

## Seven-day platelet storage: Outdate reduction and cost savings

[Paul Mintz](#) Verax Biomedical Inc. Marlborough, MA

Platelets for transfusion are stored at room temperature. Storage had been limited to five days for many years in the United States owing to the risk of bacterial growth resulting in transfusion-associated septic morbidity and mortality. This short shelf-life has resulted in national outdating of approximately 15%. Recently, FDA allowed seven-day platelet storage with the use of a designated “safety measure”. The Platelet PGD Test (Verax Biomedical, Marlborough, MA) is one such device as it detects a broad range of Gram-positive and Gram-negative bacteria. In 2018 and 2019, we surveyed 16 blood collection centers and 66 hospitals that use the PGD Test to extend platelet dating to seven days to determine how this extension of allowable storage time has reduced outdating and saved costs. At the 16 blood collection centers the mean number of platelets released for transfusion was 16,551 (median 10,000, range 1,200-48,000). At the 66 hospitals the mean number of platelets transfused was 2,206 (median 1,500, range 275-11,000). The institutions surveyed collectively were responsible for approximately 21% of annual US platelet transfusions.

The 16 blood collection centers reported that extension of platelet storage to seven days resulted in mean outdate reduction 69% (median 67%, range 23%-92%) and mean cost savings \$415,000 (median \$300,000, range \$150,000-\$900,000). The 66 hospitals reported that extension of platelet storage to seven days resulted in mean outdate reduction 74% (median 80%, range 17%-100%) and mean cost savings \$176,803 (median \$150,000, range \$30,000-\$1,200,000). Extending platelet shelf-life to seven days significantly reduces outdating of this valuable resource, increases product availability, and saves more money than bacterial testing costs.

Mintz PD. Seven-day platelet storage: Outdate reduction and cost savings (abstract). *Ann Clin Lab Sci* 2019;49(3):414. Presented at the Association of Clinical Scientists Annual Meeting. Hershey PA. May 2019.