

2015 Oneworld Accuracy

Standardization + External Quality Assessment Programs

from Ministry of Health, Trinidad and Tobago - Collaboration Member

Oneworld Accuracy Collaboration





# MINISTRY OF HEALTH, TRINIDAD AND TOBAGO



Oneworld Accuracy provides the convenience and efficiency of a digital informatics system. Laboratories may submit VQA data via the Internet. This allows them to monitor the entire VQA process online and in real time: including shipments, registration information, data submission, current and archived performance reports, and customized colour graphs that chart total error trending over multiple test events.

Oneworld Accuracy results are delivered via email or fax within days of the close of the test event. Fast turnaround time means VQA results can substantially influence patient outcomes and allow corrective actions in a timely and effective manner.

To facilitate standardization, multi-site laboratory organizations may access online customised reports that summarize network-wide performance.

Contact today to gain the Oneworld Accuracy advantage for your laboratory.



Oneworld Accuracy is a significant advance in VQA and a powerful new tool to ensure the accuracy of diagnostic testing for laboratories and their patients.

karlene.lewis@ttbs.org.tt | P 868.662.8827 ext 171/140 F 868.663.4335 | Trinidad and Tobago Bureau of Standards, Century Drive,Trincity Industrial Estate, Macoya, Tunapuna, TRINIDAD AND TOBAGO



# 2015 MINISTRY OF HEALTH, TRINIDAD AND TOBAGO ORDER FORM

PARTICIPANT	O Individual Participant O N	etwork with	participants		
INFORMATION	New Customer				
	Organization Name				
			Postal Code		
	Contact Name		Contact Position		
	Phone		Fax		
	Email				
BILLING	<ul> <li>Same as Participant Informa</li> </ul>	ation			
INFORMATION	Organization Name				
	Street Address				
			Postal Code		
	Contact Name		Contact Position		
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	Email				
	Send invoice to billing contact by Mail Email				
AUTUORIZATION					
AUTHORIZATION	By placing your order you agree				
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			Macoya, Tunapuna, Trinidad and Tobago.		
	○ Visa	American Expres			
			Expiration Date		
	Name on Card		Security Code		
	Cardholder Signature				
	* Please fax completed order fo	orm to 868 663 4335 or 6	e-mail to karlene.lewis@ttbs.org.tt		



Organization Name\_

# 2015 MINISTRY OF HEALTH, TRINIDAD AND TOBAGO ORDER FORM

\_ Oneworld Accuracy ID \_\_

ROGRAMS ORDERED			
Subscription Options			
Report only – Report additional sets of results using the same samp Subscription options.  Sample only – Receive 2nd sample set (without evaluation) for 90' Off cycle subscription – This is a stand-alone subscription for 50% of results for evaluation.  Validation subscription – This is a standalone subscription for the EC validated samples with an associated report of survey values, but To order one of these options, please write the Subscription option	% of program price. f EQA program price. You red QA program price prorated b do not submit results for eva	ceive one set of samples for a single test event by the number of test events. You receive one s luation.	and submit one set
ORDER CODE   PROGRAM	PRICE	# SUBSCRIPTIONS   # ANALYZERS *	TOTAL
E.g. BCHE435 Chemistry/Immunoassay			
		0.1.1.1.2	
		Subtotal Program Total	
		PAYMENT AMOUNT	



# **REQUEST FOR QUOTE**

### LABORATORY INFORMATION

Participant Name	Department
Street/Road	House/Apt/LR. No
P. O. Box	Post Code
City	Country
	Designation
Phone	Fax
Email	

**Electrolytes** 

O All Below

CURRENT EQA TEST MENU (To provide you with a more accurate quote, please indicate the analytes tested)

### **CHEMISTRY**

Liver

# O All Below O Total Bilirubin O Direct Bilirubin O ALT O Alkaline Phosphate O AST O Albumin Lipids O All Below O Total Cholesterol O HDL

O LDL
O Apolipoprotein A1/B
O Lipoprotein (a)

# Thyroid O All Below O T-Uptake O T3 O Free T3 O T4 O Free T4

O TSH

O Triglyceride

# O Sodium O Chloride O Potassium O CO2 **Tumor Markers** O CA 15-3 O CA 19-9 O CA 125 O CA 27.29 O CEA **Immunoassay** O DHEA O Estradiol O Estriol O Ferritin O Folate serum O FSH O Glycohemoglobin

O Homocysteine

O Beta-2-microglobulin

O LH

O PAP

O Progesterone O Prolactin O PSA O PSA - free O Testosterone O Transferrin O Vitamin B12 **Cardiac Markers** O Biosite O All Other Methods O Total CK O CK-MB O Total LDH O Myoglobin O Troponin I & T O BNP O NT-Pro BNP **Therapeutic Drugs** O Acetaminophen O Amikacin O Carbamazepine O Digoxin O Ethosuximide

O Prealbumin

O Gentamicin O Lidocaine O Lithium O NAPA O Phenobarbital O Phenytoin O Primidone O Procainamide O Quinidine O Salicylates O Theophylline O Tobramycin O Tricyclic Antidepressants O Valproic Acid O Vancomycin **Blood Gases** O pH, pCO2, pO2 O Electrolytes, Glucose, Lactate, ionized Ca++ O Urea / Creatinine O CO-Oximetry O Hematocrit

O Hemoglobin

<sup>\*</sup> Please fax completed form to 868 663 4335 or e-mail to karlene.lewis@ttbs.org.tt.



Other tests performed, not listed above \_

# **REQUEST FOR QUOTE**

Participant Name		
Participant Contact		
Urinalysis		CLINICAL MICROSCOPY
O hCG (waived)	O Sickle Cell Screening	O Fecal White Cells
O Dipstick	O Fetal Hemoglobin (Rosette, KB Stain)	O KOH preparation (photos)
O Microalbumin	O Lymphocyte Immunophenotyping	O Pinworm
Other Tests	COAGULATION	O Nasal Smear
O Alpha-fetoprotein		O Urine Sediment
O Ammonia	O Activated Clotting Time   Instrument:	
O Amylase	O Anti-Thrombin III	O Fern Test
O BUN	O D-Dimer   Kit:	
O Calcium	O Plasma PT- Roche CoaguChek O PT, APTT, Fibrinogen - Plasma	MICROBIOLOGY
O Chemistry - Body fluid	O Thrombin Time	Antigen Detection
O Chemistry - CSF		O Affirm VP
O Chemistry - Urine	ANDROLOGY	O Candida
O Cortisol		O C. difficile Toxin
O Creatinine	O Sperm Screen	O Chlamydia - non-DNA methods
O Ethanol	O Sperm Count	O Chlamydia - DNA methods
O Fecal Occult Blood	O Antisperm Antibody	O Cryptococcus
O Fetal Fibronectin	O Sperm Morphology	O Influenza A & B
O Fructosamine	O Sperm Viability	O Neisseria - all methods
O Gastric Occult Blood O GGT	BLOOD BANK	O RSV
O Glucose	DECOD BANK	O Rapid Strep A
O hCG, quantitative	O ABO, Rh	O Rotavirus
O Iron	O Antibody Screen	Cultures
0 11011	O Antibody Identification	
O Total Ketones qualitative / semi-auantitative	O Antibody Identification	O Blood
O Total Ketones qualitative / semi-quantitative	O Compatibility Testing	O Blood O Dermatophytes
O Lactate		O Blood O Dermatophytes O Ear
O Lactate O Lipase	O Compatibility Testing O Direct Antiglobulin Testing	O Dermatophytes
O Lactate O Lipase O Magnesium	O Compatibility Testing	O Dermatophytes O Ear
O Lactate O Lipase O Magnesium O Neonatal Bilirubin	O Compatibility Testing O Direct Antiglobulin Testing	O Dermatophytes O Ear O Eye
O Lactate O Lipase O Magnesium	O Compatibility Testing O Direct Antiglobulin Testing IMMUNOLOGY	O Dermatophytes O Ear O Eye O GC/Genital
O Lactate O Lipase O Magnesium O Neonatal Bilirubin O Nitrazine Testing	O Compatibility Testing O Direct Antiglobulin Testing  IMMUNOLOGY O ANA (latex kits)	O Dermatophytes O Ear O Eye O GC/Genital O Mold
O Lactate O Lipase O Magnesium O Neonatal Bilirubin O Nitrazine Testing O Osmolality O Phosphorus	O Compatibility Testing O Direct Antiglobulin Testing  IMMUNOLOGY O ANA (latex kits) O ANA (non-latex kits)	O Dermatophytes O Ear O Eye O GC/Genital O Mold O Neisseria gonorrhoeae Screen
O Lactate O Lipase O Magnesium O Neonatal Bilirubin O Nitrazine Testing O Osmolality	O Compatibility Testing O Direct Antiglobulin Testing  IMMUNOLOGY O ANA (latex kits) O ANA (non-latex kits) O Anti-CMV	O Dermatophytes O Ear O Eye O GC/Genital O Mold O Neisseria gonorrhoeae Screen O Spinal fluid
O Lactate O Lipase O Magnesium O Neonatal Bilirubin O Nitrazine Testing O Osmolality O Phosphorus O Protein Electrophoresis	O Compatibility Testing O Direct Antiglobulin Testing  IMMUNOLOGY  O ANA (latex kits) O ANA (non-latex kits) O Anti-CMV O Anti-HIV	O Dermatophytes O Ear O Eye O GC/Genital O Mold O Neisseria gonorrhoeae Screen O Spinal fluid O Sputum
O Lactate O Lipase O Magnesium O Neonatal Bilirubin O Nitrazine Testing O Osmolality O Phosphorus O Protein Electrophoresis O Sweat Testing	O Compatibility Testing O Direct Antiglobulin Testing  IMMUNOLOGY  O ANA (latex kits) O ANA (non-latex kits) O Anti-CMV O Anti-HIV O ASO	O Dermatophytes O Ear O Eye O GC/Genital O Mold O Neisseria gonorrhoeae Screen O Spinal fluid O Sputum O Stool
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O Lactate O Lipase O Magnesium O Neonatal Bilirubin O Nitrazine Testing O Osmolality O Phosphorus O Protein Electrophoresis O Sweat Testing O TIBC O Total Protein	O Compatibility Testing O Direct Antiglobulin Testing  IMMUNOLOGY  O ANA (latex kits) O ANA (non-latex kits) O Anti-CMV O Anti-HIV O ASO O C3 & C4 O C - Reactive Protein O High Sensitivity C - Reactive Protein O H. pylori	O Dermatophytes O Ear O Eye O GC/Genital O Mold O Neisseria gonorrhoeae Screen O Spinal fluid O Sputum O Stool O Streptococcus A Screen O Susceptibility
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**CEQAL** Reference Methods

CMPT - Science Architect

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**Import Permits** 

**Subscription Options** 

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The First Principle

Why Results Deadlines Matter

New + Revised for 2015

Monthly EQA

Standardization Programs

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2015 Calendar



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### STANDARDIZATION PROGRAMS

Certification - Total Cholesterol eGFR Baseline eGFR Calculation eGFR Monitoring Hemoglobin A1c Baseline Hemoglobin A1c Monitoring Lipids Baseline Lipids Monitoring Liver Function Monitoring Total Protein Monitoring

### MATRIX INSENSITIVE CHEMISTRY EQA

**B-Type Natriuretic Peptide** Cardiac Markers - Serum **Routine Chemistry** NT-Pro B-Type Natriuretic Peptide Neonatal Bilirubin Therapeutic Drug Monitoring Urea/Creatinine

### **CHEMISTRY EQA**

Alcohol

Ammonia Basic Cardiac Markers Chemistry/Immunoassay Blood Gas/Electrolytes Cardiac Markers Clinical Chemistry CO-Oximetry

Cerebrospinal Fluid Chemistry

Endocrinology Fetal Fibronectin **Body Fluid Chemistry** Occult Blood

Fecal Occult Blood Fructosamine

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Ketones

Nitrazine

Rupture of Fetal Membrane Human Chorionic Gonadotropin Special Chemistry Special Immunoassay Specific Proteins

Special Urine Chemistry **Immunosuppressants** 

**Sweat Testing** Pharmacology

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**Tumor Markers** Urine Drugs of Abuse

Urine hCG **Urine Chemistry** Urinalysis

Urine Microalbumin Urine Sediment Whole Blood Glucose

Whole Blood Hemoglobin

### POINT OF CARE EQA

Basic Cardiac Markers Blood Gas/Electrolytes Cardiac Markers Clinical Chemistry Co-Oximetry Hematocrit i-STAT Blood Gas/Electrolytes/Hematocrit Nitrazine Plasma Prothrombin Time XS POC

Rupture of Fetal Membrane Urine Drugs of Abuse Urinalysis

Whole Blood Glucose Whole Blood Hemoglobin

**HEMATOLOGY EQA Body Fluids** Cell Morphology Erythrocyte Sedimentation Rate Erythrocyte Sedimentation Rate for Alifax Flow Cytometry Progenitor Cells Fetal RBC and F Cell Detection Hematology 5-Part Differential Hematology Hematology 3-Part Differential Lymphocyte Immunophenotyping Reticulocytes Sickle Cell Screening



# TABLE OF PROGRAMS

### **COAGULATION EQA**

Coagulation D-Dimer Oral Anticoagulant Monitoring Plasma Prothrombin Time XS POC Thrombophilia

### TRANSFUSION MEDICINE EQA

Basic Transfusion Medicine Comprehensive Transfusion Medicine Direct Antiglobulin Testing **Immunohematology** 

### CLINICAL MICROSCOPY EQA

Fecal Smear Fern Test **KOH Preparation** Nasal Smear Pinworm Preparation Vaginal Preparation

### **DIAGNOSTIC IMMUNOLOGY EQA**

Antiphospholipid Autoimmunity Rheumatologic Arthritis Autoimmunity Anti-Neutrophil Cytoplasm Autoimmunity Coeliac Disease Organ Autoimmunity Rheumatologic Autoimmunity Thyroid Autoimmunity Inhalant Allergy Anti-Nuclear Antibody Anti-Nuclear Antibody Anti-Streptolysin O

C-Reactive Protein

Food Allergy

High Sensitivity C-Reactive Protein

Rhematoid Factor

### **CLINICAL SEROLOGY EQA**

Viral Antigen Detection **EBV Serology** 

Hepatitis Serology

HIV

**HIV Serology** 

HIV INSTI

Helicobacter Pylori Antibody

Herpes Simplex

HTLV Serology

Lyme Disease

Infectious Mononucleosis

Mycoplasma Antibody

Toxoplasma, Rubella and CMV Serology

Syphilis Serology

### CLINICAL NUCLEIC ACID TESTING EQA

CMV DNA Qualitative & Viral Load C. Trachomatis L.N. Gonorrhoeae DNA Qualitative HAV RNA & Parvovirus B19 DNA **HBV DNA Viral Load HCV** Genotyping **HCV RNA Viral Load HCV RNA Qualitative** 

HIV-1 Genotypic Drug Resistance HIV-1 RNA Viral Load

HSV-1/2 DNA Qualitative

HIV Tropism

### **BLOOD SCREENING EQA**

CMV DNA Qualitative & Viral Load HAV RNA & Parvovirus B19 DNA HTLV Serology Multimarker Blood Screening Serology Multimarker Blood Screenina NAT Toxoplasma, Rubella and CMV Serology Syphilis Serology

### **ANDROLOGY EQA**

Anti-Sperm Antibody Sperm Count Sperm Screen Sperm Morphology Sperm Viability

### **BACTERIOLOGY EQA**

Affirm VP Test **Bacterial Identification** Clostridium Difficile Antigen Genital Antigens Genital Culture Genital Antigens - Nucleic Acid Gram Stain Methicillin Resistant Staphylococcus aureus Neisseria Gonorrhoeae Culture Streptococcus A Antigen Streptococcus A Culture Throat Culture Urine Colony Count Urine Culture Vancomycin Resistant Enterococcus

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# **TABLE OF PROGRAMS**

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Blood Parasites Malaria Parasite Antigens PVA Smear Wet Mount



# **ONEWORLD ACCURACY COLLABORATION**

When you participate in our programs, you support and advance the Oneworld Accuracy Collaboration, the largest and most successful collaboration of its kind in the world. Collaboration Members harmonize programs to the highest international standards using common samples, challenge formats and test event calendar and manage their respective programs on OASYS, a shared informatics system developed and hosted by the Collaboration Secretariat, the Oneworld Accuracy Group, based in Vancouver, Canada.

# Collaboration Mission: to achieve universal testing accuracy for improved healthcare for all people.

Our mission is supported by your commitment to continual improvement in testing quality. Accordingly, if you have any suggestions for new programs or system features that can assist you, or if you know of any groups that might be interested in becoming a Collaboration Member, please let us know at secretariat@oneworldaccuracy.org.

The Collaboration has three types of Members. Harmonized Members are national groups that provide a comprehensive, harmonized program set. Associate Members are commercial groups that also provide a comprehensive, harmonized program set pending organization of national programs in their respective countries. Specialty Members are national groups with a specific mandate or academic focus that provide a specialty program set.

# ver, Canada)

### **Harmonized Members**

- 1. Oneworld Accuracy Group, Collaboration Secretariat (Vancouver, Canada)
- 2. AccuTest Proficiency Testing Services (Boston, USA)
- 3. Human Quality Assessment Services (Nairobi, Kenya)
- 4. Oneworld Accuracy Italia (Bologna, Italy)
- 5. Ethiopian Public Health Institute (Addis-Ababa, Ethiopia)
- 6. Centro Regionale Qualità Laboratori (Palermo, Italy)
- 7. Ministère de la Santé Publique de la Côte d'Ivoire (Abidjan, Côte d'Ivoire)
- 8. AfriQualab (Dakar, Sénégal)
- 9. Ministry of Health, Antigua & Barbuda (Saint John's, Antigua & Barbuda)
- 10. Ministry of Health, Barbados (Bridgetown, Barbados)



# ONEWORLD ACCURACY COLLABORATION

- 11. Ministry of Health, Guyana (Georgetown, Guyana)
- 12. Ministry of Health, Jamaica (Kingston, Jamaica)
- 13. Ministry of Health, Saint Lucia (Castries, Saint Lucia)
- 14. Ministry of Health, Suriname (Paramaribo, Suriname)
- 15. Ministry of Health, Trinidad & Tobago (Port of Spain, Trinidad & Tobago)
- 16. Ministry of Health, Bahamas (Nassau, Bahamas)
- 17. Ministry of Health, Belize (Belmopan, Belize)
- 18. Ministry of Health, Dominica (Roseau, Dominica)
- 19. Ministry of Health, Grenada (St. George's, Grenada)
- 20. Ministry of Health, St. Kitts & Nevis (Basseterre, St. Kitts & Nevis)
- 21. Ministry of Health, St. Vincent & the Grenadines (Kingstown, St. Vincent & the Grenadines)
- 22. National Public Health Reference Laboratory (Accra, Ghana)
- 23. Laboratoire National de Santé Publique Haïti (Port au Prince, Haïti)
- 24. National Reference Laboratory Rwanda (Kigali, Rwanda)

### **Associate Members**

- 25. Oneworld Accuracy Chinese Taipei
- 26. Oneworld Accuracy Portugal
- 27. Oneworld Accuracy Türkiye
- 28. Oneworld Accuracy España
- 29. Oneworld Accuracy United Arab Emirates
- **30.** Oneworld Accuracy India
- 31. Oneworld Accuracy Saudi Arabia
- 32. Oneworld Accuracy Panamá
- 33. Oneworld Accuracy Costa Rica
- 34. Oneworld Accuracy El Salvador
- 35. Oneworld Accuracy Guatemala
- 36. Oneworld Accuracy Honduras
- 37. Oneworld Accuracy România



# **ONEWORLD ACCURACY COLLABORATION**

# **Specialty Members**

- 38. NRL (Melbourne, Australia)
- 39. Thistle QA (Johannesburg, South Africa)
- 40. National HIV and Retrovirology Laboratories, Public Health Agency of Canada (Ottawa, Canada)
- 41. STI AIDS Cooperative Central Laboratory (Manila, Philippines)
- 42. China International Transfusion Infection Control, Shanghai Blood Services (Shanghai, China)



# **SCIENCE ARCHITECTS**



# Science(n);

from Latin scientia meaning "knowledge" is a systematic enterprise that builds and organizes knowledge in the form of testable explanations and predictions about the world.



# Architect(n);

from Latin *architectus*, derived from Greek arkhtekton meaning "chief builder" is a person or group responsible for the planning, design and construction oversight of complex systems.

### = Science Architect

The Oneworld Accuracy Collaboration features programs that embed the science of leading medical and laboratory science specialists worldwide. These groups are called Science Architects and they take the lead in the planning, design and oversight of programs within their domain of expertise. This includes selection and procurement of clinically relevant samples and design of key online program flows, such as registration, submitting results, evaluation criteria and performance reports and graphs. Science Architects stay abreast of leading and emerging clinical and laboratory trends so that their programs remain current.

The Science Architect concept is unique to the Collaboration. It means that participants gain access to the leading science of many Science Architects within a single suite of programs on a single informatics system. The Collaboration wants to reach out to new potential Science Architects worldwide so their expertise can be incorporated into new best-of-breed programs.

If you know of any group that might be interested or qualified in becoming a Science Architect, please let us know at secretariat@oneworldaccuracy.org.



# **CEQAL - SCIENCE ARCHITECT**





CEQAL (the Canadian External Quality Assessment Laboratory) was established in 1988 out of research efforts within the Department of Pathology and Laboratory Medicine at the University of British Columbia with a mission to serve as an accuracy base for the standardization of lipid testing in Canada.

CEQAL operates a Reference Method Laboratory (see CEQAL Reference Methods) and is based in Vancouver, British Columbia, Canada. CEQAL is a member of the Cholesterol Reference Method Laboratory Network (CRMLN), an international network of eight Reference Method Laboratories that serve as the accuracy base worldwide for lipid measurements. CRMLN operates under the aegis of the US Centers for Disease Control and Prevention (CDC) and the National Heart, Lung and Blood Institutes.

CEQAL's laboratory processes have been documented and standardized to meet CRMLN operating requirements. CEQAL's operations are also monitored by the International Federation of Clinical Chemistry - Joint Committee on Traceability in Laboratory Medicine (IFCC – JCTLM).

CEQAL has been a Collaboration member since inception in 2000 and serves as the Science Architect for Standardization Programs and Matrix Insensitive Chemistry EQA Programs. CEQAL's lead in the design and science of these Programs includes the collection of fresh human test samples that eliminate or minimize matrix effects as well as the operation of Reference Methods that are used to assign reference value targets in support of those Programs.

CEQAL's scientific efforts are focused upon research and development of new Standardization Programs, new reference target methodologies and the design of comprehensive quality assurance systems to support traceably accurate testing performed on point-of-care devices.

As well, CEQAL's reference methods are routinely used by instrument manufacturers for the calibration of their analytical systems and for the assignment of target values to commutable testing samples for confirmation of accuracy transfer to field methods.







