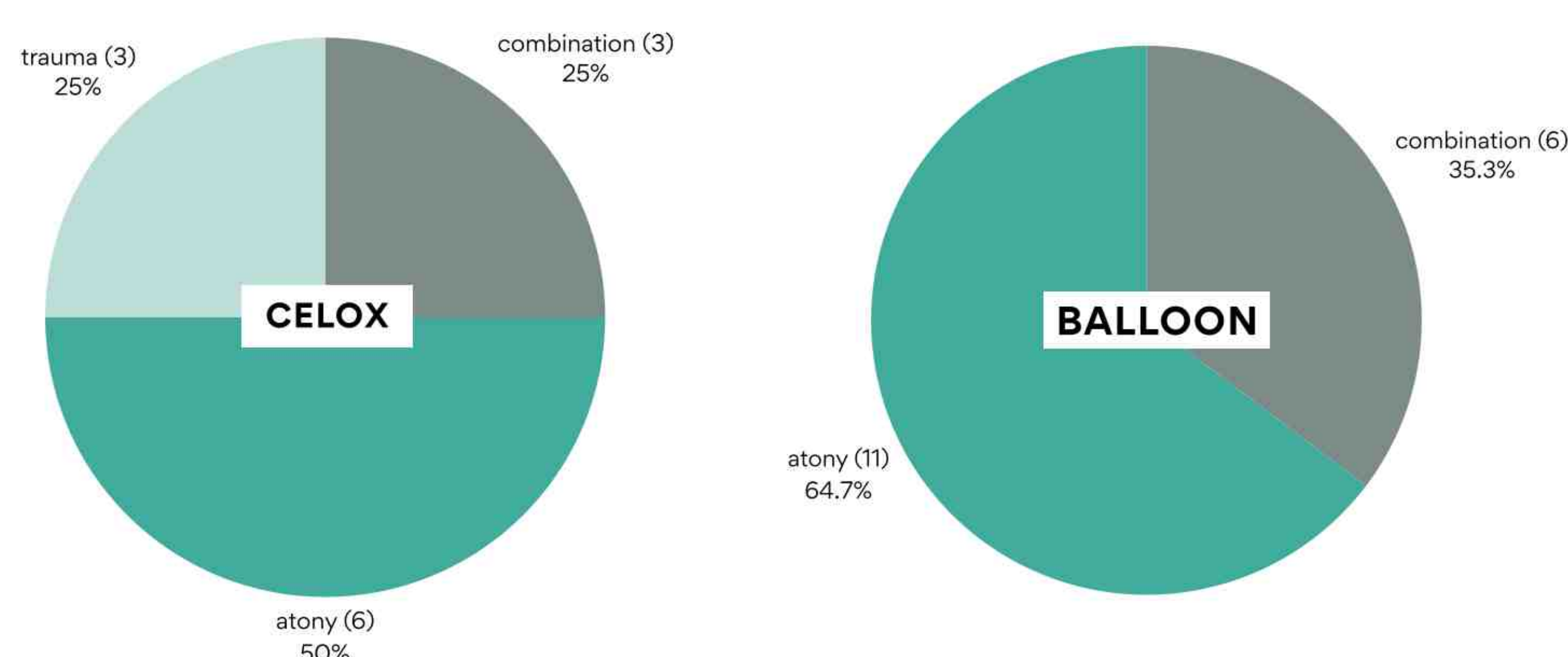
METHOD

Comparative analysis of CELOX™ (n=12) versus balloon tamponade (n=17) in the management of postpartum haemorrhage at a tertiary maternity unit from January 2024. Statistical analysis was performed using Python. Independent t-tests were used to compare continuous variables between groups.

