



CHEM.QC.REGCHEM.2.0 Quality Control Testing Intervals

PRINCIPLE

To set guidelines on the frequency of running control materials. Intervals listed below are the minimum number of times the QC material is to be run.

RELATED DOCUMENTS

CHEM.QC.REGCHEM.1.0	Regional Chemistry Quality Control
CHEM.QC.REGCHEM.3.0	New Lot Number/New Shipment-Labeling, Storage and Activation
CHEM.QC.REGCHEM.2.1	Sunquest Quality Controls and Codes
CHEM.QC.REGCHEM.2.2	QC Prep and Stability for Instruments
CHEM.QC.REGCHEM.2.3	Sunquest/ QLS Worksheets and Methods

DOCUMENT OWNER

Manager, Chemistry and Special Chemistry

PROCEDURE

- A. For each instrument, verify patients as they come off of the instrument as long as QC is acceptable (CHEM.QC.REGCHEM.1.0). Additional QC levels may be run at the discretion of the technologist. Refrigerate or freeze tests not performed due to extended down time as indicated in the individual procedures.
- B. For each instrument, perform maintenance as indicated for each shift.
- C. For each instrument stock instrument, calibrate as needed and run QC as indicated in the charts below. See individual procedures for calibration frequency.
- D. Preparation of Controls
 1. Follow the directions on the package insert for each control and refer to attachment CHEM.QC.REGCHEM.2.2 for specific details.
 - a. Record the preparation or open date, the expiration and initial of person preparing control on the vial of QC.
 - b. Refer to procedure CHEM.QC.REGCHEM.3.0 New Lot Number/New Shipment-Labeling, Storage and Activation for details on labeling.
- E. Storage and Stability
Refer to attachment CHEM.QC.REGCHEM.2.2 for specific details.



Quality Control Testing Intervals

- F. **Control Acceptability**
Refer to procedure, CHEM.QC.REGCHEM.2.0 for specific details on control acceptability.

- G. **Resulting QC**
 - 1. **Manual Entry.**
 - a. **Function:** MEM
 - b. **Worksheet:** select appropriate worksheet (See CHEM.QC.REGCHEM.2.3)
 - c. **Test Code:** select appropriate test code.
 - d. **Accession#:** enter appropriate control code.
 - 2. **Online Entry**
 - a. **Function:** OEM
 - b. **Device:** select appropriate device location.

- H. **Technical Notes**
 - 1. If maintenance is performed on an instrument, new lot number of reagent introduced, calibration is performed, major part is replaced, or any problems arise, QC material is to be analyzed irrespective of the intervals listed above.
 - 2. The running of QC material is mandatory.

- I. On weekends, QC will be run as done on Day Shift.

- J. **Frequency**
 - 1. **DPC IMMULITE 2000**
 - a. **Day Shift:** Run all QC beginning of shift
 - b. **Night Shift:** Run all QC at End of Shift

CONTROL	TESTS	CONTROL	TESTS
IMM1 IMM2 IMM3	DHEA, HCYST, TG	TM1 TM2 TM3	CA125
TAD1 TAD2	ATA ATG		
SCH1 SCH2	SHBG	SYNRC SYREC	SYPHILIS
HPG1 HPG2 HPG3	HPG	ACT1 ACT2	ACTH



Quality Control Testing Intervals

ABBOTT

2.

- a. Day Shift: Run all QC at beginning of shift
- b. Evening Shift: Run all QC at beginning of shift, except Ammonia, BIOF3, PED2, Spinal Fluid, Tobramycin, Caffeine, Amikacin, C-Peptide and TDM QC
- c. Night Shift: Run all QC at beginning of shift, except Ammonia, BIOF3, PED2, Spinal Fluid, Tobramycin, Caffeine, Amikacin, C-Peptide and TDM QC

CONTROL	Analyzer #1 Analytes	Analyzer #2 Analytes	Analyzer #3 Analytes	Analyzer #5 Analytes	Analyzer #6 Analytes	Analyzer #7 Analytes
CHEM1 CHEM2	ALB ALKP ALT AMYL AST DBIL TBIL CA CHOL CO2 CREAT FE GGT GLU LAC LDH LI NA K CL PHOS TPROT TRIG URIC HDL UREA	ALB ALKP ALT AST TBIL CA CHOL CO2 CPK CREAT FE GGT GLU LAC LIPA LI MG NA K CL PHOS TPROT TRIG TPROT HDL UREA	ALB ALKP ALT AST DBIL TBIL CA CHOL CO2 CREAT FE GLU LDH NA K CL PREALB TPROT TRIG HDL UIBC UREA	N/A	N/A	N/A
LIG1 LIG2 LIG3	TOBPO AMPTR CAFF	N/A	N/A	FT4 HCGQ CPEP FERTN DIG PHENO PTN THEO VALP TEG VANC TSH	ESTD FT3 FT4 HCGQ CORT FSH PROG TT3 TT4 TSH TUP	ESTD FT3 FT4 FERTN FSH LH PROG PROL TSH