CEQAL operates the following Reference Methods, which are used to assign reference value targets in support of Standardization Programs and Matrix Insensitive Chemistry EQA Programs. Analytes with reference value targets are indicated by this icon:

# Apolipoprotein A1 and Apolipoprotein B

LIPD763 | LIPD733

These analyses are performed at the Northwest Lipid Metabolism and Diabetes Research Laboratories, University of Washington, Seattle WA. The Siemens-Behring BNII nephelometer is calibrated using in-house calibration materials that are traceable to the WHO/IFCC International Reference Materials SP1-01 for apolipoprotein A1 and SP3-07 for apolipoprotein B. Assay precision is monitored using in-house IQC with low, medium and high levels of Apo A1 and Apo B and values assigned against the WHO/IFCC Reference materials.

Marcovina SM, Albers JJ, Henderson LO, Hannon WH. International Federation of Clinical Chemistry standardization project for measurement of apolipoproteins. III Comparability of apo A-1 values by use of common reference material. Clin Chem 1993;39:773-778

Marcovina SM, Albers JJ, Kennedy H et al. International Federation of Clinical Chemistry standardization project for measurement of apolipoproteins A-1 and B. IV: Comparability of apo B values using international reference materials. Clin Chem 1994;40:586-592

### Bilirubin (Total)

CHEM463 | CHEM433 | LIVM733 | NEOB435

This reference method is based upon the Jendrassik-Grof principle as developed by Doumas et al. The method and materials have been credentialed and approved by the National Reference System for the Clinical Laboratory, National Committee for Clinical Laboratory Standards (Document RS6-A).

Doumas BT, Perry BW, Bayse DD et al. A candidate reference method for the determination of bilirubin in serum, test for transferability. Clin Chem 1983; 29:297-301.

Doumas BT, Kwok-Cheung PP, Perry BW et al. Candidate reference method for determination of total bilirubin in serum: development and validation. Clin Chem 1985; 21:1779-1789.



Chloride CHEM463 | CHEM433

This reference method is based upon the coulometric generation of silver ions and the amperometric indication of the endpoint (Cotlove method). The method and materials have been credentialed and approved by the National Reference System for the Clinical Laboratory, National Committee for Clinical Laboratory Standards (Document RS10-P).

Velapoldi RA, Paule RC, Schaffer R et al. A reference method for the determination of chloride in serum. NBS special publication 260-67. US Department of Commerce/National Bureau of Standards, Washington, DC 1979.

### Cholesterol, Total

CHOL726 | LIPB713 | LIPD763 | LIPD733

This reference method is based upon the Abell, Levy, Brodie and Kendall method as modified by the Centers for Disease Control and Prevention. The method and materials have been credentialed and approved by the National Reference System for the Clinical Laboratory, National Committee for Clinical Laboratory Standards (Document RS3-A).

Abell LL, Levy BB, Brodie RB, Kendall RB. Simplified method for the estimation of total cholesterol in serum and demonstration of its specificity. J Biol Chem 1952;195:357-366.

Duncan IW, Mather A, Cooper GR. The procedure for the proposed cholesterol reference method. Atlanta, GA: Centers for Disease Control and Prevention, 1982.

### **Serum Creatinine**

GFRB716 | GFRM7123 | GFRM733 | GFRR733

Serum creatinine is measured in human serum using a recognized isotope dilution gas chromatograph mass spectrometry methodology as carried out in collaboration with a credentialed laboratory. The method is used for certification of the CRMs (Certified Reference Materials) for creatinine from BCR (Community Bureau of Reference of the Commission of the European Communities).

Stöckl D, Reinauer H. Candidate reference methods for the determination of target values for cholesterol, creatinine, uric acid and glucose in external quality assessment and internal accuracty control. I.Method setup. Clin Chem 1993;39:993-1000

Thienport LM,,DeLeenheer AP, Stöckl D, Reinauer H. Candidate reference methods for the determination of target values for cholesterol, creatinine, uric acid and glucose in external quality assessment and internal accuracy control. II. Method transfer. Clin Chem 1993;39:1001-6

Thienpont LM, Van Nieuwenhove B, Stöckl D, Reinauer H, De Leenheer AP. Determination of reference method values by isotope dilution-gas chromatography/mass spectrometry: a five years' experience of two European reference laboratories. Eur J Clin Chem Clin Biochem 1996;34:853-60



# Glucose CHEM463 | CHEM433

This reference method is based upon the hexokinase/glucose-6-phosphate dehydrogenase method as developed by the Glucose Committee of the American Association for Clinical Chemistry and the Centers for Disease Control and Prevention. The method and materials have been credentialed and approved by the National Reference System for the Clinical Laboratory, National Committee for Clinical Laboratory Standards (Document RS1-A).

Neese JW, Duncan P, Bayse DD et al. Development and evaluation of a hexokinase/glucose-6-phosphate dehydrogenase procedure for use as a national glucose reference method. HEW Publication No. (CDC) 77-8330. HEW. USPHS, Centers for Disease Control and Prevention, 1976.

Neese JW, Duncan P, Bayse DD et al. Development and evaluation of a hexokinase/glucose-6-phosphate dehydrogenase procedure for use as a national glucose reference method. Clin Chem 1974;20:878.

# **Glycated Hemoglobin**

### GHBB713 | GHGB733

Glycated haemoglobin target values are assigned by the Diabetes Diagnostics Laboratory at the University of Missouri, which served as the core laboratory for the measurement of glycated haemoglobin in the Diabetes Control and Complications Trial (DCCT), and is a reference laboratory in the National Glycohaemoglobin Standardization (NGSP) network.

The Diabetes Control and Complications Research Group: The effect of intensive treatment of diabetes on the development and progression of long-term complications in insulin-dependent diabetes mellitus. N Engl J Med 1993: 29:977-986.

### HDL Cholesterol (Designated Comparison Method)

### For manufacturers only

This method of higher order uses dextran sulphate (molecular weight 50,000 Daltons) as a precipitant. All lipoproteins except high density lipoprotein cholesterol are precipitated. High density lipoprotein cholesterol in the supernatant is measured by the Abell-Kendall cholesterol reference method. This method is traceable to the Centers for Disease Control and Prevention high density lipoprotein cholesterol ultracentrifugation reference method.

Kimberly MM, Leary ET, Cole TG, Waymack PP for the Cholesterol Reference Method Laboratory Network. Selection, validation, standardization, and performance of a designated comparison method for HDL-cholesterol for use in the Cholesterol Reference Method Laboratory Network. Clin Chem 1999, 45:1803-1812.



# **HDL Cholesterol (Ultracentrifugation)**

LIPB713 | LIPD763 | LIPD733

This reference method measures high density lipoprotein cholesterol after first removing very low density lipoproteins and chylomicrons by ultracentrifugation. Subsequently low density lipoproprotein cholesterol is precipitated by heparin manganese and the cholesterol in the supernatant is then quantified by the Abell-Kendall cholesterol reference method. The procedure is used at the Centers for Disease Control and Prevention to assign high density lipoprotein cholesterol target values to human-based serum pools and is considered the definitive high density lipoprotein cholesterol reference method for calibrating and checking the accuracy of routine methods. This method is traceable to the Centers for Disease Control and Prevention high density lipoprotein cholesterol ultracentrifuge reference method.

Hainline A, Karon J, Lippel K eds. Manual of laboratory operations. In: Lipid Research Clinics Program, Lipid and lipoprotein analysis, 2nd ed. US Department of Health and Human Resources, Bethesda, MD.1982.

# LDL Cholesterol β-Quantification

LIPB713 | LIPD763 | LIPD733

Low density lipoprotein cholesterol is determined after ultracentrifugation as detailed for HDL (high density lipoprotein) cholesterol by ultracentrifugation. The cholesterol content of the infranatant (which contains both LDL and HDL cholesterol) is measured and the low density lipoprotein cholesterol content is calculated as the difference after high density lipoprotein cholesterol has been measured. This method is traceable to the Centers for Disease Control and Prevention  $\beta$ -quantification reference method.

Hainline A, Karon J, Lippel K eds. Manual of laboratory operations. In: Lipid Research Clinics Program, Lipid and lipoprotein analysis, 2nd ed. US Department of Health and Human Resources, Bethesda, MD.1982.

### **Potassium**

This reference method is based upon the flame atomic emission spectrometry method for measuring potassium in serum as developed cooperatively by the National Institute of Standards and Technology and the Centers for Disease Control and Prevention. The method and materials have been credentialed and approved by the National Reference System for the Clinical Laboratory, National Committee for Clinical Laboratory Standards (Document RS8-P).

Velapoldi RA, Paul RC, Schaffer R et al. A reference method for the determination of potassium in serum. NBS special publication 260-63. US Department of Commerce/National Bureau of Standards, Washington, DC 1978. 2nd ed. US Department of Health and Human Resources, Bethesda, MD.1982.



# **Protein (Total)**

CHEM463 | CHEM433 | TPRM733

This reference method is based upon the biuret reaction and as developed, validated and tested for transferability by Doumas et al. The method and materials have been credentialed and approved by the National Reference System for the Clinical Laboratory, National Committee for Clinical Laboratory Standards (Document RS5-A2).

Doumas BT, Bayse DD, Carter RJ et al. A candidate reference method for determination of total protein in serum. I. Development and validation. Clin Chem 1981;27:1642-1650.

Doumas BT, Bayse DD, Carter RJ et al. A candidate reference method for determination of total protein in serum. II. Test for transferability. Clin Chem 1981;27:1651-1654.

### Sodium

This reference method is based upon the flame atomic emission spectrometry method for measuring sodium in serum as developed cooperatively by the National Institute of Standards and Technology and the Centers for Disease Control and Prevention. The method and materials have been credentialed and approved by the National Reference System for the Clinical Laboratory, National Committee for Clinical Laboratory Standards (Document RS7-P).

Velapoldi RA, Paul RC, Schaffer R et al. A reference method for the determination of sodium in serum. NBS special publication 260-60. US Department of Commerce/National Bureau of Standards, Washington, DC 1978.

# **Therapeutic Drug Monitoring**

THDM463 | THDM433

All drugs are targeted gravimetrically. This method is considered to be more accurate and precise than methods in routine use, but has not been subjected to a credentialing process.

### Total and Net Triglycerides (Method of Higher Order)

LIPB713 | LIPD763 | LIPD733

Net triglycerides are determined using a two step glycerol phosphate oxidase (GPO) reaction, with and without lipase. This method is used by CRMLN members and is traceable to the original CDC reference method. The original CDC reference method involves organic extraction of triglyceride followed by chemical determination of glycerol. There is no reference method for the determination of free glycerol. The level of free glycerol is determined in this sample by a non-standardized enzymatic method which is traceable to CDC gas chromatography-isotope dilution-mass spectrometry (GC-IDMS) method. The CDC has replaced the reference method with GC-IDMS analysis of Total Glycerides. The CRMLN enzymatic method is still monitored by the CDC.

Klotzsch SG, McNamara JR. Clin Chem 1990:36:1605-13



### Urea

CHEM463 | CHEM433 | URCR435 | URCR432

This reference method is based upon the coupled enzyme reaction of urease and glutamate dehydrogenase. The method was developed, validated and tested for its transferability. The method and materials have been credentialed and approved by the National Reference System for the Clinical Laboratory, National Committee for Clinical Laboratory Standards (Document RS11-P).

Sampson EJ et al. A coupled-enzyme equilibrium method for measuring urea in serum: optimization and evaluation of the AACC study group on urea candidate reference method. Clin Chem 1980; 26:816-826.



# **CMPT-SCIENCE ARCHITECT**





clinical microbiology proficiency testing

CMPT (Canadian Microbiology Proficiency Testing) is an active program of the Department of Pathology & Laboratory Medicine, University of British Columbia (UBC). CMPT operates a Medical Microbiology Research and Development Laboratory within the UBC campus in Vancouver, British Columbia, Canada.

Since inception, CMPT has maintained its focus on fulfilling its Mission Statement: Innovation, Education, Quality Assessment and Continual Improvement.

CMPT was created in 1983 as a regional microbiology EQA program for southwest British Columbia. It has since evolved into a cross-Canada program with international outreach. Today CMPT provides EQA programs in bacteriology, mycology and enteric parasitology to all laboratories in most Canadian provinces as well as EQA programs for drinking and recreational water to public health and water testing laboratories across the country.

CMPT is widely acknowledged as the principal microbiology EQA provider in Canada and a leader internationally in microbiology quality improvement and education. CMPT is voluntarily compliant with ISO 17025: 2004 and ISO 9001: 2008. Since 2004, CMPT's quality management system has been regularly assessed and certified by QMI-SAI Global. CMPT has been a Collaboration member since 2011 and serves as the Science Architect for some Bacteriology, Mycology and Mycobacteriology EQA Programs.

CMPT's focus on education and continual improvement is reflected in the design of its EQA programs. Many providers use lyophilized samples and narrowly conceive of EQA as measure of their participants' technical accuracy compared with their inter-laboratory peers. By contrast, CMPT uses fresh samples that closely simulate typical clinical samples. As well, CMPT's EQA more expansively assesses their participants' whole pre-examination, examination and post-examination cycle to ensure that they provide timely, accurate and clinically-relevant reports. CMPT's critiques, newsletters and other educational materials enjoy consistently high ratings among participants and serve as a valuable source of continuing education.

CMPT is active internationally. Numerous organizations have adopted CMPT techniques for use in their own countries through CMPT's Education, Training, & Mentoring (ETM) Program. As well, CMPT has been successfully engaged in national and international research in laboratory quality management within the UBC Program Office for Laboratory Quality Management (POLQM), a sister program to CMPT.



# NRL - COLLABORATION MEMBER + SCIENCE ARCHITECT





Established in 1985 and based in Melbourne, Australia, NRL is an independent and not-for-profit organization whose mission is to promote the quality of tests and testing for infectious diseases alobally.

NRL is designated a World Health Organization Collaborating Centre for Diagnostics and Laboratory Support for HIV and AIDS and Other Blood-borne Infections and a fully accredited proficiency testing provider under ISO 17043:2010. In addition, NRL is certified by NCS International for Quality Management AS/NZS ISO 9001:2008 and Safety Management AS/NZS 4801:2001.

NRL has been a Collaboration member since 2005 and serves as the Science Architect for Clinical Serology, Clinical Nucleic Acid Testing and Blood Screening EQA Programs. The design and analysis of these Programs draw upon NRL's extensive experience and scientific methods to ensure maximum scope for error detection. NRL EQA Programs, which incorporate genuine and diverse samples, are intended to assess the integrity of the entire testing process to identify sources of errors and prevent misdiagnosis.

As well, NRL is the founder and manager of an international quality network in which NRL directly provides Blood Screening EQA Programs and other quality services to national blood screening organizations and plasma fractionators from over 40 countries. These quality-focused participants have selected NRL Blood Screening EQA Programs as a cost-effective approach to managing risks.

In addition to EQA, NRL also offers a range of quality services for laboratories testing for infectious diseases, including:

- comprehensive and innovative quality assurance services,
- evaluations of tests and test algorithms,
- specialized laboratory testing services,
- training with sustainable outcomes, and
- consultation and advice on policy relating to laboratory testing.



# **OUR GREEN COMMITMENT**

# Minimizing environmental impact

Maximizing healthcare impact



As an environmentally responsible Collaboration, our Green Commitment includes moving from paper to digital formats and minimizing the mass and frequency of shipments to you.

As part of that commitment, we are:

- Minimizing separate shipments to you by simplifying our Test Event calendar.
- Sending you electronic copies of Instructions and Worksheets instead of printing and shipping paper copies to you.
- Providing digital images for microscopy Programs instead of printing and shipping microphotographs to you.
- Encouraging you to consider the environment before printing paperwork and to recycle or reuse all shipping materials.

# We're making a difference.

Almost 100% of our shipping materials can now be recycled or reused. Moving from paper to digital will save approximately 1400 kilograms (3100 pounds) of paper every year and avert the associated environment cost of printing that paper and shipping it around the world by air transport.



We invite you to re-imagine our Programs to minimize their environmental impact. If you have suggestions for how we can further minimize our environmental footprint, please let us know at secretariat@oneworldaccuracy.org



# **PROGRAM ESSENTIALS**

# Here is how our Programs are organized

- Programs are divided into sections by testing discipline.
- Programs are listed alphabetically by Order Code in each section.
- All Programs are offered on a calendar-year basis.



- You may enrol in any Program anytime during the year. You will start with the next available Test Event and your Program cost will be pro-rated.
- Some Programs may only be offered once a minimum number of participants is reached.

# We have simplified and standardized our Program design

- Programs may have either 3, 4, 6 or 12 test events.
- All Programs have a 21 day Test Event Window except Standardization Programs and Matrix Insensitive Chemistry EQA
   Programs. These Programs have a 7 day Test Event Window due to the nature of their sample material.
- The number of shipments per year is indicated under the format of each program.
- All Test Event Windows open on Wednesdays at 12:01 am (00.01) your local time.
- All Result Deadlines end on Wednesdays at 11:59 pm (23.59) your local time.

### Our system provides automated notices to help you manage your Programs

- Advance Shipment Notice so you can update your registration and prepare for the upcoming Test Event.
- Storage & Handling Instructions + Worksheets so you can properly receive, store and test your samples and record submitted results.
- Results Deadline Reminders so you can submit all results on time.



# **IMPORT PERMITS**

Contact your local authorities to determine import permit requirements for these programs. Use the Oneworld Accuracy program codes, program names and sample content to ensure that import permits match shipment paperwork.



Sample sets for these programs are classified by IATA as UN3373 Biological Substance, Category B and may require import permits.



Sample sets for these programs are classified by IATA as UN2814 Infectious Substances Affecting Humans, and may require import permits.



Sample sets for these programs are shipped on dry ice. Dry ice is classified by IATA as UN1845 Dangerous Goods and may require import permits.



Sample sets for these programs are shipped annually.

Program		Sample		You	r Locatio	1
Code	Program Name	Content	Sample Sets	International	USA	Canada
AFVP435	Affirm VP Test	Inoculated swab	(n)	Ьŝ		CL
AMBS431	Antimycobacterial Susceptibility	Culti-loop	2814>	ЬŚ		Р
BACT435	Bacterial Identification	Culti-loop	(July) (3373)	Þ.		CL
CANA435	Candida Antigen	Liquid	3373	P.Ś		CL
CLDA432	Clostridium Difficile Antigen	Liquid	(un) (3373)	P\$		CL
CLDA435	Clostridium Difficile Antigen	Liquid	3373	P.		CL
CMVN435	CMV DNA Qualitative & Viral Load	Human plasma	3373 (IB45) <b>K</b>	P.	Ьŝ	CL
CTNG435	C. trachomatis I N. gonorrhoeae DNA Qualitative	Human plasma	(in) (in) (in) (in) (in) (in) (in) (in)	Ьŝ	Ьŝ	CL
DERS435	Dermatophyte Screen	Culti-loop	3373	Ьŝ		CL
GENA435	Genital Antigens	Liquid	3373	Ьŝ		CL
GENC432	Genital Culture	Culti-loop	3373	P.Š		CL



# **IMPORT PERMITS**

GENC435	Genital Culture	Culti-loop	3373	Ьŝ		CL
GEND435	Genital Antigens - Nucleic Acid	Liquid	3373	Ь\$		CL
HAPN435	HAV RNA & Parvovirus B19 DNA	Human plasma	(3373) (1845) <b>K</b>	Ь\$	Ьŝ	CL
HBVL435	HBV DNA Viral Load	Human plasma	(3373) (1845) (1845)	Ьŝ	Ьŝ	CL
HCVG435	HCV Genotyping	Human plasma	3373 (B45) <b>K</b>	Ьŝ	Ьŝ	CL
HCVL435	HVC RNA Viral Load	Human plasma	3373	Ь\$	Ьŝ	CL
HCVN435	HCV RNA Qualitative	Human plasma	3373	Ь\$	Ьŝ	CL
НЕРМ435	Hepatitis Serology	Human plasma	3373	Ь\$	Ьŝ	CL
HEPM4310	Hepatitis Serology	Human plasma	3373	Ь\$	Ьŝ	CL
HIVG425	HIV-1 Drug Resistance	Human plasma	3373	Ь\$	Ьŝ	PHAC
HIVL435	HIV-1 RNA Viral Load	Human plasma	3373	Ь\$	Ьŝ	PHAC
HSVC432	Herpes Simplex	Lyophilized serum	3373	Ь\$	Ьŝ	CL
HSVN435	HSV-1/2 DNA Qualitative	Human plasma	3373	Ь\$	Ьŝ	CL
MMBS4320	Multimarker Blood Screening Serology	Human plasma	3373	Ь\$	Ьŝ	PHAC
MOLC435	Mold/Yeast Culture	Culti-loop	3373	Ьŝ		CL
MRSA435	Methicillin Resistant S. aureus	Culti-loop	3373	Ь\$		CL
MSPC435	Mycobacterium Species Culture	Culti-loop	2814	Ь\$		Р
MTUC435	Mycobacterium Tuberculosis Culture	Culti-loop	2814	Ь\$		Р
NATA4315	Multimarker Blood Screening NAT	Human plasma	3373	Ь\$	Ьŝ	PHAC



# **IMPORT PERMITS**

NGOS432	Neisseria gonorrhoeae Culture	Culti-loop	3373	Ьŝ		CL
NGOS435	Neisseria gonorrhoeae Culture	Culti-loop	(3) (3) (3)	Ьŝ		CL
STAS435	Streptococcus A Culture	Culti-loop	3373	Ь5		CL
THRC433	Throat Culture	Culti-loop	3373	Ь5		CL
THRC435	Throat Culture	Culti-loop	3373	P.Ś		CL
TORC435	CMV / Rubella / Toxoplasma Serology	Human plasma	\$3373\	Ьŝ	Ьŝ	CL
TREP4310	Syphilis Serology	Human plasma	\$3373\$	ЬŚ	Ьŝ	CL
TREP435	Syphilis Serology	Human plasma	(S)	Ьŝ	Ьŝ	CL
URCC432	Urine Colony Count	Quanticult	3373	P.Ś		CL
URIC432	Urine Culture	Culti-loop	3373	Ьŝ		CL
URIC435	Urine Culture	Culti-loop	3373	Ьŝ		CL
VREN435	Vancomycin Resistant Enterococcus	Culti-loop	3373	Ьŝ		CL
YEAC435	Yeast Culture	Culti-loop	3373	P.Ś		CL

P? Import permit may be required. Contact your local authorities.

P CFIA and PHAC Import Permits are required.

PHAC PHAC Import Permit is required.

CL Canadian Biosafety Standards and Guidelines (CBSG) CL2 Compliance Letter is required.



# **SUBSCRIPTION OPTIONS**

# We provide 5 Program subscription options to help you manage your testing quality.



**Full subscription.** You receive one set of samples and submit one set of results for evaluation for each test event in the calendar year. The exceptions are some Point of Care programs in which you may submit multiple sets of results for evaluation (e.g. up to 20) for a number of point of care devices.



**Report-only subscription.** You may submit additional sets of results using the same samples provided with the Full subscription for free. Availability is subject to sample volume, stability, and suitability. This subscription option is useful for you to assess performance of back-up systems. Report-only subscriptions are not available for programs consisting of CMS regulated analytes.



**Sample-only subscription.** This is an add-on to Full subscriptions. You receive an additional set of samples but do not submit a second set of results for evaluation. This subscription option is useful for your troubleshooting and internal quality measures.



**Off-cycle subscription.** This is a stand-alone subscription. You receive one set of samples for a single test event and submit one set of results for evaluation. This subscription option is useful for you to follow-up unexpected or adverse performance and for regulatory compliance.