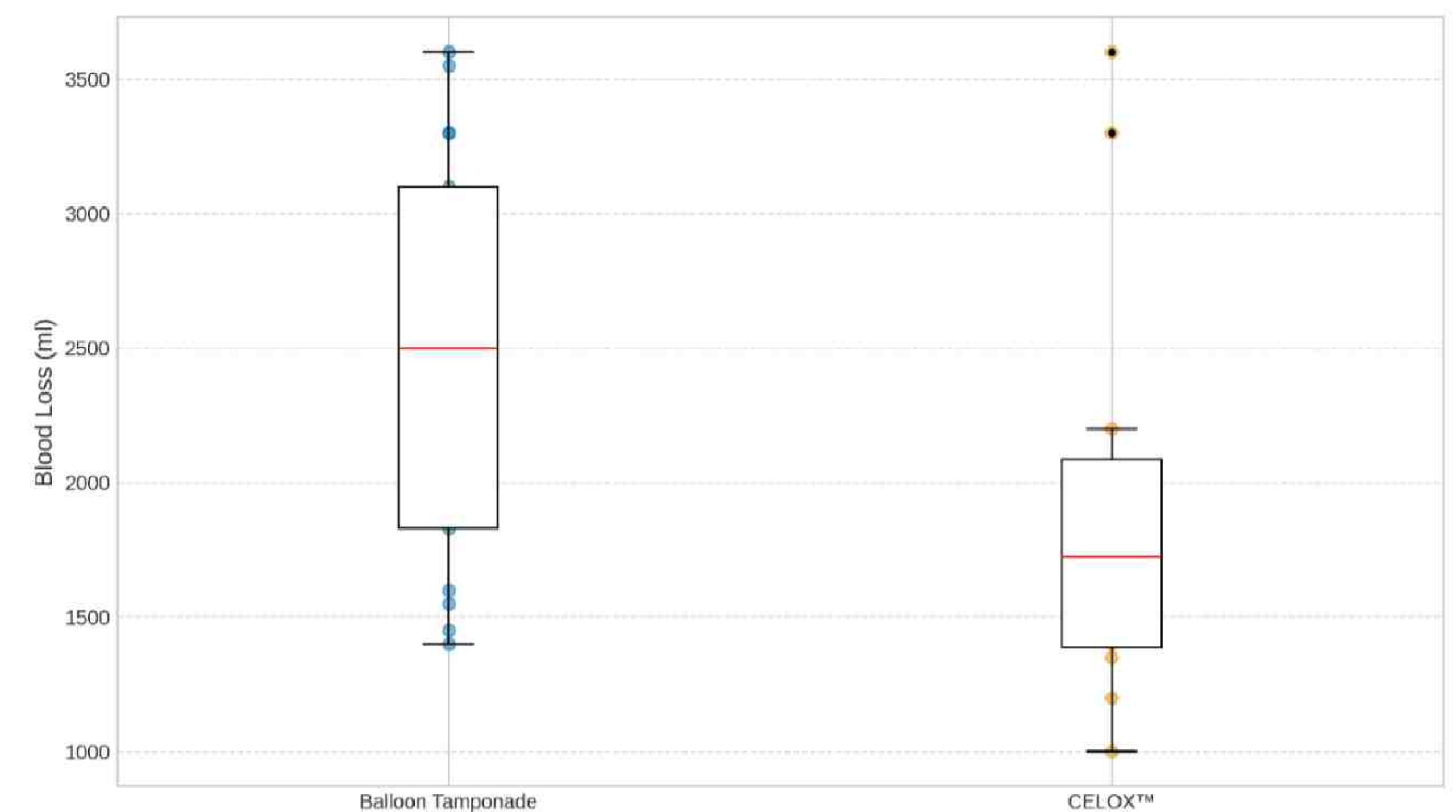
CONCLUSION

- CELOX™ is a promising alternative to balloon tamponade in PPH management, with comparable safety profiles, no worse outcomes identified
- Suggests potential advantages in blood loss control (22.5% reduction) and reduced transfusion requirements
- CELOX™ shows particular utility in vaginal wall trauma cases
- Cost-effectiveness offers additional compelling reasons to consider its inclusion in clinical protocols
- Further prospective evaluation with a larger cohort will better define optimal patient selection criteria, particularly regarding the differential efficacy observed between atonic and traumatic causes of PPH
- Ongoing evaluation of clinician experience will provide valuable insights into real-world implementation challenges

