

Platelet Function Testing – Results from Proficiency Challenges

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External proficiency testing programs are an essential component of the clinical laboratory's quality management system. Clinical laboratories participate in external proficiency testing for many of the assays performed, however there are few organizations that have applied external proficiency testing to tests for platelet disorder investigations.

In 2008, the North American Specialized Coagulation Laboratory Association (NASCOLA) began offering proficiency challenges for two tests used for platelet disorder investigations. These included: (1) post analytical challenges on the interpretation of light transmission aggregometry (LTA) findings and (2) whole mount, electron microscopy (EM) assays for platelet dense granule deficiency (DGD).

Results from the post analytical challenges for the interpretation of LTA findings has demonstrated an improvement in the LTA interpretation by participants over time, suggesting that these external proficiency challenges have had a positive impact on laboratory practice. Participants in the EM challenges for platelet dense granule deficiency have been performed well and participants reported these proficiency challenges to be of value by providing laboratories with a peer comparison of performance for an assay that is performed in only a few laboratories.

The NASCOLA external proficiency challenges have demonstrated an improvement in the quality of the interpretation of LTA findings and both the post analytical LTA challenge and the EM DG challenge are valued by participants.