**Validation subscription.** This is a stand-alone subscription. You receive one set of survey-validated samples with an associated report of survey values, but do not submit results for evaluation. This subscription option is useful for you to troubleshoot, implement a new system or work up new reagents or calibrators.

# Our Order Codes give you Program Details





# +5 FREE REPORT ONLY SUBSCRIPTIONS



Full subscriptions of Oneworld Accuracy programs come with 5 <u>free</u> Report only subscriptions. In other words, you can submit up to 5 additional sets of results for evaluation - at no cost - using the same sample set provided with your Full subscription.

It gets better. If you need additional sample volume for your Report only subscriptions, simply order as many Sample only subscriptions as you require.

This is new for 2015. Providing 5 <u>free</u> Report only subscriptions is part of our commitment to provide you with an innovative, cost-effective way to extend EQA to all your testing, including secondary and backup test platforms.

Make sure that you take full advantage of your 5 <u>free</u> Report only subscriptions – simply list how many Report only subscriptions you want for each program on your Order form.

Fine Print. We indicate the available subscription options for every Oneworld Accuracy program. Certain Point of Care programs have 19 free Report only subscriptions. Some programs are not suitable (e.g. programs with runs and replicates) and some samples are not sufficiently stable (e.g. blood gases) for Report only subscriptions. As well, this subscription option is limited for CLIA participants testing CMS regulated analytes.

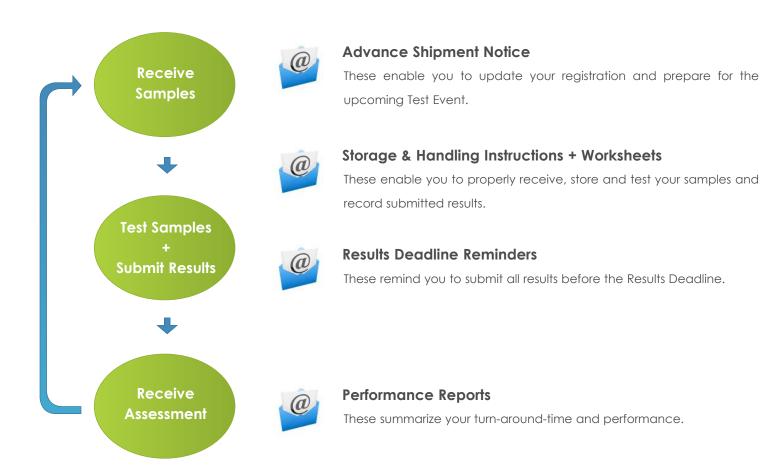


# SYSTEM OVERVIEW

# **Getting started**

Programs are listed by discipline (see Table of Programs). To order programs, please use the Order Form or Request for Quote provided by your Collaboration Member.

# **The Test Event Cycle**

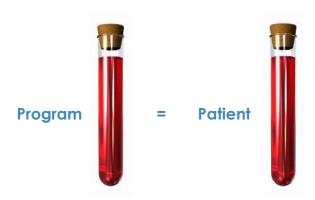


# Here's how we acknowledge your commitment to testing quality

For EQA programs, we provide an annual Certificate of Participation listing the disciplines of all programs you participated in. For Standardization Programs, we provide an annual Certificate of Performance for each program in which you met the performance goal.



# THE FIRST PRINCIPLE



When you participate in our programs, the First Principle is that you must test program samples and report results exactly as you would patient samples.

Our programs are designed to assess how you test patient samples and report results. They are intended to be educational in nature so that if problems are identified, they represent an opportunity for you to improve the quality of your patient testing. We strive to help you so that all of your patients receive accurate, clinically relevant and timely results.

Your commitment to the First Principle ensures that our programs can be a reliable measure for how you test patient samples and report results. This means you must:

- test samples in the same manner and number of times as you test patient samples;
- test samples within the same timeframes as you test patient samples;
- test samples by the same personnel that routinely test patient samples;
- test samples using the same systems used to routinely test patient samples;
- submit results within the same timeframes as you report patient results; and
- not discuss your results with other participants or send your samples for outside testing.



# WHY RESULTS DEADLINES MATTER

# Submitting results before the



signals your commitment to the First Principle.

For consistency, all Results Deadlines are on Wednesdays and end at 11:59 pm (23:59) your local time.

Submitting on time enables us to evaluate and communicate your performance as soon as possible.

To give you ample time, all programs have Test Event Windows that exceed routine testing times for patient samples.

The system reminds you of missing results and Results Deadlines. As well, the system helps you meet Results Deadlines:

- To encourage early submission, the system records when your results are submitted and calculates your Turn-Around-Time measured in days before the Results Deadline.
- To discourage late submission, the system does not accept your results if submitted after the Results Deadline.
- To fix clerical errors, the system accepts all changes to your submitted results anytime before the Results Deadline.



# **NEW + REVISED FOR 2015**

# All Standardization and EQA programs

5 FREE Report Only programs for every program in which a Report Only option is available

# **Monthly EQA**

2	BCHE4121	Chemistry/Immunoassay	New Format
3	BGAS4121	Blood Gas/Electrolytes	New Format
4	CARM4121	Cardiac Markers	New Format
5	COAG4121	Coagulation	New Format
6	HEMA4121	Hematology	New Format
7	SPRO4121	Specific Proteins	New Format
8	TUMK4121	Tumor Markers	New Format
9	UDOA4121	Urine Drugs of Abuse	New Format
10	URIN4121	Urinalysis	New Format

### **Chemistry EQA**

11	BCHE443	Chemistry/Immunoassay	New Format
12	CCHM443	Clinical Chemistry	New Format
13	ENDO443	Endocrinology	New Format
14	FOBT4123	Fecal Occult Blood	New Program
15	SPRO442	Specific Protein	New Format
16	TOXI443	Toxicology	New Format
17	TUMK443	Tumor Markers	New Format
18	UDOA443	Urine Drugs of Abuse	New Format

19 USED432 Urine Sediment Report Only option now available

# **Hematology EQA**

20	CELL435	Cell Morphology	Report Only option now available
21	HEFX465	Hematology 5 Part Differential	New Format outside of Canada
22	HEMA465	Basic Hematology	New Format outside of Canada
23	HETX465	Hematology 3 Part Differential	New Format outside of Canada

### **Coagulation EQA**

24	COAG443	Coagulation	New Format

25 COAG465 Coagulation New format outside of Canada

26DDIM442D-DimerNew Format27THBP442ThrombophiliaNew Format

### **Transfusion Medicine EQA**

28 IMHE442 Immunohematology New Program



# **NEW + REVISED FOR 2015**

# **Clinical Microscopy**

29	FECS431	Fecal Smear	Report Only option now available
30	FERN431	Fern Test	Report Only option now available
31	KOHP431	KOH Preparation	Report Only option now available
32	NASM431	Nasal Smear	Report Only option now available
33	PINW431	Pinworm Preparation	Report Only option now available
34	VAGP431	Vaginal Preparation	Report Only option now available

# Diagnostic Immunology EQA

35 ALLY443 Inhalant Allergy New Format 36 FOOD443 Food Allergy New Format

# **Clinical Nucleic Acid Testing EQA**

37 HIVT425 HIV Tropism New Program



# **MONTHLY EQA**

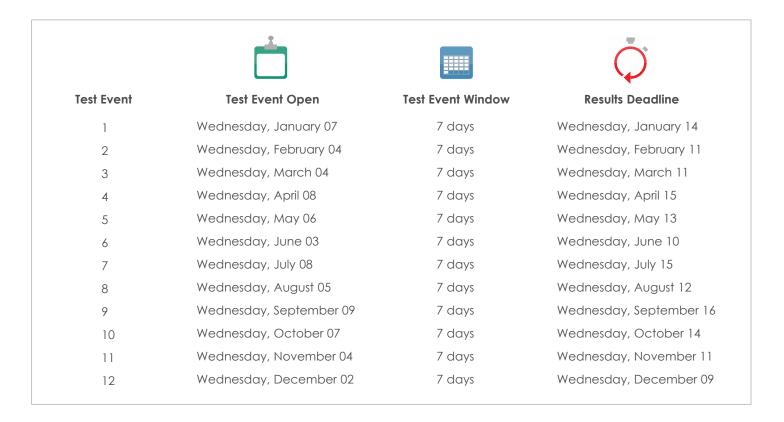
### 2015 Test Event Calendar

The following Test Event Calendar applies for all Programs in this section.

The number of shipments of sample sets is indicated in the program description for each Program.

You will receive an Advance Shipment Notice (ASN), which reminds you of upcoming shipments and test events, before the Test Event Open. You will need to update and finalize your registration before the Test Event Open to be able to submit results. Late registration may cause you to miss that test event. This is especially important for new participants who may have instruments and reagents not listed in OASYS. These have to be researched and added to OASYS before you can submit results.

All Programs in this section have a 7 day Test Event Window with Results Deadlines indicated below.



# **Subscription Options**

The following Subscription options are available for Programs in this section.





#### 2014 Pilot Calendar

We have created a two test event Pilot in 2014 for the following Monthly EQA programs:

- BCHE4121 Chemistry / Immunoassay
- BGAS4121 Blood Gas / Electrolytes
- CARM4121 Cardiac Markers
- COAG4121 Coagulation
- SPRO4121 Specific Proteins
- UDOA4121 Urine Drugs of Abuse

There will be 1 shipment of sample sets for both Pilot test events.

The Pilot is free. If you wish to participate, please enroll with your Oneworld Accuracy provider not later than Wednesday, September 10, 2014. Quantities are limited and pilot subscriptions may have to be allocated in the event of oversubscription.

You will receive an Advance Shipment Notice (ASN), which reminds you of upcoming shipments and test events, before the Test Event Open. You will need to update and finalize your registration before the Test Event Open to be able to submit results. Late registration may cause you to miss that test event. This is especially important for new participants who may have instruments and reagents not listed in OASYS. These have to be researched and added to OASYS before you can submit results.

All Pilot Programs have a 7 day Test Event Window with a Results Deadline indicated below.



#### **Subscription Options**

The following Subscription options are available for Programs in this section.





### 1. CHEMISTRY/IMMUNOASSAY

Quantitative	Lyophilized serum

ORDER CODE FORMAT COMPATIBILITY

12 test events x 1 sample x 5 mL Not compatible w

4 shipments

**BCHE4121** 

Not compatible with Abbott Vision analyzers using whole blood for HDL cholesterol.

Chemistry

Acid phosphatase, non-prostatic Acid phosphatase, prostatic Acid phosphatase, total

Alanine aminotransferase (ALT/SGPT)

Albumin Aldolase

Alkaline phosphatase (ALP)

Amylase, total Amylase, pancreatic

Aspartate aminotransferase (AST/SGOT)

Beta-2 Microglobulin

Bile acids
Bilirubin, direct
Bilirubin, total
Calcium – ionized
Calcium, total
Chloride
Cholinesterase
CO2, total

Creatine kinase (CK), total

Creatinine Ferritin

Copper

Gamma-glutamyltransferase (GGT)

Glucose

Glutamate dehydrogenase

Homocysteine

Hydroxybutyrate dehydrogenase

Iror

Iron, total binding capacity (TIBC)

Lactate

Lactate dehydrogenase (LDH)

Lipase Magnesium Osmolality Phosphate, inorganic

Phenylalanine Potassium Protein, total Sodium

Urea/Urea nitrogen

Uric acid

Vitamin D – 25-Hydroxy

Zinc

Lipids

Cholesterol, HDL Cholesterol, LDL Cholesterol, total Triglycerides

Immunoassay

17-Hydroxyprogesterone

Aldosterone

Alpha-fetoprotein (AFP) Androstenedione

Carcinoembryonic antigen (CEA)

Cortisol DHEA Sulphate Estradiol

Estriol, unconjugated

Folate

Follicle stimulating hormone (FSH)

Fructosamine

Growth Hormone Human chorionic gonadotropin (hCG)

Immunoglobulin E

Insulin

Luteinizing hormone (LH)

Progesterone Prolactin Prostate-specific antigen, total (PSA) Sex Hormone Binding Globulin

Testosterone Thyroglobulin

Thyroid stimulating hormone (TSH)

Thyroxine, free (FT4) Thyroxine, total (T4)

Transferrin

Triiodothyronine, free (FT3) Triiodothyronine, total (T3)

T-uptake Vitamin B12

**Therapeutic Drugs** 

Amikacin Carbamazepine Digoxin

Ethosuximide Gentamicin Lidocaine Lithium

N-acetylprocainamide (NAPA)

Phenobarbital Phenytoin Primidone Procainamide Quinidine Salicylate Theophylline Tobramycin Valproic Acid Vancomycin

SUBSCRIPTION OPTIONS





+5 RO FREE









## 2. BLOOD GAS/ELECTROLYTES

ORDER CODE	FORMAT	COMPATIBILITY
BGAS4121	12 test events x 1 sample x 2.5 mL 4 shipments	No known compatibility issues with any method or analyze
Calcium, ionized	Lithium	Potassium
Chloride	Magnesium, ionized	Sodium
Creatinine	pCO2	Urea
Glucose	рН	
Lactate	pO2	
SUBSCRIPTION OPTIONS		
Full	+80	OC

# 3. CARDIAC MARKERS

Quantitative   Liquid plasma	serum matrix	
ORDER CODE	FORMAT	COMPATIBILITY
CARM4121	12 test events x 1 sample x 1.5 mL 4 shipments	Compatible with plasma and serum based methods/analyzers.
CK-MB (activity)	D-dimer	NT-proBNP
CK-MB (mass)	hsCRP	Troponin I
Creatine kinase (CK)	Myoglobin	Troponin T
SUBSCRIPTION OPTIONS		
Full	+RO +5 RO FREE +SO	OC



# 4. COAGULATION

ORDER CODE	FORMAT	COMPATIBILITY		
COAG4121	12 test events x 1 sample x 1 mL 4 shipments	Not compatible with Roche CoaguChek, Ciba Corning Biotrack, Dupont Coumatrak, ITC Hemochron Jr./Signature series, i-STAT PCA, i-STAT I, ITC Protime and whole blood methods.		
Activated partial thromboplasmin time Fibrinogen (APTT) International Normalized Prothrombin III Prothrombin time (PT)		Thrombin Time d Ratio (INR)		
SUBSCRIPTION OPTIONS  +RO +5 RO FREE +SO  VA				

# 5. HEMATOLOGY

ORDER CODE	FORMAT	COMP	ATIBILITY
HEMA4121	12 test events x 1 sam 4 shipments	DIE X / MI	tible with all manual, semi-automated and ted CBC methods. Not compatible with BD QBC rs.
Hematocrit (by analyzer or spur Hemoglobin Mean Corpuscular Hemoglobin	Conce	Corpuscular Hemoglobin htration (MCHC) Corpuscular Volume (MCV) count	Red Blood Cell Count Red Cell Distribution Width (RDW) White Blood Cell Count
SUBSCRIPTION OPTIONS			



### 6. SPECIFIC PROTEINS

SPRO4121	12 test events x 1 sample x 2 mL 4 shipments	No known compatibility issues with any method or analyzed
Albumin Alpha-1-acid glycoprotein Alpha-1-antitrypsin Alpha-2-macroglobulin Alpha-fetoprotein Antistreptolysin O Antithrombin III Beta-2-microglobulin	Ceruloplasmin Complement C3 Complement C4 C-Reactive protein Ferritin Haptoglobin Immunoglobulin A (IgA) Immunoglobulin E (IgE)	Immunoglobulin G (IgG) Immunoglobulin M (IgM) Kappa light chain Lambda light chain Prealbumin Rheumatoid Factor Retinol binding protein Transferrin
SUBSCRIPTION OPTIONS		

# 7. TUMOR MARKERS

ORDER CODE	FORMAT	COMPATIBI	LITY
TUMK4121	12 test events x 1 sample x 2 mL 4 shipments	No known co	mpatibility issues with any method or analyzer
Alpha-fetoprotein (AFP)	Cancer antigen 27.29	(CA27.29)	PSA, free
Beta-2-microglobulin	Carcinoembryonic ant	tigen (CEA)	PSA, free/total ratio
Cancer antigen 125 (CA-125)	Ferritin		PSA, total
Cancer antigen 15-3 (CA15-3)	hCG		Thyroglobulin
Cancer antigen 19-9 (CA19-9)	Prostate-specific antig	en (PSA), complex	
SUBSCRIPTION OPTIONS			
Full	+RO +5 RO FREE +SO		OC



# 8. URINE DRUGS OF ABUSE

RDER CODE	FORMAT		COMPATIB	ILITY
JDOA4121	12 test ever	nts x <b>1</b> sample x <b>10</b> mL	No known co	empatibility issues with any method or analyze
Alprazolam		Diazepam		Morphine - Total
Amphetamine		EDDP		Morphine - Free
Amphetamines/Methamphetam	nines	Ethanol		Morphine-3-glucuronide
Barbiturates		Flunitrazepam		Nortriptyline
Benzoylecogonine		Lorazepam		Opiates
Benzodiazepines		Lysergic acid diethylan	nide (LSD)	Oxycodone
Buprenorphine		MDA		Phencyclidine
Cannabinoids		MDMA		Phenobarbital
Cocaine Derivatives		Methadone		Propoxyphene
Codeine		Methamphetamine		Tricyclic Antidepressants
Cotinine		Methanol		
Delta-9-THC-COOH		Methaqualone		
UBSCRIPTION OPTIONS				

# 9. URINALYSIS

ORDER CODE FO	RMAT	COMPATIBILITY
IIRINAITI	test events x 1 sample x 12 mL nipments	No known compatibility issues with any method or analyzed
Bilirubin	Hemoglobin/Blood	На
Bilirubin - Confirmatory	Ketones	Protein
Crystal Identification	Leukocyte esterase	Reducing substances
Glucose	Nitrite	Specific gravity
Human chorionic gonadotropin (hC	CG) Osmolality	Urobilinogen
SUBSCRIPTION OPTIONS		
Full	+RO +5 RO FREE +SO	OC VA



#### Global Epidemic of Chronic Disease

Chronic diseases, rather than infectious diseases, now account for the majority of global morbidity and mortality. This change is not only evident within the developed world, but also, increasingly within developing countries. Of these diseases, cardiovascular diseases (CVDs) are the most important. In 2004, an estimated 17.1 million people died from CVDs worldwide, accounting for 29% of all deaths. This is projected to increase to 23.6 million by 2030.



This reality represents an unprecedented public health epidemic worldwide. Not only is the world's population getting older, but it is also becoming more obese and hypertensive as more and more people adopt sedentary lifestyles and adverse diets – a clustering of facts that is contributing significantly to the increasing incidence of diabetes and chronic kidney disease (CKD) around the world.

In response, governments are searching for measures that will reduce the costs associated with the medical management of chronic disease while at the same time looking for ways to identify those at risk so that interventions may be initiated at an earlier stage in the disease process, thereby affording opportunities for prevention. Increasingly, standard requisitions and disease-specific testing algorithms are being introduced as part of broader initiatives aimed at optimizing medical treatments by aligning them with the laboratory tests that are promulgated in evidence-based treatment guidelines. This has served to highlight the impact that laboratory error and inaccurate test results can have when evidence-based medical guidelines are used on a population wide basis.

A recent study examining the accuracy of creatinine testing in 107 laboratories serves as a case on point (Komenda, P, Beaulieu, M, Seccombe D and Levin A. Regional Implementation of Creatinine Measurement Standardization. J Am Soc Nephrol (2008); 19:164-169). This study demonstrated that creatinine testing in this network of laboratories was operating with a positive bias relative to the credentialed reference method target value for creatinine and if this bias had not been corrected, reporting of this new index of kidney function (eGFR - an estimate of kidney function calculated from the creatinine value) would have added 10% of the adult population (500,000 people) to an at-risk strata for CKD where in fact they should not have been (false positives).

It is well recognized that CKD and diabetes have a complex inter-relationship with the etiological factors that underlie the atherosclerotic process of cardiovascular diseases. Yet a small number of routine laboratory tests figure prominently in defining the nature of this inter-relationship. They include creatinine, eGFR, hemoglobin A1c, total cholesterol, HDL cholesterol, LDL cholesterol and triglycerides. These tests are used to identify, diagnose, treat and manage patients that have, or are at risk for, CKD, diabetes and CVD. Identifying patients in early disease stages or with high risk factors provides an opportunity for early, effective, low-cost intervention that can halt or slow the progression of disease.



#### The Consequence of Non-Standardized Testing

Unfortunately, most laboratories worldwide have not standardized their measurement of creatinine, eGFR, hemoglobin A1c, total cholesterol, HDL cholesterol and triglycerides to internationally accepted bases of accuracy. There is significant variation and error among laboratories in their test results and in the normal (reference) intervals and clinical comments they provide to doctors. Consequently, the value of these non-standardized test results for early diagnosis and treatment of these chronic diseases is severely compromised.

Since early signs of kidney disease are subtle, individuals with CKD can appear healthy. Accordingly, the vast majority of individuals worldwide with early stages of CKD go undiagnosed. Given this, the ability of doctors to diagnose early stage CKD relies almost exclusively on receiving standardized, accurate creatinine test results together with correct eGFR values. However, most laboratories worldwide have not standardized their creatinine measurements and very few report eGFR values, let alone eGFR values calculated from standardized creatinine measurements.

Until doctors receive standardized creatinine test results with correct eGFR values, their ability to diagnose early stage CKD will be compromised. This means that individuals can progress undetected from early stages of CKD to kidney failure, from which there are only two outcomes: renal replacement therapy (RRT) or premature death. RRT consists of a lifetime of dialysis or a kidney transplant. For those in the developing world, premature death is by far the most probable outcome. More than 80% of individuals receiving RRT live in the developed world as RRT is largely unavailable or unaffordable in developing countries. Moreover, the presence of CKD is also associated with a large increase in cardiovascular risk. Individuals with CKD have at least a tenfold risk of dying prematurely from CVDs regardless of whether they develop kidney failure.

The case for standardizing creatinine test results with correct eGFR values is compelling. Early detection and treatment of CKD not only slows or halts the progression of patients to end-state kidney disease, but can also significantly reduces the increased incidence of CVDs, the most common cause of premature deaths worldwide. Standardizing hemoglobin A1c can not only lead to early detection of diabetes, a main cause of both CKD and CVD but also can serve as an important yardstick in helping the diabetic and their doctor manage their disease. Standardizing lipid analytes is also important given their critical role in CVD risk assessment and management for diabetic and CKD patients, for whom dyslipidemia is prevalent.



#### **Turnkey Solution to Standardize Testing**

The Standardization Programs are unique, turnkey and proven. They enable participants to standardize their measurements of creatinine (and to report correct eGFR values), hemoglobin A1c and the panel of lipid analytes with documented traceability to internationally accepted bases of accuracy. As well, these Programs enable participants to standardize the accompanying normal (reference) intervals and clinical comments they provide to doctors.

These Programs support both individual participants and entire networks of participants. Networks can include corporate networks, as well as regional, provincial and national networks. These Programs have been successfully implemented within a number a Canadian provinces and a number of national standardization initiatives are currently in progress. These initiatives draw upon the experience of the Collaboration Secretariat to ensure proper governance, sustainable funding and stakeholder support from laboratory, clinician and patient groups. For more information and assistance in starting a national standardization initiative in your country, please contact secretariat@oneworldaccuracy.org.

