

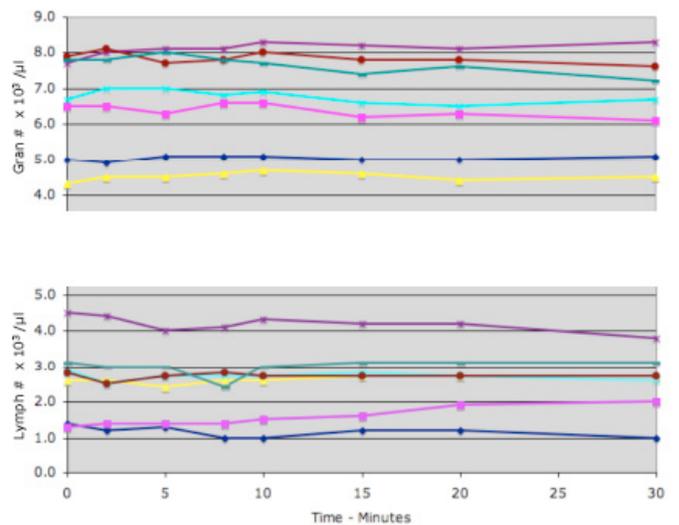
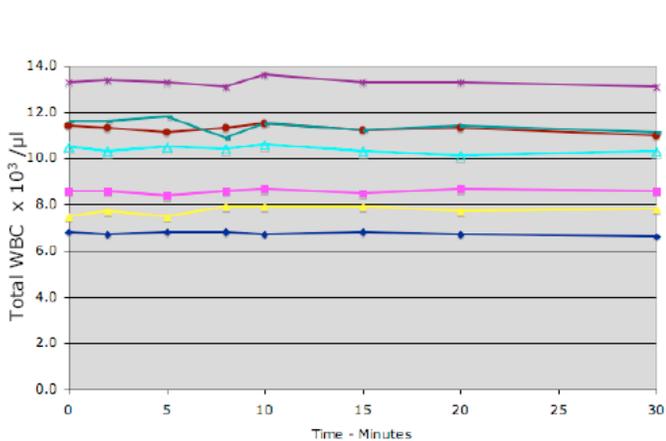
Precise and Accurate CBC Results in Under 2 Minutes

Historically, some hematology reagent systems have required leukocytes to stabilize in the EDTA tube for 10–15 minutes after collection in order to obtain an optimally resolved differential in a hematology system. Combined stabilization and sample processing time could cause a minimum 20 minute delay from sample acquisition to complete blood count (CBC) results.

After thorough research and optimization of hematology and reagent systems, Heska can confidently state that after one minute of mixing in EDTA, blood can be analyzed when using the CBC-Diff™ analyzer and the HemaTrue® Analyzer. A proprietary reagent formulation has eliminated the need for prolonged leukocyte stabilization (in EDTA) and allows for quicker analysis of samples without deleterious affects on quantitative or qualitative results.

Supportive Data

Blood from five dogs and two cats was collected into EDTA, mixed for one minute and analyzed immediately (T=0). Sequential analysis of each sample was then made over a 30 minute period. Plots showing Total WBC vs. Time, Granulocytes vs. Time, and Lymphocytes vs. Time are shown below.



Interpretation of Results

Precision, or reproducibility, is determined by calculating the coefficient of variation (CV) for repeated measurements made on a single sample. A low CV value (<5%) indicates test results are reproducible, varying little with repeated measurements. The aforementioned Heska study consistently produced results with a CV range of 1–3%. These minor fluctuations are consistent with excellent reproducibility.

Conclusion

When analyzing samples after one minute of stabilization, Heska's hematology and reagent systems meet or exceed industry achievable standards for hematologic measurement for clinical interpretation purposes. Heska's hematology systems produce faster results without sacrificing quality—supporting better patient care.