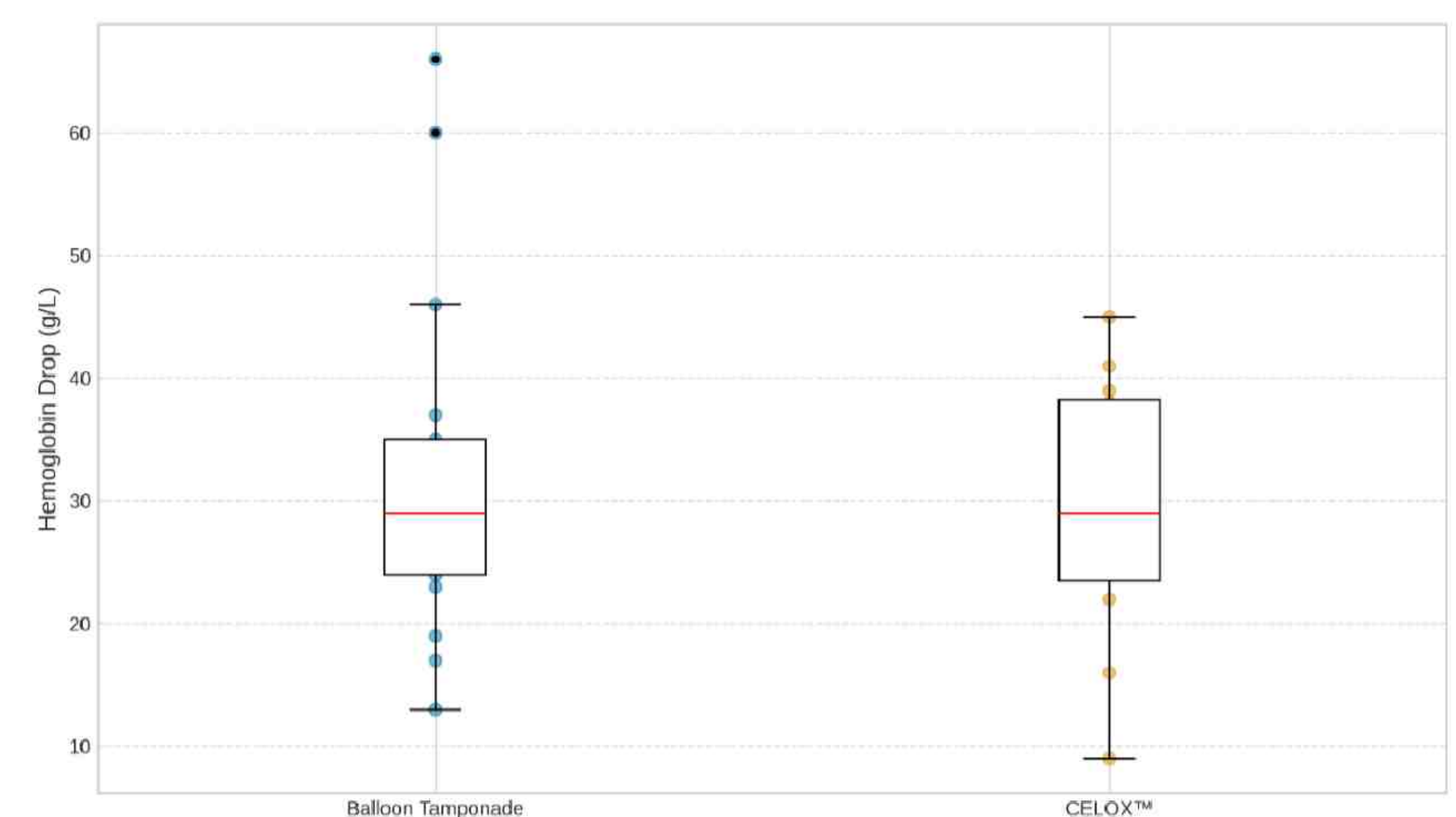
KEY FINDING: DISTRIBUTION OF PPH CAUSE: CELOX VS BALLOON



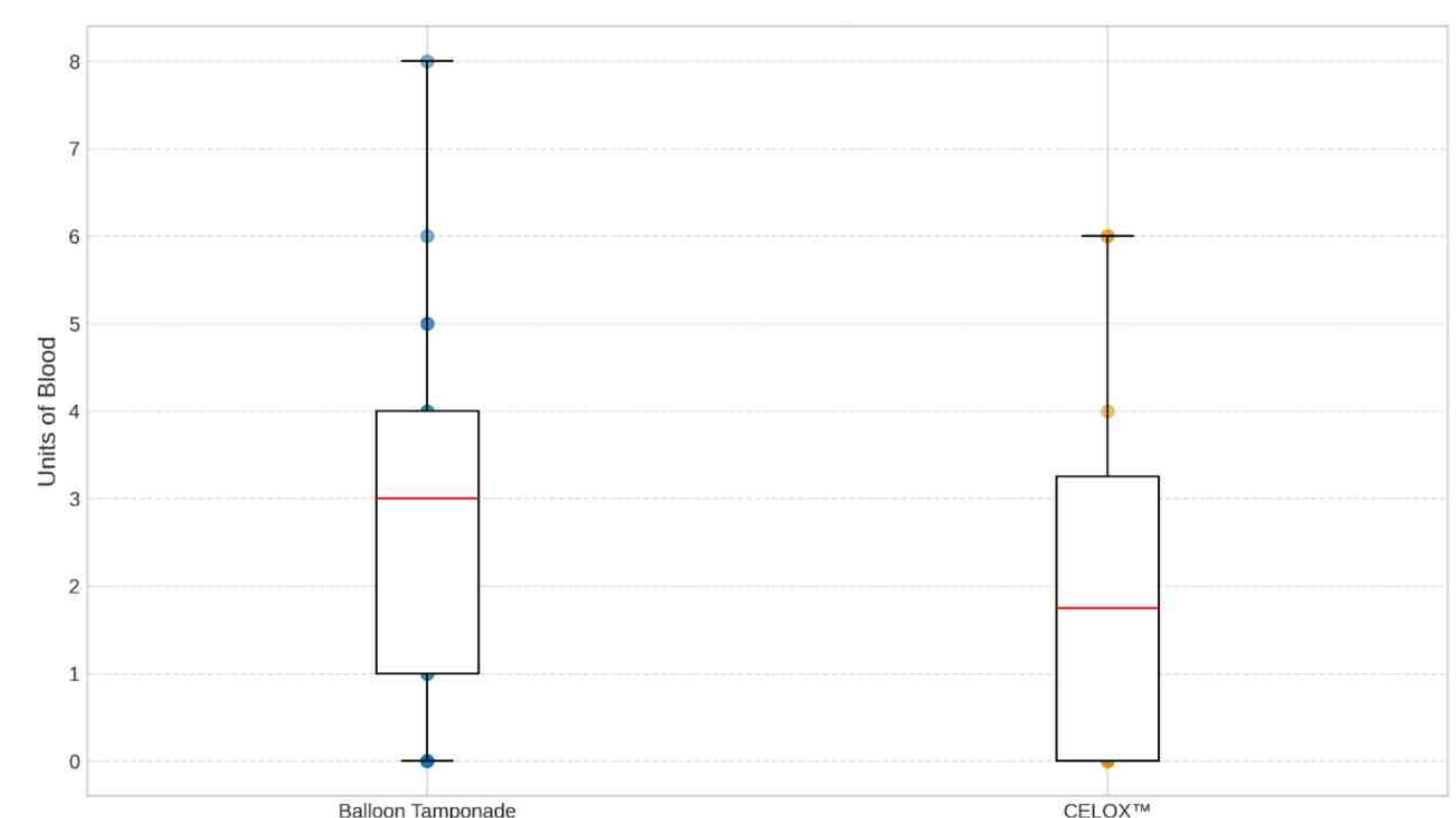
KEY FINDING: ESTIMATED BLOOD LOSS



KEY FINDING: HAEMOGLOBIN DROP



KEY FINDING: TRANSFUSION REQUIREMENT



KEY FINDING: BLOOD LOSS IN TRAUMA CASES