CEQAL is the Science Architect for all Standardization Programs. All analytes have target values assigned using internationally accepted Reference Methods described in the CEQAL Reference Method section. As well, all Programs feature sample sets of human origin that have the following characteristics:

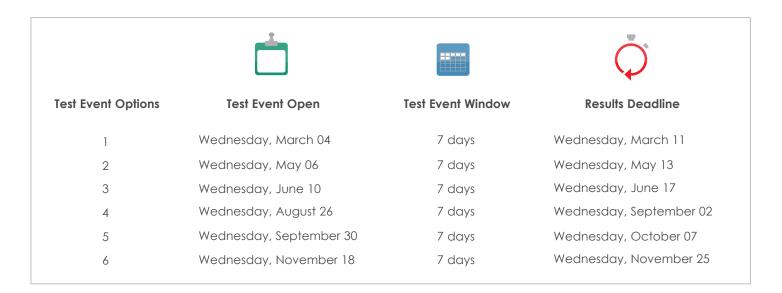
- Fresh human serum or whole blood. These are fresh from-the-vein samples that are free of stabilizers, preservatives and other augmentations. The samples are obtained with full donor consent under CEQAL's oversight from patients having the desired clinical profile required for each Program.
- Human serum. These samples are free of added stabilizers and preservatives. The base material, which is obtained under CEQAL's oversight, undergoes a proprietary process of augmentation which uses only purified materials and proteins of human origin. These samples are free of stabilizers, preservatives and other materials of non-human origin effectively eliminating or reducing the likelihood of having an adverse impact on sample matrix.

Given that these samples mimic patient samples, they must be tested in the same manner and timeframe as patient samples. Accordingly, all Standardization Programs have a 7 day Test Event Window. Due to the nature of these samples, extensions to Results Deadlines cannot be granted under any circumstances.



#### 2015 Test Event Calendar

The following Test Event Calendar applies for applies for GFRB716, LIPB713 and LIPD763. Programs GFRB716 and LIPB713 involve a single test event, which may be scheduled from the following test event options. GFRC715 is scheduled for one week after completion of GFRB716.

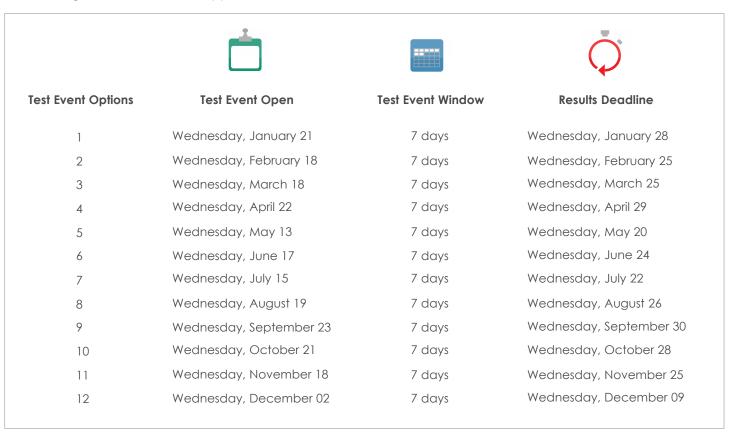


The following Test Event Calendar applies for GFRM733, GFRR733, GHBB713, GHGB733, LIPD733, LIVM733 and TPRM733. CHOL726 has only two test events following the same opening and deadline dates as listed for Test Events 1 and 3. GHBB713 involves a single test event, which may be scheduled from the following test event options.

Test Event	Test Event Open	<b>Test Event Window</b>	Results Deadline
1	Wednesday, March 04	7 days	Wednesday, March 11
2	Wednesday, June 10	7 days	Wednesday, June 17
3	Wednesday, September 30	7 days	Wednesday, October 07



The following Test Event Calendar applies for GFRM7123.



#### **Subscription Options**

The following Subscription options are available for Programs in this section.





### 1. CERTIFICATION - TOTAL CHOLESTEROL



Quantitative   Fresh human se	erum 🍕 matrix-insensitive	
ORDER CODE	FORMAT	COMPATIBILITY
CHOL726	2 test events x 6 samples x 1.5 mL 2 shipments	No known compatibility issues with any method or analyzer.

This Program enables participants to document their ability to measure total cholesterol in accordance with the performance goals established by the National Cholesterol Education Program (NCEP) with traceability to the accuracy base of the Centers for Disease Control and Prevention - Cholesterol Reference Method Laboratory Network (CDC – CRMLN).

#### **Objectives**

Certification - Total Cholesterol provides participants with an assessment of total error, calibration bias and CV in measuring total cholesterol. This Program provides two certification events, each valid for six months.

#### **Performance Goals**

To meet the NCEP performance goals for the measurement of total cholesterol, a participant must operate with an absolute bias  $\leq 3\%$  and a CV  $\leq 3\%$ .

#### **Challenge Format**

Participants are provided two shipments of fresh human serum samples designed to challenge across the range of clinical interest. Samples have target values assigned by the credentialed Reference Method for total cholesterol traceable to the CDC-CRMLN accuracy base. The sample set consists of individual 1.5 mL vials of Samples A - F tested as patient specimens. Samples are tested in duplicate over 3 days:

- Day 1 A A | B B | C C | D D | E E | F F
- Day 2 A A | B B | C C | D D | E E | F F
- Day 3 A A | B B | C C | D D | E E | F F

#### **Analysis**

Results are submitted online, forwarded to the CDC for analysis against the NCEP performance goals and summarized in an electronic Performance Report which:

- Details total cholesterol test results versus target values.
- Reports total error, calibration bias and CV in measuring total cholesterol.
- Correlates the laboratory method with the credentialed Reference Method.
- Graphs the bias of the laboratory method relative to target values.

#### Certificate

Participants who measure total cholesterol within the NCEP performance goals receive a Certificate of Traceability from the CDC-CRMLN recognizing their successful completion of Certification - Total Cholesterol.

# SUBSCRIPTION OPTIONS +RO +5 RO FREE +SO OC VA



2. **EGFR BASELINE** CEQAL Science architect

Quantitative   Human serum	matrix-insensitive	
ORDER CODE	FORMAT	COMPATIBILITY
GFRB716	1 test event x 6 samples x 1 mL 1 shipment	No known compatibility issues with any method or analyzer.

#### **Objectives**

eGFR Baseline includes eGFR Calculation at no charge. eGFR Baseline provides participants with:

- a baseline assessment of total error, calibration bias and CV in measuring creatinine.
- a custom Bias Correction Formula to correct any calibration bias.
- validation of their custom Bias Correction Formula for reducing creatinine measurement error.

#### **Performance Goals**

Participants are assessed on the basis of three different total error performance goals. The optimal total error performance goal is ≤ 3.5%.

#### **Challenge Format**

Participants are provided a single shipment of human serum samples designed to challenge at the clinical decision levels for diagnosis of early-stage kidney disease. Samples have target values assigned by the ID | MS Reference Method. The sample set consists of individual 1 mL vials of Samples A - F tested as patient specimens. Samples A - C are tested in triplicate and Samples D - F are tested once over 3 days:

- Day 1 A A A | B B B | C C C | D
- Day 2 A A A | B B B | C C C | E
- Day 3 A A A | B B B | C C C | F

#### **Analysis**

Results are submitted online, analyzed against the three different total error performance goals for creatinine and summarized in an electronic Performance Report which:

- Details creatinine values versus target values.
- Reports total error, calibration bias and CV in measuring creatinine.
- Correlates the laboratory method with the ID | MS Reference Method.
- Graphs the bias of the laboratory method relative to target values.
- Provides a custom Bias Correction Formula that can be used to correct calibration bias.
- Validates the use of this custom Bias Correction Formula in reducing measurement error for creatinine.





### 3. eGFR CALCULATION

Quantitative Cases		
ORDER CODE	FORMAT	COMPATIBILITY
GFRC715	1 test event x 5 case histories 1 shipment	No known compatibility issues with any method or analyzer.

#### **Objectives**

eGFR Calculation is included with eGFR Baseline at no charge. eGFR Calculation provides participants with an assessment of their ability to calculate corrected creatinine values using the custom Bias Correction Formula (provided with eGFR Baseline) and to report correct eGFR values using either the CKD-EPI or MDRD equation.

#### **Challenge Format**

Participants are provided five case histories, each consisting of patient information and a creatinine result. For each case history, participants are required to calculate a corrected creatinine result using the custom Bias Correction Formula, if required, and report an eGFR value using either the CKD-EPI or MDRD equation.

#### **Analysis**

Results are submitted online, analyzed against the CKD-EPI or MDRD equation. and summarized in an electronic Performance Report. This Report provides for each case history:

- The corrected creatinine value using the custom Bias Correction Formula if required.
- The correct eGFR value using either the CKD-EPI or MDRD equation.





4. eGFR MONITORII	NG E E Q A L GORD	hitect
Quantitative   Human serum	matrix-insensitive	
ORDER CODES	FORMAT	COMPATIBILITY
GFRM7123	12 test events x 3 samples x 1 mL 1 shipment	
GFRM733	3 test events x 3 samples x 1 mL	No known compatibility issues with any method or analyzer.
GFRR733	3 shipments	

Both the CKD-EPI and MDRD equations include a factor for patients of African American descent. GFRM7123 and GFRR733 are suitable for participants serving a patient population including those of African American descent. GFRM733 is best suited for participants serving a patient population which does not include those of African American descent.

#### **Objectives**

eGFR Monitoring provides participants with an on-going assessment of total error in measuring creatinine and accuracy in reporting eGFR using either the CKD-EPI or MDRD equation.

#### **Performance Goals**

Participants are assessed on the basis of three different total error performance goals. The optimal total error performance goal is  $\leq 3.5\%$ .

#### **Challenge Format**

Participants are provided with human serum samples designed to challenge at the clinical decision levels for diagnosis of early-stage kidney disease. Samples have target values assigned by the ID | MS Reference Method. The sample set consists of Samples A - C, each with a case history. Samples are tested as patient specimens. Participants are required to:

- Provide uncorrected creatinine values.
- If they apply any correction formula, then provide the formula and corrected creatinine values.
- Report eGFR using either the CKD-EPI or MDRD equation.

#### **Analysis**

Results are submitted online, analyzed against the three different total error performance goals for creatinine and summarized in an electronic Performance Report which:

- Details creatinine values versus target values.
- Validates the use of any applied correction formula in reducing measurement error for creatinine.
- Provides correct eGFR values using either the CKD-EPI or MDRD equation.
- Provides corrected creatinine values if a custom Bias Correction Formula is applied.

#### Certificate

Participants who consistently measure creatinine within the optimal total error performance goal of  $\leq$  3.5% and who calculate correct eGFR values for all case histories provided receive a Certificate of Performance recognizing their successful completion of eGFR Monitoring.





#### GFRC715 | GFRM7123 | GFRM733 | GFRR733

#### MDRD (Modification of Diet in Renal Disease) equation:

#### For Creatinine reported in mg/dL:

eGFR (mL/min/1.73 m<sup>2</sup>) =  $175 \times (P_{\text{creatinine}})^{-1.154} \times (Age)^{-0.203} \times (0.742 \text{ if Female}) \times (1.210 \text{ if African American})$ 

#### For Creatinine reported in µmol/L:

eGFR (mL/min/1.73 m²) =  $30848.92 \text{ x} \text{ (P}_{\text{creatinine}})^{-1.154} \text{ x (Age)}^{-0.203} \text{ x (0.742 if Female)} \text{ x (1.210 if African American)}$ 

#### CKD-EPI (Chronic Kidney Disease Epidemiology Collaboration) equation:

#### For Creatinine values ≤ 0.7 mg/dL in females:

eGFR (mL/min/1.73 m<sup>2</sup>) = 141 x ( $P_{creatinine}/0.7$ )-0.329 x (0.993)<sup>Age</sup> x 1.018 x (1.159 if African American)

#### For Creatinine values > 0.7 mg/dL in females:

eGFR (mL/min/1.73 m<sup>2</sup>) =  $141 \times (P_{\text{creatinine}}/0.7)^{-1.209} \times (0.993)^{\text{Age}} \times 1.018 \times (1.159 \text{ if African American})$ 

#### For Creatinine values ≤ 0.9 mg/dL in males:

eGFR (mL/min/1.73 m<sup>2</sup>) =  $141 \times (P_{\text{creatinine}}/0.9)^{-0.411} \times (0.993)^{\text{Age}} \times (1.159 \text{ if African American})$ 

#### For Creatinine values > 0.9 mg/dL in males:

eGFR (mL/min/1.73 m<sup>2</sup>) = 141 x ( $P_{creatinine}/0.9$ )<sup>-1.209</sup> x (0.993)<sup>Age</sup> x (1.159 if African American)

#### For Creatinine values ≤ 62 µmol/L in females:

eGFR (mL/min/1.73 m<sup>2</sup>) = 141 x ( $P_{creatinine}/62$ )<sup>-0.329</sup> x (0.993)<sup>Age</sup> x 1.018 x (1.159 if African American)

#### For Creatinine values > 62 µmol/L in females:

eGFR (mL/min/1.73 m<sup>2</sup>) = 141 x ( $P_{creatinine}/62$ )<sup>-1.209</sup> x (0.993)<sup>Age</sup> x 1.018 x (1.159 if African American)

#### For Creatinine values ≤ 80 µmol/L in males:

eGFR (mL/min/1.73 m²) = 141 x ( $P_{creatinine}/80$ )<sup>-0.411</sup> x (0.993)<sup>Age</sup> x (1.159 if African American)

#### For Creatinine values > 80 µmol/L in males:

eGFR (mL/min/1.73 m<sup>2</sup>) = 141 x ( $P_{creatinine}/80$ )<sup>-1.209</sup> x (0.993)<sup>Age</sup> x (1.159 if African American)



#### 5. HEMOGLOBIN A1C BASELINE



Quantitative   Fresh human w	thole blood matrix-insensitive	
ORDER CODE	FORMAT	COMPATIBILITY
GHBB713	1 test event x 3 samples x 0.5 mL 1 shipment	No known compatibility issues with any method or analyzer.

Since diabetes is prevalent in patients with kidney disease, augment your eGFR strategy with Hemoglobin A1c Baseline (GHBB713) and Hemoglobin A1c Monitoring (GHGB733). Prevailing clinical guidelines for the diagnosis and management of diabetes have been established by the American Diabetes Association. Proper and uniform application of these guidelines require that laboratories measure hemoglobin A1c with methods that are precise and traceable to the IFCC/DCCT accuracy base.

#### **Objectives**

The Hemoglobin A1c Baseline program provides participants with an assessment of total error.

#### **Performance Goals**

Participants are assessed on the basis of three different total error performance goals. The optimal total error performance goal is  $\leq 4.3\%$ .

#### **Challenge Format**

Participants are provided with one shipment of fresh human whole blood samples designed to challenge across the range of clinical interest. Samples have target values assigned by the IFCC/DCCT Reference Method. The sample set consists of individual 0.5mL vials of Samples A-C tested as patient specimens. Samples are tested in duplicate over 3 days:

- Day 1 A A | B B | C C
- Day 2 A A | B B | C C
- Day 3 A A | B B | C C

#### **Analysis**

Results are submitted online, analyzed against the three different total error performance goals for hemoglobin A1c and summarized in an electronic Performance Report which:

- Details hemoglobin A1c test results versus target values.
- Reports total error in measuring hemoglobin A1c.
- Graphs the bias of the laboratory method relative to target values.

#### SUBSCRIPTION OPTIONS





Science architect C E Q A L **HEMOGLOBIN A1c MONITORING** Quantitative Fresh human whole blood matrix-insensitive ORDER CODE **GHGB733** 3 test events x 3 samples x 0.5 mL No known compatibility issues with any method or analyzer. 3 shipments Hemoglobin A<sub>1C</sub> 💠 Glycated Hemoglobin - Total Glycated Hemoglobin A1 SUBSCRIPTION OPTIONS ос Full +RO +5 RO FREE +SO



# 7. LIPIDS BASELINE CEQAL Science archite

Quantitative   Human serum	matrix-insensitive	
ORDER CODE	FORMAT	COMPATIBILITY
LIPB713	1 test event x 3 samples x 2 mL 1 shipment	No known compatibility issues with any method or analyzer.

The Adult Treatment Panel III (ATP III) Guidelines of the National Cholesterol Education Program (NCEP) utilize lipoprotein test results for classifying patients at risk of coronary heart disease (CHD). The NCEP Working Group on Lipoprotein Measurements has defined clinically relevant performance goals for the measurement of lipoproteins. This Program enables participants to assess their ability to measure lipoproteins in accordance with these performance goals.

#### **Objectives**

Lipids Monitoring provides participants with an on-going assessment of total error in measuring lipids.

#### **Performance Goals**

Participants are assessed on the basis of three different total error performance goals for each analyte.

The Total Cholesterol optimal total error performance goal is ≤ 4.5%.

The HDL Cholesterol optimal total error performance goal is  $\leq 5.5\%$ .

The LDL Cholesterol optimal total error performance goal is  $\leq$  6.8%.

The Triglycerides optimal total error performance goal is ≤ 14.0%.

#### **Challenge Format**

Participants are provided with one shipment of human serum samples designed to challenge across the range of clinical interest. Samples have target values assigned by credentialed Reference Methods traceable to the CDC-CRMLN accuracy base. The sample set consists of individual 2 mL vials of Samples A - C tested as patient specimens. Samples are tested in duplicate over 3 days:

- Day 1 A A | B B | C C
- Day 2 A A | B B | C C
- Day 3 A A | B B | C C

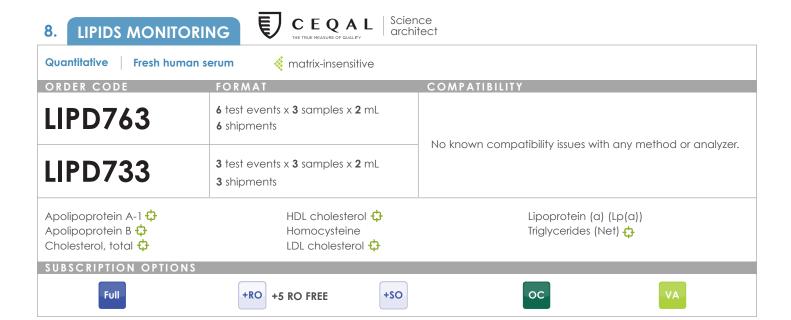
#### **Analysis**

Results are submitted online, analyzed against the NCEP total error performance goals and summarized in an electronic Performance Report which:

- Details lipid test results versus target values.
- · Reports total error in measuring lipids.
- Graphs the bias of the laboratory methods relative to target values.







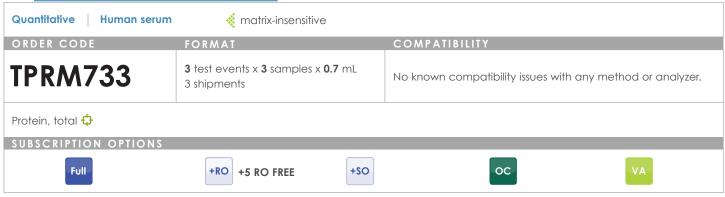






### 10. TOTAL PROTEIN MONITORING







These Matrix Insensitive Chemistry EQA Programs feature sample sets of human origin that have the following characteristics:

- Fresh human serum, plasma or whole blood. These are fresh from-the-vein samples that are free of stabilizers, preservatives and other augmentations. The samples are obtained with full donor consent under the Science Architects` oversight from patients having the desired clinical profile required for each Program.
- Human serum, plasma or whole blood. These samples are free of added stabilizers and preservatives. The base material, which is obtained under the Science Architects` oversight, undergoes a proprietary process of augmentation which uses only purified materials and proteins of human origin.

Samples for these Programs are free of stabilizers, preservatives and other materials of non-human origin effectively eliminating or reducing the likelihood of having an adverse impact on sample matrix (matrix insensitive).

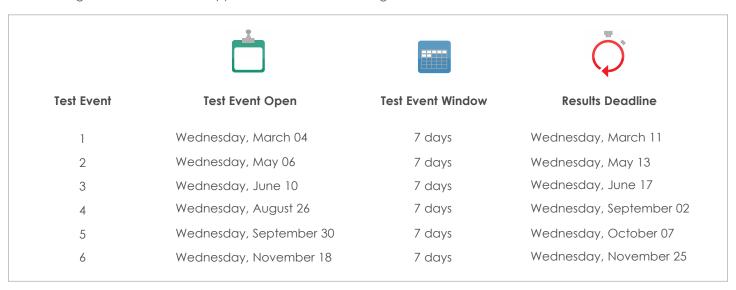
Given that these samples mimic patient samples, they must be tested in the same manner and timeframe as patient samples. Accordingly, all Programs within this section have a 7 day Test Event Window. Due to the nature of these samples, extensions to Results Deadlines cannot be granted under any circumstances.

Some analytes within Matrix Insensitive Chemistry Programs have target values assigned by CEQAL using Reference Methods described in the CEQAL Reference Method section. Those analytes are identified with this icon:



#### 2015 Test Event Calendar

The following Test Event Calendar applies for all 6 test event Programs in this section.



The following Test Event Calendar applies for all 3 test event Programs in this section.



#### **Subscription Options**

The following Subscription options are available for Programs in this section.





# 1. B-TYPE NATRIURETIC PEPTIDE C E Q A L | Science architect



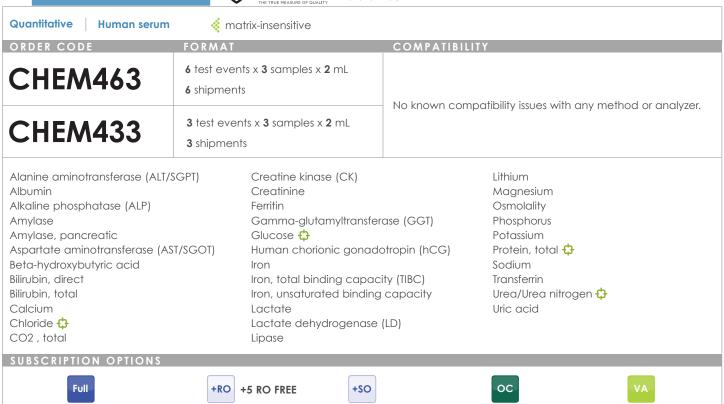
# 2. CARDIAC MARKERS-SERUM C E Q A L Science architect

	THE TRUE MEASURE OF QUALITY		
Quantitative   Human serum	matrix-insensitive		
ORDER CODE	FORMAT	COMPATIBILITY	
CAMS463	6 test events x 3 samples x 1 mL 6 shipments	Not compatible with Biosite Triage Meter, Roche Cardiac Reader, Spectral Cardiac STATUS, Response Biomedical RAMP	
CAMS433	3 test events x 3 samples x 1 mL 3 shipments	Reader and Roche Cobas h232.	
CK-MB (activity) CK-MB (mass) Creatine kinase (CK)	Lactate dehydrogenase Myoglobin	Troponin I Troponin T	
SUBSCRIPTION OPTIONS			
Full	+RO +5 RO FREE +SO	OC VA	



3. ROUTINE CHEMISTRY

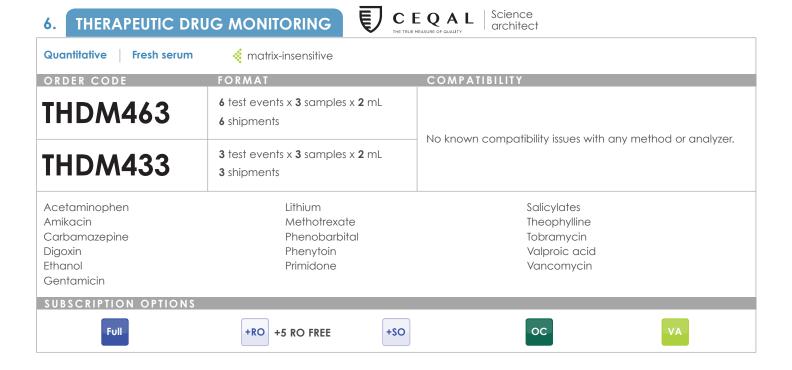
C E Q A L | Science architect



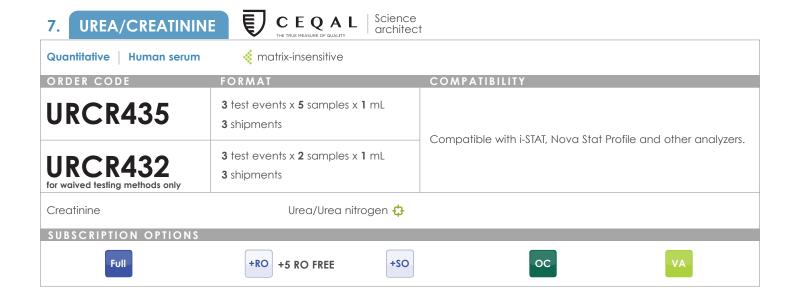














#### 2015 Test Event Calendar

The following Test Event Calendar applies for all programs in this section except for BCHE443, CCHM443, ENDO443, SPRO442, TOXI443, TUMK443 and UDOA443.

