

Use of Triglyceride Testing to Qualify Samples for Donor Testing

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Background: Lipemia is a significant reason for discarding samples and units. We looked to see if we could minimize this loss by quantitatively determining the triglyceride level. Package inserts were reviewed and it was determined that a limit of 1200 mg/dL would meet the requirements for all tests performed. We report the benefits after 5 months of data utilizing this approach.

Methods: Visually lipemic samples were assayed on the Abbott Aeroset to determine sample suitability. Instrument linearity was established to 1200 mg/dL. Samples were assayed within one day of receipt. Acceptable samples (<1200 mg/dL) were tested the next day for the standard assays.

Results: Over 5 months, all visually lipemic samples were assayed for triglyceride testing. Of 136,422 total samples, 188 (0.14%) met these criteria. Of the 188 tested, 155 samples were acceptable for testing (82.4%) with values <1200 mg/dL. IBC units represented 86 samples (55.5%), and the remainder of samples were from testing clients. This program saved \$115,664 in total in addition to the 155 salvaged units of blood product if RBC were provided to hospitals for an average price of \$203.00 and apheresis at \$500.00.

Conclusions: The use of the Abbott Aeroset to evaluate sample suitability is cost-effective and allows 82.4% of lipemic samples that might otherwise result in discarded units to be tested as usable units.

No. Tested	Lipemic (% of total)	<1200 md/dL (% of total)
Total 136,422	188 (0.14)	155 (0.11)
IBC	98 (0.07)	86 (0.06)
Client	90 (0.07)	69 (0.05)