

Triglycerides, DBS

Self-Collection Capillary Blood Microsample Method.

Performance Characteristics

● Within-Run Precision

Within-run precision was determined by testing microsamples containing two concentrations of Triglycerides. Each of the microsamples was tested ten times:

Triglycerides (mg/dL)	Standard Deviation	Coefficient of Variation (%)
104.6	2.5	2.4
63.2	1.5	2.3

● Clinical Sensitivity and Specificity

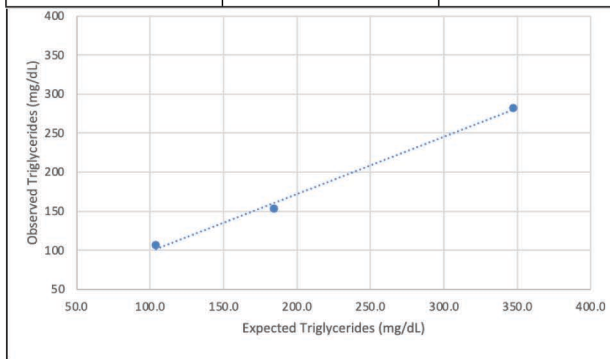
Clinical sensitivity and specificity were determined by testing paired venous samples and capillary blood microsamples from 50 donors and the results evaluated at a cut-off value of 200 mg/dL:

N=50	Capillary Trig ≥ 200 mg/dL	Capillary Trig < 200 mg/dL
Venous Triglycerides ≥ 200 mg/dL	12	1
< 200 mg/dL	1	36

● Linearity

Capillary blood samples containing different levels of Triglycerides, expanding throughout the reportable range, were selected and the assay was performed in triplicate:

Observed Triglycerides (mg/dL)	Expected Triglycerides (mg/dL)	Recovery (%)
106.6	104.0	102.5
152.9	184.2	83.0
282.4	347.0	81.4



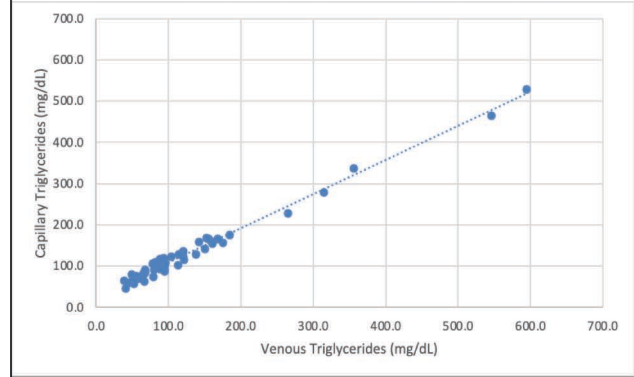
● Microsample Stability

Triglycerides dried blood microsamples are stable for two weeks when stored at ambient temperature during regular shipping and handling conditions.

● Accuracy

Paired venous samples, and capillary blood microsamples containing varying concentrations of Triglycerides, were tested. Triglycerides concentration observed for the dried blood microsamples versus venous (enzymatic colorimetric method) were statistically analyzed by simple regression.

N=50		
Correlation Coefficient	0.9867	
Slope	0.8282	
Intercept	25.32	
	Microsample	Comparable Standard Method
Mean Value of Triglycerides	132.1	129.0
Standard Deviation of Range	94.3	113.1



● Sample Requirements

The Triglycerides dried blood microsample test requires capillary blood placed into a Microcollection device. The device is then placed in the return box and mailed to the laboratory for analysis.

● Convenience and Simplicity

Simple stepwise instructions are provided to health awareness participants for collection of a Microsample using a finger lancet:

1. The collection kit is provided
2. Participant deposits 5 blood drops into transport device
3. The Microsample is mailed to the laboratory

● Interpretation

Triglycerides levels greater than 200 mg/dL are associated with an increased risk of several chronic medical conditions caused by obesity, under reactive thyroid, excessive alcohol, effect of certain medications, diabetes and kidney disease.