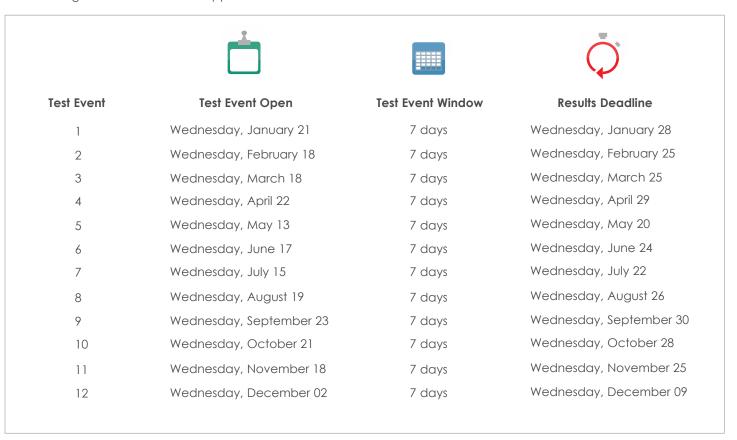


The following Test Event Calendar applies for BCHE443, CCHM443, ENDO443, SPRO442, TOXI443, TUMK443, UDOA443.



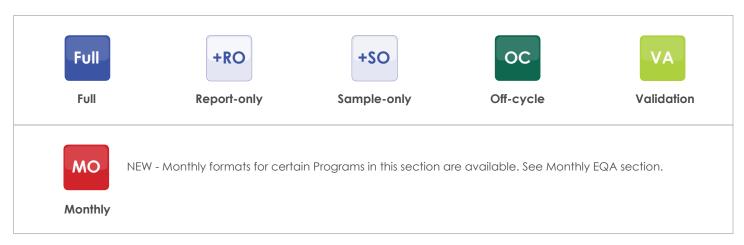


The following Test Event Calendar applies for FOBT4123.



#### **Subscription Options**

The following Subscription options are available for Programs in this section.





### 1. ALCOHOL



### 2. AMMONIA

Quantitative   Aqueous solut	ion	
ORDER CODE	FORMAT	COMPATIBILITY
AMMN432	3 test events x 2 samples x 2 mL 3 shipments	No known compatibility issues with any method or analyzer.
Ammonia SUBSCRIPTION OPTIONS		
Full	+RO +5 RO FREE +SO	OC

### 3. BASIC CARDIAC MARKERS

Quantitative and/or qualitative	e Plasma	
ORDER CODE	FORMAT	COMPATIBILITY
BCAM435	3 test events x 5 samples x 1 mL 3 shipments	No known compatibility issues with any method or analyzer.
BCAM432 for waived testing methods only	3 test events x 2 samples x 1 mL 3 shipments	
CK-MB (activity) CK-MB (mass) Creatinine kinase	Lactate dehydrogenase Myoglobin	(LD) Troponin I Troponin T
SUBSCRIPTION OPTIONS		
Full	+RO +5 RO FREE +SO	OC



### 4. CHEMISTRY/IMMUNOASSAY

Quantitative   Lyophilized	d serum	
ORDER CODE	FORMAT	COMPATIBILITY
BCHE435	3 test events x 5 samples x 5 mL 3 shipments	Not compatible with Abbott Vision analyzers using whole blood
BCHE443	4 test events x 3 samples x 5 mL 3 shipments	for HDL cholesterol.

#### Chemistry

Acid phosphatase, non-prostatic Acid phosphatase, prostatic Acid phosphatase, total

Alanine aminotransferase (ALT/SGPT)

Albumin Aldolase

Alkaline phosphatase (ALP)

Amylase, total Amylase, pancreatic

Aspartate aminotransferase (AST/SGOT)

Beta-2 Microglobulin

Bile acids
Bilirubin, direct
Bilirubin, total
Calcium – ionized
Calcium, total
Chloride
Cholinesterase
CO2, total

Creatine kinase (CK), total

Creatinine Ferritin

Copper

Gamma-glutamyltransferase (GGT)

Glucose

Glutamate dehydrogenase

Homocysteine

Hydroxybutyrate dehydrogenase

Iron

Iron, total binding capacity (TIBC)

Lactate

Lactate dehydrogenase (LDH)

Lipase Magnesium Osmolality Phosphate, inorganic

Phenylalanine Potassium Protein, total Sodium Transferrin

Urea/Urea nitrogen

Uric acid

Vitamin D – 25-Hydroxy

Zinc

Lipids

Cholesterol, HDL Cholesterol, LDL Cholesterol, total Triglycerides

Immunoassay

17-Hydroxyprogesterone

Aldosterone

Alpha-fetoprotein (AFP) Androstenedione

Carcinoembryonic antigen (CEA)

Cortisol DHEA Sulphate Estradiol

Estriol, unconjugated

Estitol, offeotijogale

Folate

Follicle stimulating hormone (FSH)

Fructosamine Growth Hormone

Human chorionic gonadotropin (hCG)

Immunoglobulin E

Insulin

Luteinizing hormone (LH)

Progesterone

Prolactin

Prostate-specific antigen, total (PSA) Sex Hormone Binding Globulin

Testosterone Thyroglobulin

Thyroid stimulating hormone (TSH)

Thyroxine, free (FT4) Thyroxine, total (T4) Triiodothyronine, free (FT3) Triiodothyronine, total (T3)

T-uptake Vitamin B12

Therapeutic Drugs

Acetaminophen Amikacin Carbamazepine Digoxin

Ethosuximide Gentamicin Lidocaine Lithium

N-acetylprocainamide (NAPA)

Phenobarbital Phenytoin Primidone Procainamide Quinidine Salicylate Theophylline Tobramycin Valproic Acid Vancomycin

#### SUBSCRIPTION OPTIONS





+5 RO FREE









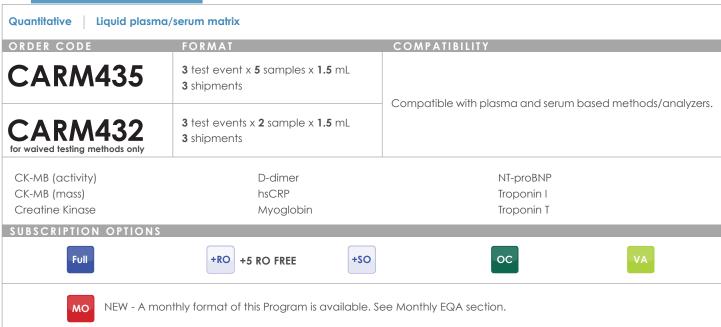
NEW - A monthly format of this Program is available. See Monthly EQA section.



### 5. BLOOD GAS / ELECTROLYTES

ORDER CODE	FORMAT	COMPATIBILITY	
BGAS435	3 test events x 5 samples x 2.5 mL 3 shipments	No known compatibility issues with any method or analyzer	
BGAS432 for waived testing methods only	3 test events x 2 samples x 2.5 mL 3 shipments		
Calcium, ionized	Lithium	Potassium	
Chloride	Magnesium, ionized	Sodium	
Creatinine	pCO2	Urea	
Glucose	рН		
Lactate	pO2		
SUBSCRIPTION OPTIONS			
Full	+80	OC	

### 6. CARDIAC MARKERS





# 7. CLINICAL CHEMISTRY

ORDER CODE	FORMAT		COMPATIB	ILITY
CCHM435	3 test eve 3 shipme	ents x <b>5</b> samples x <b>5</b> mL ents		
CCHM432 for waived testing methods only	3 test ev 3 shipme	ents x <b>2</b> samples x <b>5</b> mL ents		<b>ible</b> with Abbott Vision analyzers using whole L cholesterol.
CCHM443	4 test eve 3 shipme	ents x <b>3</b> samples x <b>5</b> mL nts		
Acid phosphatase, total Alanine aminotransferase (AL Albumin Alkaline phosphatase Amylase Amylase - Pancreatic Aspartate aminotransferase (Bicarbonate Bilirubin, direct Bilirubin, total Calcium Chloride	,	Cholesterol, HDL Cholesterol, LDL Cholesterol, total Cholinesterase CO2, total Creatinine kinase (CK) Creatinine Ferritin Gamma-glutamyltransfer Glucose Iron Iron, total binding capac		Lactate Lactate dehydrogenase (LD) Lipase Magnesium Osmolality Phosphorus Potassium Protein, total Sodium Triglycerides Urea/Urea nitrogen Uric acid
SUBSCRIPTION OPTIONS				

# 8. CO-OXIMETRY

Quantitative   Lyophilized H	b solution		
ORDER CODE	FORMAT	COMPATIBILITY	
COHB435	3 test events x 5 samples x 0.5 mL 3 shipments	Not compatible with Abbott i-STAT or AVL OPTI CCA.	
COHB432 for waived testing methods only	3 test events x 2 samples x 0.5 mL 3 shipments		
Carboxyhemoglobin Hemoglobin	Methemoglobin Oxyhemoglobin	Reduced hemoglobin	
SUBSCRIPTION OPTIONS			
Full	+RO +5 RO FREE +SO	OC	



### 9. CEREBROSPINAL FLUID CHEMISTRY

ORDER CODE	FORMAT	COMPATIBILITY
CSFT432	3 test events x 2 samples x 2 mL 3 shipments  No known compatibility issues with any method of	
Albumin Chloride Glucose Immunoglobulin G (IgG)	Lactate Lactate dehydrogenase Potassium	Protein, total (LD) Sodium
SUBSCRIPTION OPTIONS		_

### 10. ENDOCRINOLOGY

ORDER CODE	FORMAT	COMPATIBILITY	
ENDO435	3 test events x 5 samples x 5 mL 3 shipments		
ENDO432 for waived testing methods only	3 test events x 2 samples x 5 mL 3 shipments	No known compatibility issues with any method or anal	
ENDO443	4 test events x 3 samples x 5 mL 3 shipments		
17-Hydroxyprogesterone Aldosterone Alpha-fetoprotein (AFP) Androstenedione Cortisol DHEA Sulphate Estradiol Estriol, unconjugated Follicle Stimulating Hormone	Fructosamine Growth Hormone Human chorionic gonadotr Insulin Luteinizing Hormone Progesterone Prolactin Sex Hormone Binding Globa	Thyroxine, free (FT4) Triiodothyronine (T3) Triiodothyronine, free (FT3) T-uptake	
SUBSCRIPTION OPTIONS			



### 11. FETAL FIBRONECTIN

Qualitative Serum		
ORDER CODE	FORMAT	COMPATIBILITY
FFIB432	<ul><li>3 test events x 2 samples x 1 mL</li><li>3 shipments</li></ul>	No known compatibility issues with any method or analyzed
Fetal fibronectin		·
SUBSCRIPTION OPTION	18	
Full	+RO +5 RO FREE +S0	OC

### 12. BODY FLUID CHEMISTRY

Quantitative Serum		
ORDER CODE	FORMAT	COMPATIBILITY
FLCH433	3 test events x 3 samples x 3 mL 3 shipments	No known compatibility issues with any method or analyzer.
Albumin Amylase Cholesterol, total	Creatinine Glucose Lactate dehydrogenase	pH Protein, total (LD) Triglycerides
SUBSCRIPTION OPTIONS  Full	+RO +5 RO FREE +SO	OC VA

## 13. OCCULT BLOOD





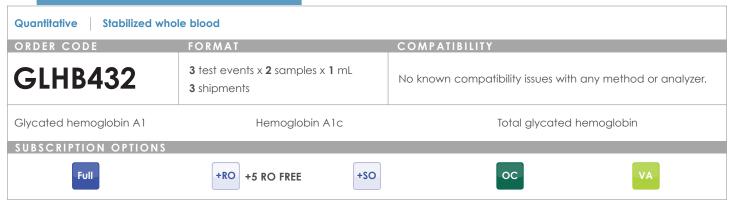
### 14. FECAL OCCULT BLOOD

Qualitative   Simulated feca	l material			
ORDER CODE	FORMAT		COMPATIBILITY	
FOBT4123	12 test events x 3 samples 12 shipments		Not compatible with Immunochemical I	methods.
Fecal occult blood				
SUBSCRIPTION OPTIONS				
Full	+RO +5 RO FREE	+SO	ос	VA

### 15. FRUCTOSAMINE

Quantitative   Serum		
ORDER CODE	FORMAT	COMPATIBILITY
FRUC432	3 test events x 2 samples x 1 mL 3 samples	No known compatibility issues with any method or analyzer.
Fructosamine		
SUBSCRIPTION OPTIONS		
Full	+RO +5 RO FREE +SO	OC

### 16. BASIC GLYCATED HEMOGLOBIN





## 17. GASTRIC OCCULT BLOOD

Qualitative and/or quantitative	Simulated gastric material	
ORDER CODE	FORMAT	COMPATIBILITY
GOBD432	3 test events x 2 samples x 2 mL 3 shipments	No known compatibility issues with any method or analyzer.
Occult blood SUBSCRIPTION OPTIONS	На	
Full	+RO +5 RO FREE +SO	OC VA

### 18. HEMATOCRIT

ORDER CODE	FORMAT	COMPATIBILITY
HCRT435	3 test events x 5 samples x 1.7 mL 3 shipments	Compatible with analyzers using conductivity methods such
HCRT432 for waived testing methods only	3 test events x 2 samples x 1.7 mL 3 shipments	as AVL, Nova, IL and Radiometer. <b>Not compatible</b> with Abbott i-STAT.
Hematocrit by conductivity m	nethods	
SUBSCRIPTION OPTIONS		
Full	+RO +SO	OC



## 19. i-STAT BLOOD GAS/ELECTROLYTES/HEMATOCRIT

Quantitative Aqueous solution				
ORDER CODE	FORMAT	COMPATIBILITY		
IBGH435	3 test events x 5 samples x 2.5 mL 3 shipments	Compatible with i-STAT analyzers <b>only</b>		
IBGH432 for waived testing methods only	3 test events x 2 samples x 2.5 mL 3 shipments	Compatible with i-STAT analyzers <b>only</b> .		
Calcium-ionized Chloride Creatinine CO2 Total Glucose	Hematocrit Hemoglobin - Calculated Lactate pCO2 pH	pO2 Potassium Sodium Urea nitrogen		
SUBSCRIPTION OPTIONS				
Full	+80	OC		

### 20. KETONES





#### 21. NITRAZINE



#### 22. RUPTURE OF FETAL MEMBRANE

Qualitative   Lyophilized solution				
ORDER CODE	FORMAT	COMPATIBILITY		
ROFM431	3 test events x 1 sample x 0.5 mL 3 shipments	Compatible with Amnisure ROM Test <b>only</b> .		
PAMG-1 (placental alpha micr	oglobulin-1)			
SUBSCRIPTION OPTIONS				
Full	+RO +5 RO FREE +SO	OC VA		

#### 23. HUMAN CHORIONIC GONADOTROPIN





### 24. SPECIAL CHEMISTRY

ORDER CODE	FORMAT	COMPATIBILITY	
SPCH432	3 test events x 2 samples x 5 mL 3 shipments	No known compatibility issues with any method or analyzer.	
Acid phosphatase, prostatic Carcinoembryonic antigen (CEA DHEA-sulphate Estradiol Estriol, total Estriol, unconjugated	Ferritin Folate Follicle stimulating hormo Homocysteine Luteinizing hormone (LH) Prealbumin	Testosterone	
SUBSCRIPTION OPTIONS			

### 25. SPECIAL IMMUNOASSAY

Quantitative   Lyophilized se	serum			
ORDER CODE	FORMAT	COMPATIBILITY		
SPIM432	3 test events x 2 samples x 2 mL 3 shipments	No known compatibility issues with any method or analyzer.		
C-peptide Insulin	Parathyroid hormone	Vitamin D, 25-Hydroxy		
SUBSCRIPTION OPTIONS				
Full	+RO +5 RO FREE +SO	OC		



## 26. SPECIFIC PROTEINS

ORDER CODE	FORMAT	COMPATIBILITY	
SPRO435	3 test events x 5 samples x 2 mL 3 shipments	No known compatibility issues with any method or analyze	
SPRO442	4 test events x 2 samples x 2 mL 3 shipments		
Albumin Alpha-1-acid glycoprotein Alpha-1-antitrypsin Alpha-2-macroglobulin Alpha-fetoprotein Antistreptolysin O Antithrombin III Beta-2-microglobulin	Ceruloplasmin Complement C3 Complement C4 C-Reactive protein Ferritin Haptoglobin Immunoglobulin A (IgA) Immunoglobulin E (IgE)	Immunoglobulin G (IgG) Immunoglobulin M (IgM) Kappa light chain Lambda light chain Prealbumin Rheumatoid Factor Retinol binding protein Transferrin	
SUBSCRIPTION OPTIONS Full	+RO +5 RO FREE +SO	OC VA	

## 27. SPECIAL URINE CHEMISTRY

ORDER CODE	FORMAT	COMPATIBILITY	
SPUC432	3 test events x 2 samples x 20 mL 3 shipments	No known compatibility issues with any method or analyzer.	
17-Hydroxycorticosteroids 17-Ketogenic steroids 3-Methoxytyramines 5-Hydroxyindoleacetic acid Aldosterone Catecholamines, free	Coproporphyrins Cortisol, free Dopamine Epinephrine Homovanillic acid	Metanephrine Norepinephrine Normetanephrine Uroporphyrin Vanillylmandelic acid	
SUBSCRIPTION OPTIONS			



#### 28. IMMUNOSUPPRESSANTS



#### 29. SWEAT TESTING





## 30. PHARMACOLOGY

Quantitative   Lyophilized serum				
ORDER CODE	FORMAT	COMPATIBILITY		
TOXI435	3 test events x 5 samples x 5 mL 3 shipments			
TOXI432 for waived testing methods only	3 test events x 2 samples x 5 mL 3 shipments	No known compatibility issues with any method or analyzer.		
TOXI443	4 test events x 3 samples x 5 mL 3 shipments			
Acetaminophen Amikacin Carbamazepine Digoxin Ethosuximide Gentamicin Lidocaine	Lithium N-acetyl procainamide Phenobarbital Phenylalanine Phenytoin Primidone Procainamide	Quinidine Salicylates Theophylline Tobramycin Valproic acid Vancomycin		
SUBSCRIPTION OPTIONS				
Full	+RO +5 RO FREE +SO	OC VA		

### 31. TRACE ELEMENTS - BLOOD

Quantitative   Lyophilized whole blood				
ORDER CODE	FORMAT	COMPATIBILITY		
TRBD432	3 test events x 2 samples x 5 mL 3 shipments	No known compatibility issues with any method or analyzer.		
Arsenic Cadmium Chromium	Lead Selenium Manganese Thallium Mercury			
SUBSCRIPTION OPTIONS				
Full	+RO +5 RO FREE +SO	OC		



## 32. TRACE ELEMENTS - SERUM

TRSE432  3 test events x 2 samples x 3 mL 3 shipments  No known compatibility issues with any meth	od or analyze	
Aluminium Copper Nickel		
Cadmium Iron Selenium		
Calcium Magnesium Silver	Silver	
Chromium Manganese Zinc	Zinc	
SUBSCRIPTION OPTIONS		

## 33. TRACE ELEMENTS - URINE

Quantitative   Lyophilized urine				
ORDER CODE	FORMAT	COMPATIBILITY		
<b>TRUR432</b>	3 test events x 2 samples x 5 mL 3 shipments	No known compatibility issues with any method or analyzer.		
Aluminium	Copper	Mercury		
Arsenic	Creatinine	Molybdenum		
Cadmium	Fluoride	Nickel		
Calcium	Iron	Selenium		
Chromium	Lead Vanadium			
Cobalt	Manganese	Zinc		
SUBSCRIPTION OPTIONS				
Full	+RO +5 RO FREE +SO	OC VA		



## 34. TUMOR MARKERS

ORDER CODE	FORMAT	COMPATIBILITY		
TUMK432	3 test events x 2 samples x 2 mL 3 shipments	No known compatibility issues with any method or analyze		
TUMK443	4 test events x 3 samples x 2 mL 3 shipments	- No known companionly issues with any memod of analyzer		
Alpha-fetoprotein (AFP) Beta-2-microglobulin Cancer antigen 125 (CA 125) Cancer antigen 15-3 (CA15-3) Cancer antigen 19-9 (CA 19-9)	Cancer antigen 27.29 (CA Carcinoembryonic antige Ferritin hCG Prostate-specific antigen (	en (CEA)  PSA, free/total ratio  PSA, total  Thyroglobulin		
SUBSCRIPTION OPTIONS  Full	+RO +5 RO FREE +SO	OC VA		



### 35. URINE DRUGS OF ABUSE

UDOA432			COMPATIBILITY	
UDOA443	4 test eve 3 shipmer	ents x <b>3</b> sample x <b>10</b> mL	No known compatibility issues with any method or analyze	
Alprazolam Amphetamine Amphetamines/Methamphe Barbiturates Benzoylecogonine Benzodiazepines Buprenorphine Cannabinoids Cocaine Derivatives Codeine Cotinine Delta-9-THC-COOH	etamines	Diazepam EDDP Ethanol Flunitrazepam Lorazepam Lysergic acid diethylan MDA MDMA Methadone Methamphetamine Methanol Methaqualone	Nortripty Opiates ide (LSD) Oxycodo Phencyc Phenobo Propoxy	e - Free e-3-glucuronide line one slidine arbital
SUBSCRIPTION OPTIONS  Full	+RO	+5 RO FREE +SO	ОС	VA