Quality Control Testing Intervals

CONTROL	Analyzer #1 Analytes	Analyzer #2 Analytes	Analyzer #3 Analytes	Analyzer #5 Analytes	Analyzer #6 Analytes	Analyzer #7 Analytes
BIOF3	N/A	N/A	N/A	HCGQ	HCGQ	N/A
QIMM1 QIMM2 QIMM3		B2MG	A1AT CRP C3 C4 IGG IGM IGA HAPT RF TRANT	N/A	N/A	N/A
CARD1 CARD3		N/A	CACRP	N/A	N/A	BNP TROP
CSF1 CSF2	CSFGL CSFTP	N/A	N/A	N/A	N/A	N/A
UR1 UR2	UUNR URCAR UCRR UKR UNAR UCLR URUA UTP	UCRR MICAL		N/A	N/A	N/A
AM1 AM3	N/A	AMM	N/A	N/A	N/A	N/A
PED 2	TBIL DBIL	TBIL	TBIL DBIL	N/A	N/A	N/A
HIVV0 HIVV1 HIVV2 HIVV3 HIVV4 VRC VR1				HIV		
CTAC1 CTAC2 CTAC3				CYCLO TACRO		



Quality Control Testing Intervals

COBAS c501

3.

- a. Day Shift: Beginning of Shift: DIAB, QIMM, KLC, KHC, LHC, LLC
- b. Evening Shift: ~8PM: DIAB
- c. Night Shift: End of Shift DIAB
- d. Run LIG1, LIG2, and LIG3 for Primidone (Mysoline), and Lidocaine weekly and once every 24 hours when patients are run.

CONTROL	ANALYTES
LIG1 LIG2 LIG3	LIDO PRIM
DIAB1 DIAB2	HBA1C
QIMM1 QIMM3 Day shift only	ASO
KLC KHC Day Shift only	KFLC
LLC LHC Day shift only	LFLC



Quality Control Testing Intervals
CENTAURS

4.

- a. Day Shift: Beginning of Shift: LIG, RUB, TM, PTH, VRC, VR1, VR2, VR3, HAVPC, AGCPC
- b. Evenings: ~8pm: LIG, TM
- c. Night Shift: End of Shift: LIG, RUB, TM, PTH
- d. When calibrating Centaurs, always use a new pack and deactivate partial the pack. When calibration is completed and QC is acceptable on the new pack, reactivate the partial pack (if any) and QC the partial pack

CONTROL	ANALYTE
LIG1 LIG2 LIG3	PSA B12 FOL TESTO INSUL
RUBNC RUBRM RUBPC	RUBELLA
TM1 TM2 TM3	CA19-9 CA27-29 (BR) AFP CEA
PTH1 PTH2 PTH3	PTH
FOL1 FOL2 FOL3	RBCFOL Note: Only run FOL1 if RBCFOL is <3.5
VRC	HBSAB HBSAG HEPC HCORM HCORT HAVM HAVT
VR1	HBSAG HEPC
AGCPC	CONF FOR HBSAG
VR2	HBSAB
VR3	HCORM HCORT
HAVPC	HAVM HAVT



Quality Control Testing Intervals

5. UniCel DxI Access

- a. Day Shift: Beginning of Shift: TM

CONTROL	ANALYTE
TM1	CA125 AFP
TM2	
TM3	

- 6. Protein Electrophoresis: serum and urine
 - a. Run on each day of patient testing: Helena Neutral Density Densitometer Control (SPE1).
 - b. Run on each gel: Helena Normal and Abnormal (SPERN, SPEARA).
 - c. For Immunofix, record on Maintenance Sheet that control applications worked. Run the IFE controls once a day.

- 7. Osmometer 3D3
 - a. Evening Shift: Complete daily maintenance checklist.
 - b. Run QC each day CHEM1, UR2, S290

- 8. Ionized Calcium
 - a. Day Shift- Run NOVA1, NOVA2, and NOVA3
 - b. Evening- Run NOVA2
 - c. Night Shift- Run NOVA3

- 9. Cyclo/Tacro
 - a. Run CTAC1, CTAC2, and CTAC3 with each batch of patients run

- 10. HIVAB
 - a. Day Shift: Run all QC (HIVV0, HIVV1, HIVV2, HIVV3, HIVV4, VRC, and VR1)
 - b. Night Shift: Run all QC (HIVV0, HIVV1, HIVV2, HIVV3, HIVV4, VRC, and VR1)