



ACCURACY MONITORING CATALOG

PRODUCTS PROVIDED
IN PARTNERSHIP WITH:



CEQAL
THE TRUE MEASURE OF QUALITY

WSLH *Proficiency*
(800) 462-5261
wslhpt.org **T**esting



Accuracy monitoring ensures that tests tied to clinical guidelines are not only precise, but also correct. It has a huge impact on the cost and quality of patient care.



– **DAVID W. SECCOMBE** MD, PhD, FCAP
Managing Director, CEQAL

INTRODUCTION



WSLH has partnered with CEQAL to offer laboratories the largest menu of accuracy-based programs anywhere in the world.

Proficiency testing serves as a valuable and efficient means to check the precision of a given method within a peer group. The samples have long shelf lives and many analytes can often be tested within a single sample. It is a requirement for lab accreditation and a worthwhile component of quality control.

One of the potential shortcomings, however, is that PT does not allow laboratories to compare results relative to a 'gold standard' or internationally credentialed reference method. In other words, PT can tell you whether or not a given method is reproducible, but it won't reveal if a calibration bias exists relative to a correct value from a reference method. Nor is it possible to know whether matrix effects are causing the sample to behave in a way that is inconsistent with an actual patient sample.

That's where accuracy monitoring can help supplement PT to help ensure the validity of key clinical tests. Accuracy-based programs are of particular importance for tests that are tied to evidence-based guidelines, where established cut points exist that drive medical decision-making. Being challenged at the appropriate levels and knowing with certainty that your results are not just consistent but correct is of the utmost importance to patient care.

WSLH is proud to be providing these innovative programs at a reduced cost to our members and we remain committed to the continual improvement of laboratory testing throughout the country.

Sincerely,

KRISTINE S. HANSBERY MBA, BS, MT (ASCP)
Director, Laboratory Improvement Division, WSLH PT

Kristine Hansbery

PT VS. ACCURACY

The table below highlights some of the key differences between proficiency testing and accuracy monitoring.

	PROFICIENCY TESTING	ACCURACY MONITORING
Sample Commutability	Unknown, possible matrix effects	Commutable, 100% human material
Target Value Assignment	Group mean for a given analyzer, method, etc.	Reference method or gravimetric additions
Analyte Challenge Levels	Program dependent, highly variable	Clinically significant, tied to guidelines
Key Performance Metric	Standard deviation relative to peer group	Total error based on biological variation
Performance Reports	At the conclusion of each test event	Instantly displayed on Youden plots
Required by CLIA	Yes	Supplementary to PT
Reveals Potential Calibration Bias	N/A	Yes
Suitable for Harmonization	N/A	Yes

SAMPLES

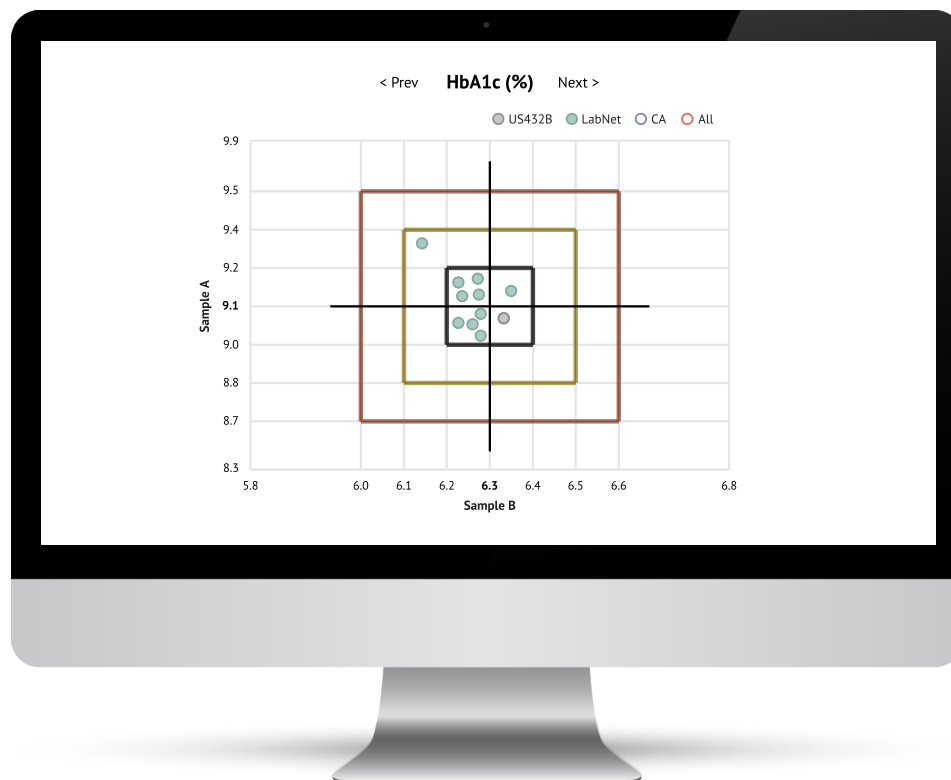
CEQAL's accuracy programs feature commutable samples with 100% human material sourced from in-house clinics. Samples are screened for viruses at the donor level before being added to their pools. No preservatives or stabilizers are introduced at any point in the process. This ensures that the reference material is free of matrix effects that can contribute to error.