### 36. URINE hCG

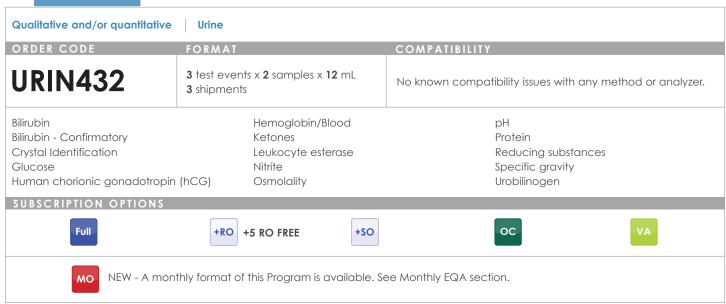
Qualitative Urine			
ORDER CODE	FORMAT	COMPATIBILITY	
UHCG435	3 test events x 5 samples x 1 mL 3 shipments	No known compatibility issues with any method or analyzer.	
UHCG432 for waived testing methods only	3 test events x 2 samples x 1 mL 3 shipments	companion, sees min any momes of analyzon	
Human chorionic gonadotrop	, ,		
SUBSCRIPTION OPTIONS			
Full	+RO +5 RO FREE +SO	OC VA	



#### 37. URINE CHEMISTRY

ORDER CODE	FORMAT	COMPATIBILITY	
URCH432	3 test events x 2 samples x 10 mL 3 shipments	No known compatibility issues with any method or analyzer	
Albumin Glucose		Protein, total	
Amylase	Magnesium	Sodium	
Calcium Osmolality		Urea/Urea nitrogen	
Chloride Phosphorus		Uric acid	
Creatinine	Potassium		
SUBSCRIPTION OPTIONS			
Full	+RO +5 RO FREE +SO	OC VA	

#### 38. URINALYSIS





### 39. URINE MICROALBUMIN

Qualitative and/or quantitative	Urine			
ORDER CODE	FORMAT	COMPATIBILITY		
URMA432	3 test events x 2 samples x 3 mL 3 shipments  No known compatibility issues with any method or a			
Albumin / creatinine ratio	Creatinine Microalbumin			
SUBSCRIPTION OPTIONS				
Full	+RO +5 RO FREE +SO	OC		

### 40. URINE SEDIMENT

Qualitative   Photo and on	line digital image		
ORDER CODE	FORMAT	COMPATIBILITY	
USED432	<ul><li>3 test events x 2 photos</li><li>3 shipments</li></ul>	Each photo / image comes with a case study. Your recompared to those of Advisory Committee.	esults are
Urine sediment SUBSCRIPTION OPTIONS			
Full	+RO +5 RO FREE	+SO OC VA	

### 41. WHOLE BLOOD GLUCOSE

ORDER CODE	FORMAT	COMPATIBILITY	
WGLU435	3 test events x 5 samples x 1 mL 3 shipments	No known compatibility issues with any method or analyzer.	
WGLU432 for waived testing methods only	3 test events x 2 samples x 1 mL 3 shipments		
Whole blood glucose			
SUBSCRIPTION OPTIONS			
Full	+RO +19 RO FREE +SC	OC	



#### 42. WHOLE BLOOD HEMOGLOBIN





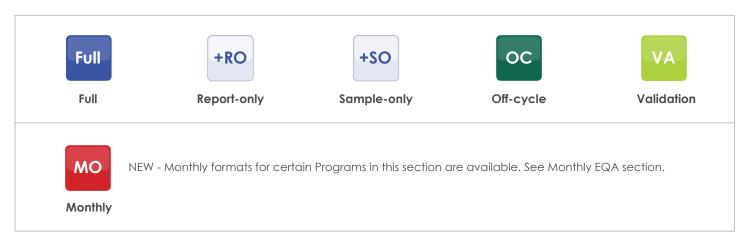
#### 2015 Test Event Calendar

The following Test Event Calendar applies for all Programs in this section.



#### **Subscription Options**

The following Subscription options are available for Programs in this section.





### 1. BASIC CARDIAC MARKERS

ORDER CODE	FORMAT	COMPATIBILITY	
BCAM432 for waived testing methods only	3 test events x 2 samples x 1 mL 3 shipments	No known compatibility issues with any method or analyzed  Troponin I  Troponin T	
CK-MB (activity) CK-MB (mass) Creatine kinase	Lactate dehydrogenase Myoglobin		
SUBSCRIPTION OPTIONS			
Full	+RO +5 RO FREE +SO	OC	

### 2. BLOOD GAS/ELECTROLYTES

ORDER CODE	FORMAT	COMPATIBILITY	
BGAS432 for waived testing methods only	3 test events x 2 samples x 2.5 mL 3 shipments	No known compatibility issues with any method or analyzer	
Calcium, ionized	Lithium	Potassium	
Chloride	Magnesium, ionized	Sodium	
Creatinine	pCO2	Urea	
Glucose	рН		
Lactate	pO2		
SUBSCRIPTION OPTIONS			
Full	+80	OC	



### 3. CARDIAC MARKERS

ORDER CODE	FORMAT	COMPATIBILITY	
CARM432 for waived testing methods only	3 test events x 2 sample x 1.5 mL 3 shipments	Compatible with plasma and serum based methods/analyzer	
Creatine Kinase (CK)	D-dimer	NT-proBNP	
CK-MB activity	hsCRP	Troponin I	
CK-MB mass	Myoglobin	Troponin T	
SUBSCRIPTION OPTIONS			
Full	+RO +5 RO FREE +SO	OC	

# 4. CLINICAL CHEMISTRY

ORDER CODE	FORMA	T	COMPATIB	ILITY
CCHM432 for waived testing methods only	3 test ev	ents x <b>2</b> samples x <b>5</b> mL ents	Not compati	<b>ible</b> with Abbott Vision analyzers using whole L cholesterol.
Acid Phosphatase Alanine aminotransferase (ALI Albumin Alkaline phosphatase Amylase Amylase - Pancreatic Aspartate aminotransferase (A Bilirubin, direct Bilirubin, total Calcium Chloride Cholesterol, total	,	Cholinesterase CO2, total Creatine kinase (CK) Creatinine Ferritin Gamma-glutamyltransfer Glucose HDL cholesterol Iron Iron, total binding capac Lactate Lactate dehydrogenase	city (TIBC)	LDL cholesterol Lipase Magnesium Osmolality Phosphorus Potassium Protein, total Sodium Triglycerides Urea nitrogen Uric acid
SUBSCRIPTION OPTIONS  Full	+RC	+5 RO FREE +SO		OC VA



## 5. CO-OXIMETRY

ORDER CODE	FORMAT	COMPATIBILITY	
COUD 422	3 test events x 2 samples x 0.5 mL	Not compatible with Abbott i-STAT or AVL OPTI CCA.	
COHB432 for waived testing methods only	3 shipments		
Carboxyhemoglobin	Methemoglobin	Reduced hemoglobin	
Hemoglobin	Oxyhemoglobin		
SUBSCRIPTION OPTIONS			
Full	+RO +5 RO FREE +SO	OC	

### 6. HEMATOCRIT

Quantitative   Aqueous solu	ution			
ORDER CODE	FORMAT		COMPATIBILITY	
HCRT432 for waived testing methods only	3 test events x 2 samples x 1.7 mL 3 shipments		Compatible with analyzers using conductivity methods suc as AVL, Nova, IL and Radiometer. <b>Not compatible</b> with Abbo i-STAT.	
Hematocrit by conductivity m	ethods			
SUBSCRIPTION OPTIONS				
Full	+RQ	+\$0	oc	VA

### 7. i-STAT BLOOD GAS/ELECTROLYTES/HEMATOCRIT

ORDER CODE	FORMAT	COMPATIBILITY	
IBGH432 for waived testing methods only	3 test events x 2 samples x 2.5 mL 3 shipments	Compatible with i-STAT analyzers <b>only</b> .	
Calcium-ionized	Hematocrit	pO2	
Chloride	Hemoglobin - Calculated	Potassium	
Creatinine	Lactate	Sodium	
CO2 Total	pCO2	Urea nitrogen	
Glucose	рН		
SUBSCRIPTION OPTIONS			
E. II			
Full	+80	OC VA	



#### 8. NITRAZINE



#### 9. PLASMA PROTHROMBIN TIME XS POC

Quantitative   Lyophilized Pl		COMPATIBILITY
ORDER CODE	FORMAT	COMPATIBILITY
PLPX431	3 test events x 1 sample x 0.3 mL 3 shipments	Compatible with Roche CoaguChek XS, CoaguChek XS Plus & CoaguChek XS Pro analyzers <i>only</i> .
International Normalized Ratio (INR)		
SUBSCRIPTION OPTIONS		
Full	+RO +5 RO FREE +SO	OC

#### 10. RUPTURE OF FETAL MEMBRANE





### 11. URINE DRUGS OF ABUSE

UDOA432	<b>3</b> test events x <b>2</b> samples x <b>10</b> mL <b>3</b> shipments	COMPATIBILITY  Compatible with all analyzers and methods requiring 10 mL or less of sample. Participants requiring greater than 10mL sample volume must order additional Sample-only subscriptions as necessary.
Alprazolam Amphetamine Amphetamines/Methamphetam Barbiturates Benzodiazepines Benzoylecogonine Buprenorphine Cannabinoid Cocaine Derivatives Codeine Cotinine Delta-9-THC-COOH	Diazepam EDDP Ethanol Flunitrazepam Lorazepam Lysergic acid diethylam MDA MDMA Methadone Methamphetamine Methanol Methaqualone	Morphine - Total Morphine - Free Morphine-3-glucuronide Nortriptyline Opiates Oxycodone Phencyclidine Phenobarbital Propoxyphene Tricyclic Antidepressants
Full Full	+RO +5 RO FREE +SC	OC VA

## 12. URINALYSIS

ORDER CODE	FORMAT C	OMPATIBILITY
URIN432	3 test events x 2 samples x 12 mL 3 shipments	o known compatibility issues with any method or analyzer.
Bilirubin Bilirubin - Confirmatory Crystal Identification Glucose Hemoglobin / Blood	Human chorionic gonadotrop Ketones Leukocyte esterase Nitrite Osmolality	pin (hCG) pH Protein Reducing substances Specific gravity Urobilinogen
SUBSCRIPTION OPTION	S	
Full	+RO +5 RO FREE +SO	OC



#### 13. WHOLE BLOOD GLUCOSE



#### 14. WHOLE BLOOD HEMOGLOBIN



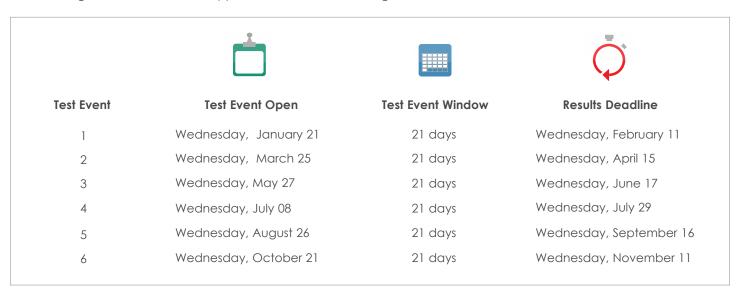


#### 2015 Test Event Calendar

The following Test Event Calendar applies for all 3 test event Programs in this section.



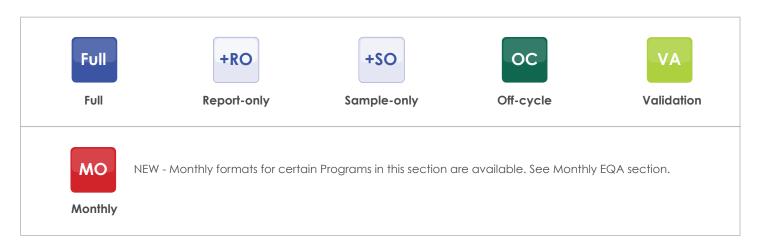
The following Test Event Calendar applies for all 6 test event Programs in this section.





#### **Subscription Options**

The following Subscription options are available for Programs in this section.





#### 1. BODY FLUIDS

Qualitative and/or quantitative	ve Protein solution	
ORDER CODE	FORMAT	COMPATIBILITY
BFLD432	3 test events x 2 samples x 2 mL 3 shipments	Compatible with all hemocytometers. Not compatible with automated methods.
Red blood cell count	White blood cell cou	unt
SUBSCRIPTION OPTIONS		
Full	+RO +5 RO FREE +	va va

#### 2. CELL MORPHOLOGY



#### 3. ERYTHROCYTE SEDIMENTATION RATE





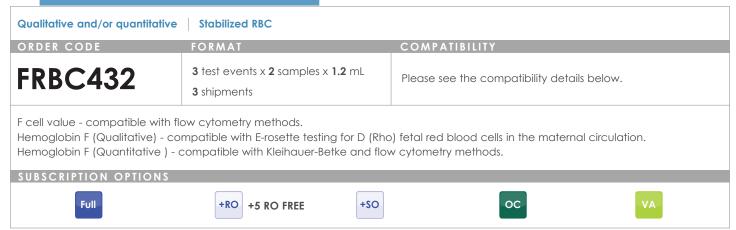
#### 4. ERYTHROCYTE SEDIMENTATION RATE FOR ALIFAX

ORDER CODE	FORMAT	COMPATIBILITY
ESRA433	<ul><li>3 test events x 3 samples x 3 mL</li><li>3 shipments</li></ul>	Compatible <b>only</b> with Alifax Test 1, Microtest 1, Roller 10, Roller Jo-Plus.
Erythrocyte sedimentation re	ate (ESR)	
SUBSCRIPTION OPTION	S	

#### 5. FLOW CYTOMETRY PROGENITOR CELLS

Quantitative   Simulated whole blood			
ORDER CODE	FORMAT	COMPATIBILITY	
FLPG432	3 test events x 2 samples x 1.5 mL 3 shipments	No known compatibility issues with any method or analyzer.	
CD34+	White blood cell count		
SUBSCRIPTION OPTIONS			
Full	+RO +5 RO FREE +SO	OC VA	

#### 6. FETAL RBC AND F CELL DETECTION





#### 7. HEMATOLOGY 5-PART DIFFERENTIAL

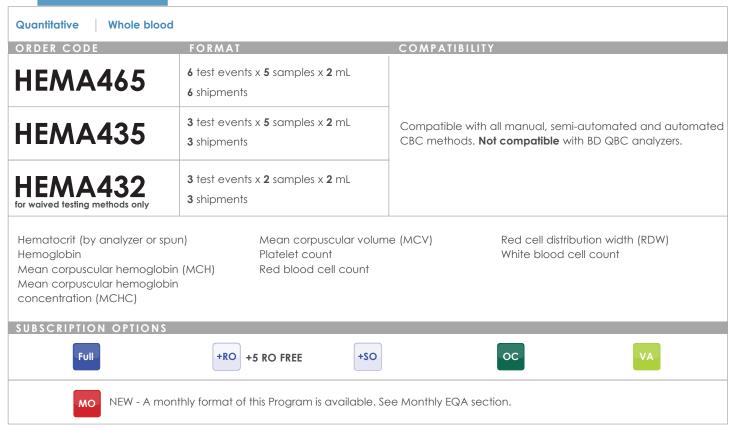
7. HEMATOLOGY 5-PART DIFFERENTIAL				
Quantitative   Whole blood				
ORDER CODE	FORMAT	COMPATIBILITY		
HEFA465	6 test events x 5 samples x 3 mL 6 shipments	Compatible with Radim SEAC Genius and Coulter STKS, MAXM,		
HEFA435	3 test events x 5 samples x 3 mL 3 shipments	HmX, LH series, VCS, GENS and UniCel DxH 800 analyzers.		
HEFB465	6 test events x 5 samples x 3 mL 6 shipments	Compatible with Melet Schloesing MS9-5 and Bayer Technicon		
HEFB435	3 test events x 5 samples x 3 mL 3 shipments	H*1, H*2, H*3 and ADVIA 120 and 2120 analyzers.		
HEFD465	6 test events x 5 samples x 3 mL 6 shipments	Compatible with Bayer ADVIA 70, Biocode Hycel Xenia, Boule Quintas,  Danam EXCELL 22, Diatron Abacus 5 & Junior 5, Nihon Celltac E MEK-		
HEFD435	3 test events x 5 samples x 3 mL 3 shipments	7222 & F MEK-8222, Abbott Cell Dyn 3000, 3200, 3500, 3700, 4000, Ruby & Sapphire analyzers.		
HEFE465	6 test events x 5 samples x 2.5 mL 6 shipments	Compatible with Coulter AcT 5 Diff and ABX Pentra 60, 60 C+, 80,		
HEFE435	3 test events x 5 samples x 2.5 mL 3 shipments	XL 80, 120, Argos, Minos & Helios analyzers.		
HEFF465	6 test events x 5 samples x 2.5 mL 6 shipments	Compatible with Diagon D-Cell 5 D and Sysmex		
HEFF435	3 test events x 5 samples x 2.5 mL 3 shipments	SE9000/9500/9500R, SF3000 analyzers.		
HEFG465	6 test events x 5 samples x 4.5 mL 6 shipments	Compatible with Horiba Pentra DX/DF Nexus, Mindray BC-6800 and Sysmex NE1500/5500/8000, XE2100/5000, XN1000,		
HEFG435	3 test events x 5 samples x 4.5 mL 3 shipments	XS800i/1000i/1000iC and XT800i/2000i/4000i analyzers.		
HEFH465	6 test events x 5 samples x 3 mL 6 shipments	Compatible with Mindray BC-5100, BC-5100Vet, BC-5200, BC-5300,		
HEFH435	3 test events x 5 samples x 3 mL 3 shipments	BC-5300Vet & BC-5500 analyzers.		



HEMATOLOGY 5-PART DIFFERENTIAL CONTINUED FROM PREVIOUS PAGE.

ORDER CODE	FORMAT	COMPATIBILITY	
HEFI465	6 test events x 5 samples x 3 mL 6 shipments	Compatible with Orphee Mythic 22 analyzer.	
HEFI435	3 test events x 5 samples x 3 mL 3 shipments		
Hematocrit Hemoglobin Mean corpuscular hemoglobin Mean corpuscular hemoglobin concentration (MCHC)	,	Monocytes, Eosinophils, Basophils) White blood cell count	
SUBSCRIPTION OPTIONS  +RO +5 RO FREE +SO VA			

#### 8. HEMATOLOGY





#### 9. HEMATOLOGY 3-PART DIFFERENTIAL

Quantitative   Whole bloc	od		
ORDER CODE	FORMAT	COMPATIBILITY	
HETA465	6 test events x 5 samples x 2 mL 6 shipments	Compatible with Abbott Cell Dyn 300-800/610/900/1400/1500/1600; ABX/Baker Minos STE/STEL/STEX/STX, Micros 45/60, Helios LMG, Spirit & Argos LMG; Bayer ADVIA 60; Biorexfars CELLDIFF-3; Coulter AcT Diff/Diff 2/8/10, JT/JT2/JT3, MD 284/II/II 8/II 10/II 16, ONYX, S Plus IV/V/VI, S880, ST/STKR, T540/T660/T890; Danam DC	
HETA435	3 test events x 5 samples x 2 mL 3 shipments	16CP/18, EXCELL 16/18; Diatron Abacus; Drew Scientific Drew-3; Human HumaCount/30TS/60TS; Medonic CA 620/530/M16/M20; Mindray BC-2800/3000Plus/3200; Melet Schloesing MS4/9/9-3; Nihon Celltac MEK-6318/6400/6410/6420; Orphee Mythic 18; PointCare Now; Radim HeCo C/S/Plus; URIT-3300.	
HETB465	6 test events x 5 samples x 2 mL 6 shipments	Compatible <b>only</b> with Sysmex K-series/pocH-100i, Abbott C	
<b>HETB435</b>	3 test events x 5 samples x 2 mL 3 shipments	HumaCount Plus analyzers.	
Hematocrit Mean corpuscular voluments (MCH) Mean corpuscular hemoglobin (MCH) Mean corpuscular hemoglobin Red blood cell count Red cell distribution with concentration (MCHC)		Lymphocytes, Monocytes) White blood cell count	
SUBSCRIPTION OPTIO	NS		
Full	+RO +5 RO FREE +	SO VA	

### 10. LYMPHOCYTE IMMUNOPHENOTYPING

Quantitative   Simulated whole blood			
This program is being conducted in conjunction with the internationally recognized QASI EQA program founded in 1997 by the National Laboratory for HIV Immunology of the Public Health Agency of Canada (Science Architect).			
ORDER CODE	FORMAT	COMPATIBILITY	
QASI432	3 test events x 2 samples x 2.5 mL 3 shipments	No known compatibility issues with any method or analyzer.	
CD19 (B Cells) CD3 (T Cells) CD4 (T Helper)	CD45 (Leukocytes) CD56/CD16+56 (NK Cells) CD8 (T Cytotoxic)	Lymphocytes White blood cell count	
SUBSCRIPTION OPTION	N S		
Full	+RO +5 RO FREE +SO	OC	



### 11. RETICULOCYTES

Quantitative   Whole blood		
ORDER CODE	FORMAT	COMPATIBILITY
RETA432	3 test events x 2 samples x 3 mL 3 shipments	Compatible with new methylene blue stain and automated methods. <b>Not compatible</b> with Abbott Cell-Dyn (3000, 3200, 3500, 3700, 4000), Coulter GENS and LH series analyzers.
RETB432	3 test events x 2 samples x 3 mL 3 shipments	Compatible <b>only</b> with Abbott Cell-Dyn 3000, 3200, 3500, 3700, 4000 and Ruby analyzers.
RETC432	3 test events x 2 samples x 4 mL 3 shipments	Compatible <b>only</b> with Coulter GENS and LH series analyzers.
Red blood cell count	Reticulocyte count	
SUBSCRIPTION OPTIONS		
Full	+RO +5 RO FREE +SO	OC

### 12. SICKLE CELL SCREENING

Qualitative   Whole blood		
ORDER CODE	FORMAT	COMPATIBILITY
SCSC432	3 test events x 2 samples x 0.9 mL 3 shipments	No known compatibility issues with any method or analyzer.
Sickle cell screening		
SUBSCRIPTION OPTIONS		
Full	+RO +5 RO FREE +SO	OC



#### 2015 Test Event Calendar

The following Test Event Calendar applies for COAG435, COAG432, DDIM432, ORAC432, PLPX431 and THBP432.



The following Test Event Calendar applies for COAG443, DDIM442 and THBP442.

Test Event	Test Event Open	<b>Test Event Window</b>	Results Deadline
1	Wednesday, March 25	21 days	Wednesday, April 15
2	Wednesday, July 08	21 days	Wednesday, July 29
3	Wednesday, October 21	21 days	Wednesday, November 11
4	Wednesday, November 25	21 days	Wednesday, December 16

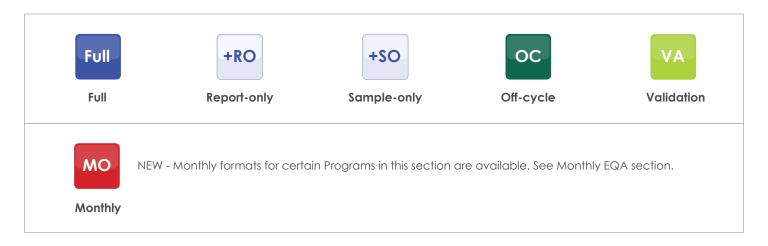


The following Test Event Calendar applies for COAG465



#### **Subscription Options**

The following Subscription options are available for Programs in this section.





## 1. COAGULATION

Quantitative Lyophilized pla	asma	
ORDER CODE	FORMAT	COMPATIBILITY
COAG465	6 test events x 5 samples x 1 mL 6 shipments	
COAG435	3 test events x 5 samples x 1 mL 3 shipments	Not compatible with Roche CoaguChek, Ciba Corning Biotrack, Dupont Coumatrak, ITC Hemochron Jr./Signature series, i-STAT PCA, i-STAT I, ITC Protime and whole blood methods.
COAG432	3 test events x 2 samples x 1 mL 3 shipments	
COAG443	4 test events x 3 samples x 1 mL 3 shipments	
Activated partial thromboplastin time (APTT) Fibrinogen International Normalized International N		Prothrombin time (PT) Ratio (INR) Thrombin Time
SUBSCRIPTION OPTIONS		
Full	+RO +5 RO FREE +SO	OC VA
MO NEW - A mor	athly format of this Program is available. Se	ee Monthly EQA section.

## 2. D-DIMER

Qualitative and/or quantitative   Lyophilized plasma			
ORDER CODE	FORMAT	COMPATIBILITY	
DDIM432	3 test events x 2 samples x 1 mL 3 shipments	Compatible with all analyzers and methods using plasma. <b>Not</b>	
DDIM442	4 test events x 2 samples x 1 mL 3 shipments	compatible with AGEN SimpliRED.	
D-dimer			
SUBSCRIPTION OPTIONS			
Full	+RO +5 RO FREE +SO	OC VA	



#### 3. ORAL ANTICOAGULANT MONITORING

Quantitative   Lyophilized plasma			
ORDER CODE	FORMAT	COMPATIBILITY	
ORAC432	3 test events x 2 samples x 1 mL 3 shipments	Not compatible with Point of Care devices.	
International Normalized Ratio (INR) Prothrombin Time			
SUBSCRIPTION OPTIONS			
Full	+RO +5 RO FREE +SO	OC VA	

### 4. PLASMA PROTHROMBIN TIME XS POC

ORDER CODE	FORMAT	COMPATIBILITY
PLPX431	3 test events x 1 sample x 0.3 mL 3 shipments	Compatible with Roche CoaguChek XS, CoaguChek XS Plus & CoaguChek XS Pro analyzers <b>only.</b>
nternational Normalized R	atio (INR)	
SUBSCRIPTION OPTIONS		
SUBSCRIPTION OPTIOI	18	

### 5. THROMBOPHILIA

Qualitative and quantitative   Lyophilized plasma		
ORDER CODE	FORMAT	COMPATIBILITY
<b>THBP432</b>	3 test events x 2 samples x 1 mL 3 shipments	No known compatibility issues with any method or
<b>THBP442</b>	4 test events x 2 samples x 1 mL 3 shipments	analyzer.
Activated Protein C resistance (APC Protein C activity resistance) Protein C antigen		Protein S antigen, free Protein S activity
SUBSCRIPTION OPTIONS		
Full	+RO +5 RO FREE +SO	OC



## TRANSFUSION MEDICINE EQA

#### 2015 Test Event Calendar

The following Test Event Calendar applies all 3 test event Programs in this section.



The following Test Event Calendar applies for all 4 test event Programs in this section.



#### **Subscription Options**

The following Subscription options are available for Programs in this section.





# TRANSFUSION MEDICINE EQA

#### 1. BASIC TRANSFUSION MEDICINE

Qualitative   Simulated whole blood (15% hematocrit)		
ORDER CODE	FORMAT	COMPATIBILITY
<b>BTME435</b>	3 test events x 5 samples x 4 mL 3 shipments	Compatible with manual and automated methods.
ABO grouping	Rh (D) grouping	Unexpected antibody detection
SUBSCRIPTION OPTIONS		
Full	+RO +5 RO FREE +SO	OC VA

#### 2. COMPREHENSIVE TRANSFUSION MEDICINE

Qualitative   Simulated whole blood (15% hematocrit) Donor red blood cell suspension (25% hematocrit)			
ORDER CODE	FORMAT	COMPATIBILITY	
CTME435	3 test events x 5 samples x 4 mL plus one 2 mL Donor cell suspension 3 shipments	Compatible with manual and automated methods.	
ABO grouping Antibody identification	Compatibility testing Red blood cell antigen de	Rh (D) grouping etection Unexpected antibody detection	
SUBSCRIPTION OPTIONS			
Full	+RO +5 RO FREE +SO	OC VA	

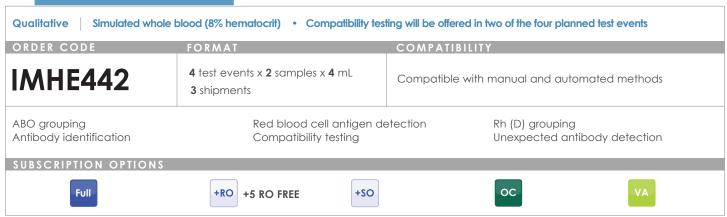
#### 3. DIRECT ANTIGLOBULIN TESTING





# TRANSFUSION MEDICINE EQA

#### 4. IMMUNOHEMATOLOGY





# **CLINICAL MICROSCOPY EQA**

#### 2015 Test Event Calendar

The following Test Event Calendar applies for all Programs in this section.



#### **Subscription Options**

The following Subscription options are available for Programs in this section.





## **CLINICAL MICROSCOPY EQA**

#### 1. FECAL SMEAR



#### 2. FERN TEST



#### 3. KOH PREPARATION





# **CLINICAL MICROSCOPY EQA**

### 4. NASAL SMEAR



### 5. PINWORM PREPARATION



### 6. VAGINAL PREPARATION





#### 2015 Test Event Calendar

The following Test Event Calendar applies for all Programs in this section with the exception of ALLY443 and FOOD443.



The following Test Event Calendar applies for ALLY443 and FOOD443.



#### **Subscription Options**

The following Subscription options are available for Programs in this section.





### 1. ANTIPHOSPHOLIPID AUTOIMMUNITY

Qualitative and quantitative	Serum	
ORDER CODE	FORMAT	COMPATIBILITY
AIAP432	3 test events x 2 samples x 0.5 mL 3 shipments	No known compatibility issues with any method or analyze
Anti-beta-2-glycoprotein I (Anti B2-GPI)  SUBSCRIPTION OPTIONS		
Full	+RO +5 RO FREE +SO	OC VA

## 2. RHEUMATOLOGIC ARTHRITIS AUTOIMMUNITY

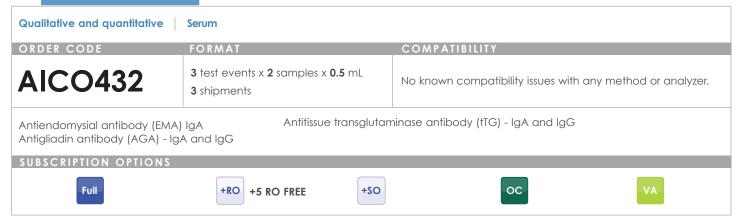
Qualitative and quantitative	Serum	
ORDER CODE	FORMAT	COMPATIBILITY
AIAR432	3 test events x 2 samples x 0.5 mL 3 shipments	No known compatibility issues with any method or analyzer.
Rheumatoid factor	VCP / CCP IgG	
SUBSCRIPTION OPTIONS		
Full	+RO +5 RO FREE +SO	OC

## 3. ANTI-NEUTROPHIL CYTOPLASM AUTOIMMUNITY





### 4. COELIAC DISEASE



## 5. ORGAN AUTOIMMUNITY

Qualitative and quantitative	Serum	
ORDER CODE	FORMAT	COMPATIBILITY
AIOR432	3 test events x 2 samples x 0.5 mL 3 shipments	No known compatibility issues with any method or analyzer.
Antimitochondrial M2 antibody (AMA) Anti-smooth muscle antibody (ASMA) Liver-kidney microsomal antibody (LKM) Anti-parietal cell antibody (APCA)		
SUBSCRIPTION OPTIONS		
Full	+RO +5 RO FREE +SO	OC

## 6. RHEUMATOLOGIC AUTOIMMUNITY

Qualitative and quantitative   Serum			
ORDER CODE	FORMAT	COMPATIBILITY	
AIRH432	3 test events x 2 samples x 0.5 mL 3 shipments	No known compatibility issues with any method or analyzer.	
ANA	Anti-dsDNA	ENA	
SUBSCRIPTION OPTIONS			
Full	+RO +5 RO FREE +SO	OC	



# 7. THYROID AUTOIMMUNITY

Quantitative   Serum  ORDER CODE	FORMAT	COMPATIBILITY
AITH433	3 test events x 3 samples x 1 mL 3 shipments	No known compatibility issues with any method or analyzer.
Antithyroglobulin antibody (Ab anti TG)	Antithyroid peroxidase a (Ab anti TPO)	ntibody Thyroglobulin
SUBSCRIPTION OPTIONS  Full	+RO +5 RO FREE +SO	OC VA

## 8. INHALANT ALLERGY

Quantitative   Serum		
ORDER CODE	FORMAT	COMPATIBILITY
ALLY433	3 test events x 3 samples x 2 mL 3 shipments	No known compatibility issues with any mathed or analyzar
ALLY443	4 test events x 3 samples x 2 mL 3 shipments	No known compatibility issues with any method or analyzer.
Acarus Epithelia Graminaceous plants	Grass Hymenoptera	Latex Trees
SUBSCRIPTION OPTIONS		
Full	+RO +5 RO FREE +SO	OC VA



## 9. ANTI-NUCLEAR ANTIBODY

RDER CODE	FORMAT	COMPATIBILITY
ANAB435	3 test events x 5 samples x 0.6 mL 3 shipments	Not compatible with latex agglutination method.
Anti-nuclear antibody (ANA) Anti-ENA Anti-DNA (ds, ss)	Anti-RNP Anti-Sm	Anti-SSA Anti-SSB
SUBSCRIPTION OPTIONS		
SUBSCRIPTION OPTIONS  Full	+RO +5 RO FREE +SO	OC VA

### 10. ANTI-NUCLEAR ANTIBODY

Qualitative   Serum		
ORDER CODE	FORMAT	COMPATIBILITY
ANAL435	3 test events x 5 samples x 1 mL 3 shipments	Compatible with <b>only</b> latex agglutination method.
Anti-nuclear Antibody (ANA)		
SUBSCRIPTION OPTIONS		
Full	+RO +5 RO FREE +SO	OC VA

## 11. ANTI-STREPTOLYSIN O





## 12. C-REACTIVE PROTEIN

Qualitative and quantitative   Serum		
ORDER CODE	FORMAT	COMPATIBILITY
CRPR432	3 test events x 2 samples x 1 mL 3 shipments	Compatible with all analyzers and methods that measure levels greater than 1.0 mg/dL.
C-reactive protein (CRP)  SUBSCRIPTION OPTIONS		
Full	+RO +5 RO FREE	+SO OC VA

## 13. FOOD ALLERGY

Quantitative   Serum		
ORDER CODE	FORMAT	COMPATIBILITY
FOOD433	3 test events x 3 samples x 0.5 mL 3 shipments	No known compatibility issues with any method or analyzer.
FOOD443	4 test events x 3 samples x 0.5 mL 3 shipments	No known companionly issues with any memora of analyzer.
Main allergens		
SUBSCRIPTION OPTIONS		
Full	+RO +5 RO FREE +SO	OC VA

## 14. HIGH SENSITIVITY C-REACTIVE PROTEIN





## 15. RHEUMATOID FACTOR





#### 2015 Test Event Calendar

The following Test Event Calendar applies for all Programs in this section.



### **Subscription Options**

The following Subscription options are available for Programs in this section.





## 1. VIRAL ANTIGEN DETECTION

Qualitative   Aqueous solution		
ORDER CODE	FORMAT	COMPATIBILITY
AVIR435	3 test events x 5 samples x 1 mL 3 shipments	Not compatible with immunofluorescence assays.
Adenovirus Influenza A	Influenza A and/or B Respiratory syncytial virus	Rotavirus
SUBSCRIPTION OPTIONS		
Full	+RO +5 RO FREE +SO	OC VA

# 2. EBV SEROLOGY

Quantitative and/or qualitative	Lyophilized solution		
ORDER CODE	FORMAT	COMPATIBILITY	
EBVS435	3 test events x 5 samples x 0.5 mL 3 shipments	No known compatibility issues with any method or analyzer.	
EBVS432	3 test events x 2 samples x 0.5 mL 3 shipments		
EBV Viral Capsid Antigen (VCA) IgG EBV Early Antigen (EA) IgG EBV Nuclear Antigen (NA) IgG EBV Viral Capsid Antigen (VCA) IgM			
SUBSCRIPTION OPTIONS			
Full	+RO +5 RO FREE +SO	OC VA	



3. HEPATITIS SEROLOGY Science of Quality Science of architect

Qualitative Liquid human plasma			
ORDER CODE	FORMAT	COMPATIBILITY	
HEPM4310	3 test events x 10 samples x 1.8 mL 3 shipments	Participants can report multiple runs and replicates for	
<b>HEPM435</b>	3 test events x 5 samples x 1.8 mL 3 shipments NA to participants in Australia and NZ.	multiple analyzers or methods.	
Anti-HAV IgG Anti-HAV IgM Anti-HAV Total Anti-HBc IgM	Anti-HBc Total Anti-HBe Anti-HBs Anti-HCV	HBeAg HBsAg HCV Ag	
SUBSCRIPTION OPTIONS			
Full	+80	OC	

## 4. HIV

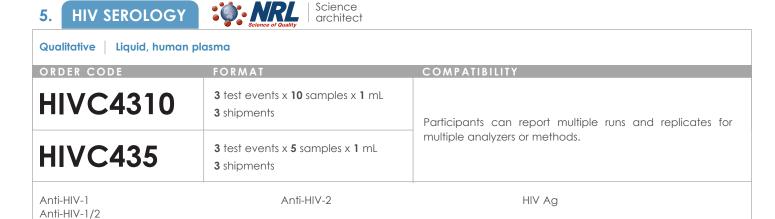
Qualitative   Serum		
ORDER CODE	FORMAT	COMPATIBILITY
HIVA435	3 test events x 5 samples x 1 mL 3 shipments	Compatible with all analyzers and methods including
HIVA432 for waived testing methods only	3 test events x 2 samples x 1 mL 3 shipments	Orasure OraQuick Rapid HIV-1 Antibody Test Kit.
Anti-HIV-1	Anti-HIV-1/2	Anti-HIV-2
SUBSCRIPTION OPTIONS		
Full	+RO +5 RO FREE +SO	OC VA



SUBSCRIPTION OPTIONS

Full

# **CLINICAL SEROLOGY EQA**



+SO

oc

6. HIV INSTI CEQAL Science architect

+190

Qualitative   Liquid, human plasma			
ORDER CODE	FORMAT	COMPATIBILITY	
HIVN435	3 test events x 5 samples x 0.1 mL 3 shipments	Compatible with INSTI HIV-1 Antibody test kit only.	
HIVN432	3 test events x 2 samples x 0.1 mL 3 shipments		
Anti-HIV-1 SUBSCRIPTION OPTIONS			
Full	+RO +5 RO FREE +SO	OC	



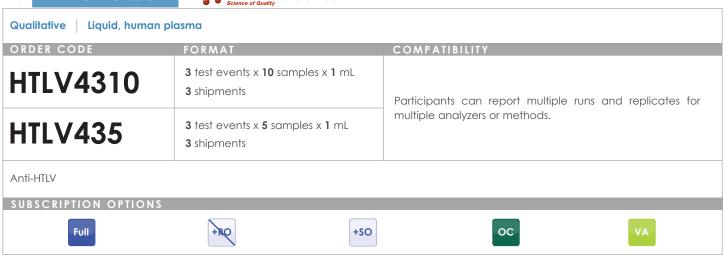
#### 7. HELICOBACTER PYLORI ANTIBODY



### 8. HERPES SIMPLEX

Qualitative Lyophilized serum			
ORDER CODE	FORMAT	COMPATIBILITY	
HSVC432	3 test events x 2 samples x 0.6 mL 3 shipments	Participants can report multiple runs and replicates for multiple analyzers or methods.	
Herpes simplex antibodies SUBSCRIPTION OPTIONS			
Full	+80	OC	

# 9. HTLV SEROLOGY Science architect





## 10. LYME DISEASE

Qualitative   Serum			
ORDER CODE	FORMAT	COMPATIBILITY	
LYME432	3 test events x 2 samples x 0.6 mL 3 shipments	No known compatibility issues with any method or analyzer.	
Lyme disease - Borrelia burgdorferi SUBSCRIPTION OPTIONS			
Full	+RO +5 RO FREE +SO	OC	

## 11. INFECTIOUS MONONUCLEOSIS

Qualitative and/or quantitative   Serum				
ORDER CODE	FORMAT	COMPATIBILITY		
<b>MONO435</b>	3 test events x 5 samples x 0.6 mL 3 shipments			
MONO432 for waived testing methods only	3 test events x 2 samples x 0.6 mL 3 shipments	Compatible with latex agglutination and hemagglutination methods.		
Infectious mononucleosis	Infectious mononucleosis heterophile antibodies			
SUBSCRIPTION OPTIONS	ON OPTIONS			
Full	+RO +5 RO FREE +SO	OC		

## 12. MYCOPLASMA ANTIBODY





# 13. TOXOPLASMA, RUBELLA AND CMV SEROLOGY Science of Cutality Science o



Qualitative   Liquid, human p	lasma			3373
ORDER CODE	FORMAT		COMPATIBILITY	·
TORC435	3 test events x 5 samples x 1 mL 3 shipments		Participants can report multiple runs and replicates for multip analyzers or methods.	
Anti-CMV IgG Anti-CMV IgM		coplasma IgG coplasma IgM	Rubella IgG Rubella IgM	
SUBSCRIPTION OPTIONS				
Full	+RQ	+\$O	OC	

# 14. SYPHILIS SEROLOGY Science architect



Qualitative   Liquid, human pl	asma	(3373)
ORDER CODE	FORMAT	COMPATIBILITY
TREP4310	3 test events x 10 samples x 1 mL 3 shipments	Participants can report multiple runs and replicates for
TREP435	3 test events x 5 samples x 1 mL 3 shipments	multiple analyzers or methods.
Anti-Treponema pallidum	Non-Treponemal antibodies	
SUBSCRIPTION OPTIONS		
Full	+80	OC



#### 2015 Test Event Calendar

The following Test Event Calendar applies for all Programs in this section. HIVG425 and HIVT425 have only two test events following the same opening and deadline dates as listed for Test Events 1 and 3.



#### **Subscription Options**

The following Subscription options are available for Programs in this section.









## 2. C. TRACHOMATIS | N. GONORRHOEAE DNA QUALITATIVE



ORDER CODE	FORMAT
CTNG435	3 test events x 5 samples x 1.2 mL
C111G433	1 shipment

Clinical samples

No known compatibility issues with any method or analyzer.

Chlamydia trachomatis DNA Neisseria gonorrhoeae DNA

SUBSCRIPTION OPTIONS

Qualitative







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,,		
ш		

1845

## 3. HAV RNA & PARVOVIRUS B19 DNA



Qualitative and quantitative Frozen human plasma ORDER CODE FORMAT COMPATIBILITY HAPN435 3 test events x 5 samples x 2.4 mL No known compatibility issues with any method or analyzer. 1 shipment HAV RNA Parvovirus B19 DNA SUBSCRIPTION OPTIONS Full oc +RQ +SO













Qualitative Frozen human p	lasma	3373 (JNX) (JNX) (1845)	
ORDER CODE	FORMAT	COMPATIBILITY	
HCVN435	3 test events x 5 samples x 1.2 mL 1 shipment	No known compatibility issues with any method or analyzer.	
HCV RNA			
SUBSCRIPTION OPTIONS			
Full	+80	OC VA	

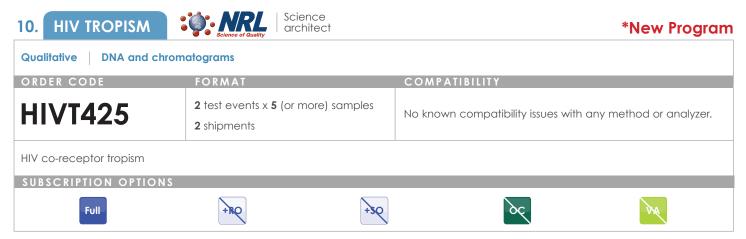
# 8. HIV-1 GENOTYPIC DRUG RESISTANCE NRL

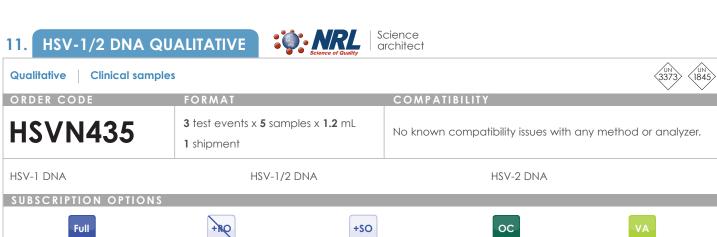
















Programs in this section are suitable for laboratories screening for blood and/or blood products for transfusion and transplantation. NRL is the Science Architect for these Programs, which have been designed to assist participants to monitor and compare their testing processes and systems with others used around the world to identify and correct sources of error.

As well, NRL is the founder and manager of an international quality network in which NRL directly provides Blood Screening EQA Programs to all participants in Australia and New Zealand and to national blood screening organizations and plasma fractionators outside Australia and New Zealand. This network is comprised of participants from over 40 countries.

Accordingly, all national blood screening organizations will be enrolled in these Blood Screening EQA Programs directly with NRL as part of this NRL quality network. All other participants outside of Australia and New Zealand in these Programs will be enrolled with their respective Collaboration Member.

In addition to EQA, NRL also provides other support services to blood screening laboratories and plasma fractionators to ensure the safety of their blood supply. These support services include:

- Quality Control Programs designed to assess the accuracy and precision of results on a daily basis;
- A Specificity Monitoring Program that ensures screening blood and/or blood-borne infectious diseases is cost effective and efficacious to reduce blood wastage;
- Reference testing on difficult-to-diagnose samples;
- Assistance in commissioning new testing platforms through the provision of specifically designed validation panels;

For more information about these support services, please contact NRL at oneworldaccuracy@nrl.gov.au.



#### 2015 Test Event Calendar

The following Test Event Calendar applies for HTLV4310, MMBS4320, TORC435 and TREP4310.



The following Test Event Calendar applies for CMVN435, HAPN435 and NATA4315.



#### **Subscription Options**

The following Subscription options are available for Programs in this section.









Science architect

Qualitative and quantitative Frozen human plasma

ORDER CODE FORMAT COMPATIBILITY

The content of the process of the plant of the plant

#### 2. HAV RNA & PARVOVIRUS B19 DNA



Science architect

1845 Qualitative and quantitative Frozen human plasma ORDER CODE FORMAT COMPATIBILITY 3 test events x 5 samples x 2.4 mL HAPN435 No known compatibility issues with any method or analyzer. 1 shipment HAV RNA Parvovirus B19 DNA SUBSCRIPTION OPTIONS +RO OC Full +SO

## 3. HTLV SEROLOGY



Science architect

Qualitative | Liquid, human plasma

ORDER CODE FORMAT COMPATIBILITY

HTLV4310 3 test events x 10 samples x 1 mL 3 shipments Participants can report multiple runs and replicates for multiple analyzers or methods.