REFERENCE VALUES

CEQAL assigns reference values at clinically significant concentrations using either the internationally credentialed reference method for a given analyte (e.g. Lipids, HbA1c, Creatinine, Liver Function Tests) or through gravimetric additions of substances of known purity (e.g. Therapeutic Drugs, Urinary Albumin). These are the gold standards by which labs can reliably gauge accuracy.

SYSTEM & REPORTS

CEQAL has an intuitive online system for submitting results. Reports are generated in real time and data is displayed on Youden plots. This allows participants to quickly assess performance relative to reference values, as well as others in their network and region.



PROGRAM MENU

HbA1c Monitoring			\$215 Order # A1C2x3
Format: 2 events x 3 samples (0.5 mL)	Sample matrix: 100% human whole blood	RV assignment: DCCT/IFCC reference method	
Analytes: HbA1c			

Creatinine/eGFR Monitoring			\$435 Order # CRE2x3
Format: 2 events x 3 samples (1 mL)	Sample matrix: 100% human serum	RV assignment: ID-GCMS reference method	
Analytes: Creatinine, eGFR (calculated)			

Liver Function Monitoring			\$435 Order # LFM2x3
Format: 2 events x 3 samples (0.7 mL)	Sample matrix: 100% human serum	RV assignment: IFCC primary reference methods, Dumas reference method	
Analytes: ALKP, ALT, AST, GGT, Total Bilirubin			

Lipids Monitoring			\$435 Order # LIP2x3
Format: 2 events x 3 samples (2 mL)	Sample matrix: 100% human serum	RV assignment: Reference methods traceable to CDC, WHO/IFCC	
Analytes: Apo A-1, Apo B, HDL, LDL (calc.), LDL (direct), Total Cholesterol, Lp(a)*, Triglycerides (total), Triglycerides (net)			
*Target value assigned by all results median			

Total Cholesterol CDC Certification			\$525 Order # TCC2x6
Format: 2 events x 6 samples (2 mL)	Sample matrix: 100% human serum	RV assignment: Reference method traceable to CDC	
Analytes: Total Cholesterol			

Neonatal Bilirubin Monitoring		\$375 Order # NBM2x5
Format: 2 events x 5 samples (0.5 mL)	Sample matrix: 100% human serum with human bilirubin conjugates	RV assignment: Doumas reference method
Analytes: Total Bilirubin, Direct Bilirubin		

Therapeutic Drug Monitoring		\$375 Order # TDM2x3
Format: 2 events x 3 samples (2 mL)	Sample matrix: 100% human serum	RV assignment: Gravimetrically assigned
Analytes: Acetaminophen, Amikacin, Caffeine, Carbamazepine, Digoxin, Ethanol, Gentamicin, Lithium, Methotrexate, Phenobarbital, Phenytoin, Primidone, Salicylates, Theophylline, Tobramycin, Valproic Acid, Vancomycin		

Urinary Albumin Monitoring		\$395 Order # UAM2x3
Format: 2 events x 3 samples (0.5 mL)	Sample matrix: 100% human urine	RV assignment: Gravimetrically assigned
Analytes: Albumin, Albumin/Creatinine Ratio (ACR), Creatinine		

Vitamin D Monitoring		\$405 Order # VDM2x3
Format: 2 events x 3 samples (0.5 mL)	Sample matrix: 100% human serum	RV assignment: ID-HPLC-MS/MS Vitamin D reference method
Analytes: Vitamin D		

Thyroid Monitoring		\$415 Order # THY2x3
Format: 2 events x 3 samples (0.5 mL)	Sample matrix: 100% human serum	RV assignment: Dialysis / Mass spectrometry
Analytes: Free T3, Free T4		

Testosterone Monitoring		\$435 Order # TES2x3
Format: 2 events x 3 samples (0.5 mL)	Sample matrix: 100% human serum	RV assignment: ID-HPLC-MS/MS Testosterone reference method
Analytes: Testosterone		

ABOUT CEQAL

CEQAL was established in 1988 as a reference method laboratory for the standardization of lipid testing in Canada. They are a member of the CDC's CRMLN (Cholesterol Reference Method Laboratory Network) and facilitate the lipids testing certification process for labs and instrument manufacturers globally. In addition to lipids, CEQAL operates several other reference methods and is recognized as an international authority on accuracy, standardization and harmonization.



To learn more, call **604.336.3695** or email info@ceqal.com

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