Anti-HTLV

SUBSCRIPTION OPTIONS +50 OC VA







Science architect

Qualitative Liquid human plasma			
ORDER CODE	FORMAT	COMPATIBILITY	
MMBS4320	3 test events x 20 samples x 1 mL 3 shipments	Participants can report multiple runs and replicates for multiple analyzers or methods.	
Anti-HBc Total Anti-HCV	Anti-HIV HCV Ag	HIV Ag HBsAg	
SUBSCRIPTION OPTIONS			
Full	+80	OC	

## 5. MULTIMARKER BLOOD SCREENING NAT





Qualitative | Frozen human plasma ORDER CODE FORMAT COMPATIBILITY 3 test events x 15 samples x 4.4 mL **NATA4315** Compatible with blood screening NAT assays. No known compatibility issues with any method or analyzer. 1 shipment **HBV DNA HCV RNA** HIV RNA SUBSCRIPTION OPTIONS +RO oc Full +SO

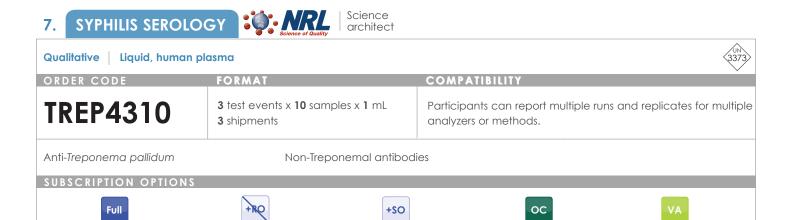
## 6. TOXOPLASMA, RUBELLA AND CMV SEROLOGY





Qualitative | Liquid, human plasma ORDER CODE FORMAT COMPATIBILITY 3 test events x 5 samples x 1 mL Participants can report multiple runs and replicates for mul-**TORC435** tiple analyzers or methods. 3 shipments Anti-CMV IgG Anti-Toxoplasma IgG Anti-Rubella IgG Anti-CMV IgM Anti-Toxoplasma IgM Anti-Rubella IgM SUBSCRIPTION OPTIONS Full +RO +SO oc







# **ANDROLOGY EQA**

#### 2015 Test Event Calendar

The following Test Event Calendar applies for all Programs in this section.



#### **Subscription Options**

The following Subscription options are available for Programs in this section.





# **ANDROLOGY EQA**

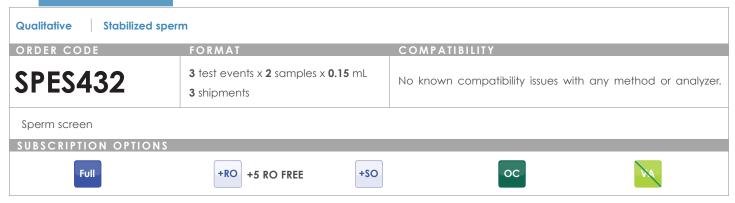
## 1. ANTI-SPERM ANTIBODY



## 2. SPERM COUNT

Quantitative Stabilized sperm						
ORDER CODE	FORMAT	COMPATIBILITY				
SPER432	3 test events x 2 samples x 0.15 mL 3 shipments	No known compatibility issues with any method or analyzer.				
Sperm count SUBSCRIPTION OPTIONS						
SUBSCRIPTION OFFICINS						
Full	+RO +5 RO FREE +SO	oc Marie Mar				

## 3. SPERM SCREEN





# **ANDROLOGY EQA**

## 4. SPERM MORPHOLOGY

Quantitative Unstained glass slide and printed image

ORDER CODE FORMAT COMPATIBILITY

SPMO432 3 test events x 2 samples No known compatibility issues with any method or analyzer.

Sperm morphology

SUBSCRIPTION OPTIONS

+RO +SO OC

## 5. SPERM VIABILITY





#### 2015 Test Event Calendar

The following Test Event Calendar applies for all Programs in this section.



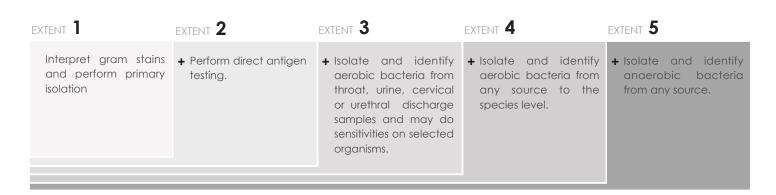
### **Subscription Options**

The following Subscription options are available for Programs in this section.





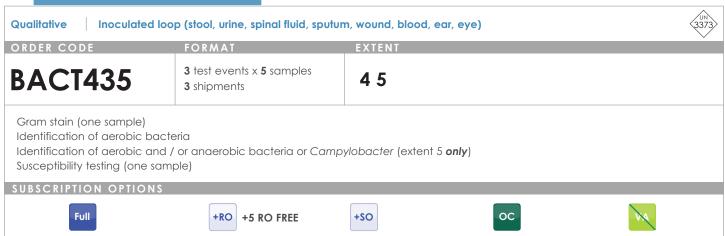
#### Select the programs that correspond to your extent of testing



### 1. AFFIRM VP TEST



## 2. BACTERIAL IDENTIFICATION





## 3. CLOSTRIDIUM DIFFICILE ANTIGEN

Qualitative Liquid			3373	
ORDER CODE	FORMAT	EXTENT	COMPATIBILITY	
CLDA435	3 test events x 5 samples x 1 mL 3 shipments	1 2	No known compatibility issues with any	
CLDA432	3 test events x 2 samples x 1 mL 3 shipments	1 2	method or analyzer	
Clostridium difficile Ag	Clostridium difficile Toxin A/B			
SUBSCRIPTION OPTIONS				
Full	+RO +5 RO FREE	024	oc va	

## 4. GENITAL ANTIGENS

Qualitative Liquid				3373
ORDER CODE	FORMAT	EXTENT	COMPATIBILITY	·
GENA435	3 test events x 5 samples x 1 mL 3 shipments	1 2	No known compatib	·
Chlamydia trachomatis	Neisseria gonorrhoeae			
SUBSCRIPTION OPTIONS				
Full	+RO +5 RO FREE +S	0	ОС	Da

## 5. GENITAL CULTURE





#### 6. GENITAL ANTIGENS - NUCLEIC ACID





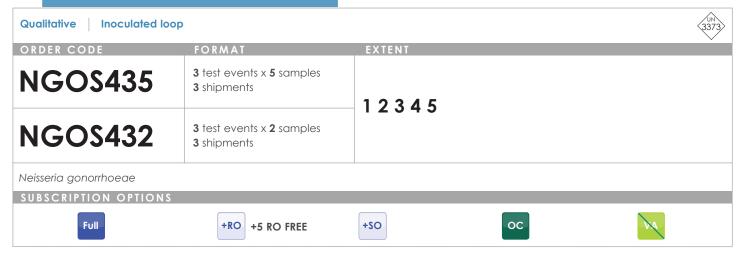


## 8. METHICILLIN RESISTANT STAPHYLOCOCCUS AUREUS





## 9. NEISSERIA GONORRHOEAE CULTURE



## 10. STREPTOCOCCUS A ANTIGEN

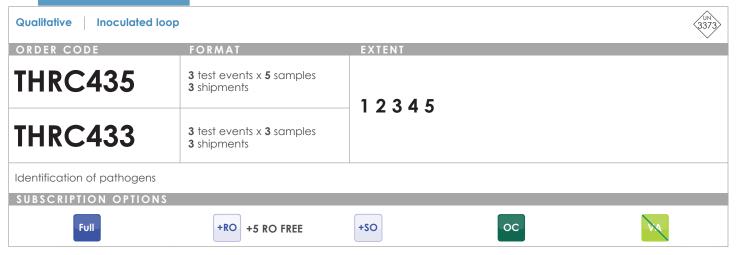
Qualitative   Swabs							
ORDER CODE	FORMAT	EXTENT	COMPATIBILITY				
STAA435	3 test events x 5 samples 3 shipments	1 2	No known compatibility issues with any method or analyzer.				
STAA432	3 test events x 2 samples 3 shipments	1 2					
Streptococcus A							
SUBSCRIPTION OPTIONS							
Full	+RQ	+\$0	oc V4				



### 11. STREPTOCOCCUS A CULTURE



### 12. THROAT CULTURE

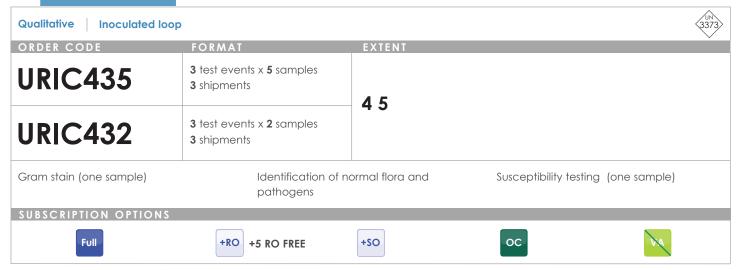


## 13. URINE COLONY COUNT





## 14. URINE CULTURE



## 15. VANCOMYCIN RESISTANT ENTEROCOCCUS





# MYCOBACTERIOLOGY EQA

#### 2015 Test Event Calendar

The following Test Event Calendar applies for all Programs in this section.



#### **Subscription Options**

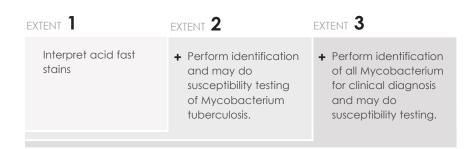
The following Subscription options are available for Programs in this section.





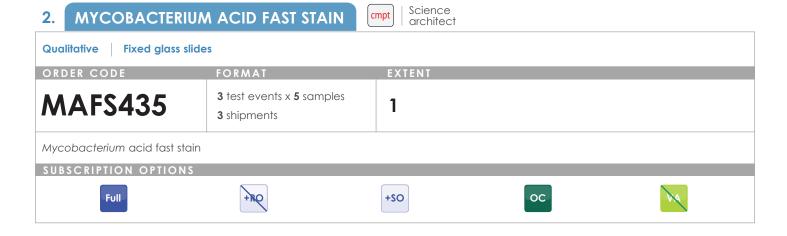
## MYCOBACTERIOLOGY EQA

#### Select the programs that correspond to your extent of testing



### 1. ANTIMYCOBACTERIAL SUSCEPTIBILITY

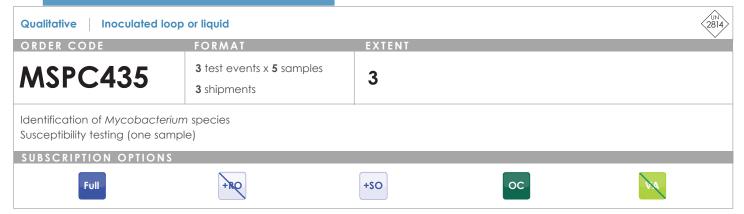




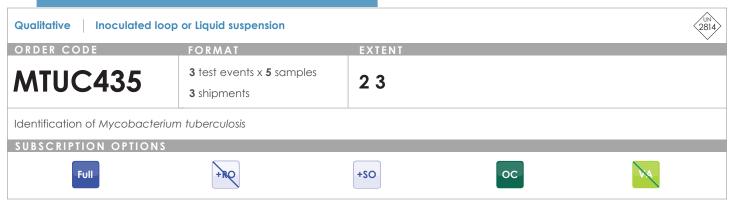


## MYCOBACTERIOLOGY EQA

### 3. MYCOBACTERIUM SPECIES CULTURE



### 4. MYCOBACTERIUM TUBERCULOSIS CULTURE





#### 2015 Test Event Calendar

The following Test Event Calendar applies for all Programs in this section.



#### **Subscription Options**

The following Subscription options are available for Programs in this section.





#### Select the programs that correspond to your extent of testing

EXTENT 3 EXTENT 4 EXTENT 1 EXTENT 2 Isolate and identify + Isolate and identify + Isolate and identify + Isolate and identify all yeast and/or all fungi to the genus fungi to the species yeast and/or dermatophytes to level. dermatophytes to the level. the genus level and species level. perform direct antigen testing.

### 1. CANDIDA ANTIGEN



## 2. CRYPTOCOCCUS ANTIGEN





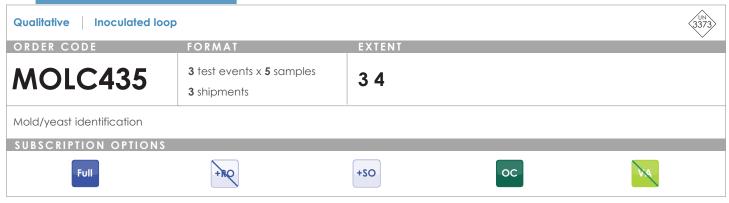
## 3. DERMATOPHYTE SCREEN

Qualitative   Inoculated loc	q			3373
ORDER CODE	FORMAT	EXTENT	COMPATIBII	LITY
DERS435	3 test events x 5 samples 3 shipments	1	Dermatophyte	e test media.
Dermatophyte detection  SUBSCRIPTION OPTIONS				
Full	+RQ	+\$0	oc	M

## 4. KOH SLIDES cmpt | Science architect

Qualitative Glass slides				
ORDER CODE	FORMAT	EXTENT		
<b>KOHS432</b>	<ul><li>3 test events x 2 samples</li><li>3 shipments</li></ul>	1		
Fungal identification				
SUBSCRIPTION OPTIONS				
Full	+RQ	+\$O	oc	Da

## 5. MOLD / YEAST CULTURE





## 6. YEAST CULTURE





#### 2015 Test Event Calendar

The following Test Event Calendar applies for all Programs in this section.



### **Subscription Options**

The following Subscription options are available for Programs in this section.





#### Select the programs that correspond to your extent of testing

#### EXTENT 1 EXTENT 2

Detect parasites by wet mounts / pinworm preparations and perform direct antigen testing. + Use concentration methods and permanent stains for identification.

### 1. BLOOD PARASITES

Qualitative   Thin and thick blood smears								
ORDER CODE	FORMAT	EXTENT						
BLPA435	3 test events x 5 samples 3 shipments	2						
BLPA432	3 test events x 2 samples 3 shipments	2						
Blood parasite detection and identification								
SUBSCRIPTION OPTIONS								
Full	+RO +5 RO FREE +SO	oc						

## 2. MALARIA

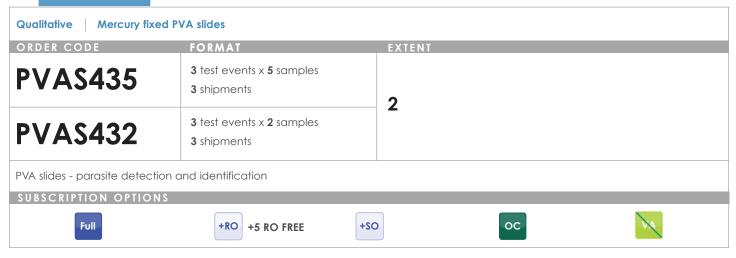




### 3. PARASITE ANTIGENS

ORDER CODE	FORMAT	EXTENT	COMPATIBILITY
PARA435	3 test events x 5 samples x 1 mL 3 shipments	1 2	Enzyme immunoassay. <b>Not compatible</b>
PARA432	3 test events x 2 samples x 1 mL 3 shipments	1 2	with Biosite Parasitology test kit.
Giardia lamblia and / or Cry	ptosporidium	<u>'</u>	'
SUBSCRIPTION OPTION	S		
Full Full		50	oc

## 4. PVA SMEAR





## 5. WET MOUNT





# 2015 CALENDAR

											TE 1   Jan 21 - Feb
		1	Test Event 1	Opening Dat	e: Mar 25 - Re	sults Deadline	e: Apr 15				TE 2   Mar 25 - Apr
											TE 3   May 27- Jun 1
		1	Test Event 2	Opening Dat	e: Jul 08 - Res	sults Deadline	: Jul 29				TE 4  Jul 08 - Jul 29
											TE 5   Aug 26 - Sep
		1	Test Event 3	Opening Dat	e: Oct 21 - Re	sults Deadline	e: Nov 11				<b>TE 6</b>   Oct 21 - Nov
Andrology											Coagulation 6 TE
SPAB432	SPER432	SPES432	SPMO432	SPVB432							COAG465
Bacteriolog	ду										Hematology 6 TE
AFVP435	CLDA432	GENA435	GENC435	GRAM435	NGOS432	STAA432	STAS435	THRC435	URIC432	VREN435	HEFA465 HEFB465
BACT435	CLDA435	GENC432	GEND435	MRSA435	NGOS435	STAA435	THRC433	URCC432	URIC435		HEFD465
Chemistry											HEFE465
ALCH435	BGAS432	CCHM435	ENDO435	GLHB432	IBGH435	SHCG435	SUPR432	TRSE432	UHCG435	WGLU432	HEFF465
AMMN432	BGAS435	COHB432	FFIB432	GOBD432	KETN432	SPCH432	SWEA433	TRUR432	URCH432	WGLU435	HEFG465
3CAM432	CARM432	COHB435	FLCH433	HCRT432	NITZ431	SPIM432	TOXI432	TUMK432	URIN432	WHGN432	HEFH465
3CAM435	CARM435	CSFT432	FOBD432	HCRT435	ROFM431	SPRO435	TOXI435	UDOA432	URMA432	WHGN435	HEFI465
BCHE435	CCHM432	ENDO432	FRUC432	IBGH432	SHCG432	SPUC432	TRBD432	UHCG432	USED432		HEMA465
Clinical Mi	croscopy										HETA465
FECS431	FERN431	KOHP431	NASM431	PINW431	VAGP431						HETB465
Clinical Se	rology										
AVIR435	HEPM435	HIVA435	HIVN432	HSVC432	LYME432	MONO435	TREP435				
EBVS432	HEPM4310	HIVC435	HIVN435	HTLV435	MMBS4320	MYPL432	TREP4310				
EBVS435	HIVA432	HIVC4310	HPYL432	HTLV4310	MONO432	TORC435					
Coagulatio	on										
COAG432	COAG435	DDIM432	ORAC432	PLPX431	THBP432						
Diagnostic	Immunolog	у									
AIAP432	AICN432	AIOR432	AITH433	ANAB435	ANSO435	FOOD433	RHFA435				
AIAR432	AICO432	AIRH432	ALLY433	ANAL435	CRPR432	HCRP432					
Hematolog	ЗУ										
BFLD432	ESRA433	HEFA435	HEFE435	HEFH435	HEMA435	QASI432	RETC432				
CELL435	FLPG432	HEFB435	HEFF435	HEFI435	HETA435	RETA432	SCSC432				
ERSR432	FRBC432	HEFD435	HEFG435	HEMA432	HETB435	RETB432					
Mycobact	eriology										
AMBS431	MAFS435	MSPC435	MTUC435								
Mycology											
CANA435	CRYA432	DERS435	KOHS432	MOLC435	YEAC435						
Parasitolog	ЗУ										
BLPA432	BLPA435	MALA435	PARA432	PARA435	PVAS432	PVAS435	WMNT432	WMNT435			
Transfusion	Medicine										
BTME435	CTME435	DATG432									



# 2015 CALENDAR

						<b>TE 1</b>   Jan 21 - Jan 28
						<b>TE 2</b>   Feb 18-Feb 25
TE 1   Feb 25 - Mar 18	TE 1   Feb 25-Mar 18	TE 1   Mar 04-Mar 11	TE 1   Mar 04-Mar 11	<b>TE 1</b>   Mar 04 - Mar 11	TE 1   Mar 18 - Mar 25	TE 3   Mar 18-Mar 25
						<b>TE 4</b>   Apr 22 - Apr 29
				<b>TE 2</b>   May 06-May 13		
					TE 2   May 20 - May 27	TE 5   May 13-May 20
	TE 2   Jun 03 - Jun 24	TE 2  Jun 10 - Jun 17		TE 3   Jun 10 - Jun 17		TE 6  Jun 17 - Jun 24
					TE 3   Jun 24 - Jul 01	
						<b>TE 7</b>   Jul 15-Jul 22
				<b>TE 4</b>   Aug 26-Sep 02	<b>TE 4</b>   Sep 09-Sep 16	12 / 301 13-301 22
TF 21 Com 20 Com 20						TE 8   Aug 19-Aug 26
TE 2   Sep 09 - Sep 30	TE 3   Sep 09-Sep 30	TE 3   Sep 30-Oct 07	TE 2   Sep 30-Oct 07	<b>TE 5</b>   Sep 30 - Oct 07		<b>TE 9</b>   Sep 23-Sep 30
					TE 5   Oct 14-Oct 21	<b>TE 10</b>   Oct 21 - Oct 28
						TE 11   Nov 18-Nov 25
				TE 6   Nov 18 - Nov 25		·
					TE 6   Dec 02 - Dec 09	TE 12   Dec 02 - Dec 09
Clinical NAT HIVG425	Clinical NAT CMVN435	MI Chemistry BNPS432	Standardization CHOL726	MI Chemistry 6 TE CAMS463	Standardization GFRC715	Chemistry FOBT4123
HIVT425	CTNG435	CAMS433		CHEM463		
	HAPN435	CHEM433		THDM463		Standardization GFRM7123
	HBVL435	NBNP432				
	HCVG435	NEOB435 THDM433		Standardization GFRB716		
	HCVL435 HCVN435	URCR432		LIPB713		
	HIVL435	URCR435		LIPD763		
	HSVN435	Standardization				
	NATA4315	GFRM733				
		GFRR733				
		GHBB713				
		GHGB733				
		LIPD733				
		LIVM733				
		TPRM733				



# 2015 CALENDAR

	<b>TE 1</b>   Jan 07-Jan 14
	TE 2   Feb 04-Feb 11
	TE 3   Mar 04-Mar 11
TE 1   Mar 25-Apr 15	TE 4   Apr 08 - Apr 15
	TE 5   May 06 - May 13
	12 0   May 00 May 13
	TE 6   Jun 03 - Jun 10
TE 2   Jul 08 - Jul 29	TE 7   Jul 08 - Jul 15
	TE 8   Aug 05 - Aug 12
TE 3   Oct 21 - Nov 11	TE 9   Sep 02-Sep 09
120 00121 1107 11	TE 10   Oct 07 - Oct 14
	TE 11   Nov 04-Nov 11
TE 4   Nov 25-Dec 16	
	TE 12   Dec 02 - Dec 09
Chemistry 4 TE	Chemistry 12 TE
BCHE443	BCHE4121
CCHM443	BGAS4121
ENDO443	CARM4121
SPRO442	SPRO4121
TOXI443	TUMK4121
TUMK443	UDOA4121
UDOA443	URIN4121
Coagulation 4 TE	Coagulation 12 TE
COAG443	COAG4121
DDIM442	Hematology 12 TE
THBP442	HEMA4121
Transfusion Medicine 4 TE	
IMHE442	
Diagnostic Immunology 4 TE	
ALLY443	
FOOD443	

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Your ideas, commitment and energy will advance this mission. Accordingly, if you have any
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interested in becoming Collaboration Members or Science Architects, please let us know a

secretariat@oneworldaccuracy.org.

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