

Medtronic ACT Plus Low Range Cartridge - Training Guide and Checklist

At the end of the training session the operator:

- Reviews relevant documentation for the ACT Plus.
- Performs two levels of LR-ACT Quality Control. Results are within acceptable range.
- Patient testing is performed in duplicate and within acceptable tolerance range 12%.
- Demonstrates knowledge of routine maintenance and basic troubleshooting.

Annually completes for ongoing competency validation:

- Two sets of Quality Control (QC) Testing for ACT Low Range Cartridge (Normal Level and Abnormal Level).
- Operator attempts to perform each set of QC within a six month period.

1	SYSTEM OVERVIEW – Discussion	Date/Initial
	<ul style="list-style-type: none"> • ACT Plus Instrument • Principle of Measurement • Quality Control & the Low Range Cartridge • Reporting of Patient Results 	
2	Perform QUALITY CONTROL for ACT Low Range Cartridge	
	<ul style="list-style-type: none"> • Discussion - location & storage of Quality Control(QC) lyophilized reagents, 0.1 M CaCl₂ & ACT Low Range cuvettes. • Discussion - QC testing and frequency of QC testing. • Documents LR-ACT and QC information onto QC record sheet: Lot #; expiry date; QC acceptable range. • Documents LR-ACT and QC information into ACT Plus data base: Lot #; expiry date; QC acceptable range. • Review safety precautions in reagent handling. • Prepares Quality Control material. • Performs Quality Control Testing & reports results onto worksheet. • Acceptable tolerance limits of QC & the difference between duplicates. 	
3	SPECIMEN COLLECTION – Discussion	
	<ul style="list-style-type: none"> • Sample Volume & Type. • Collection protocol. • Specimen Stability. • Collection Factors affecting reliability of results. 	
4	REPORTING A PATIENT RESULT – discussion.	
	<ul style="list-style-type: none"> • Documentation of patient results onto the patient chart. • Acceptable limits of acceptance – difference of duplicates. 	
5	MAINTENANCE – Performs the following.	
	<ul style="list-style-type: none"> • Daily - optics cleaning; surface cleaning; record temperature. • Monthly - temperature Verification; Clean Actuator Heat Block Assembly. • Documentation of maintenance activities. 	
6	TROUBLE SHOOTING – Discussion	
	<ul style="list-style-type: none"> • Quality Controls not within acceptable reference range. • ACT Plus Operational Error Codes • Assistance. Team Leaders and POCT Technologist are identified. 	

POCT Competency - Medtronic Automated Coagulation Timer II with Low Range Cartridge			
NAME:		Operator ID:	RN RT indicate
Dept:			
Activated Clotting Time Analysis – Low Range Cartridge Medtronic ACT II			Date
1	Operator has read relevant documentation.		
2	Knows how to turn the instrument on.		
3	What steps are required for instrument set-up.		
4	Knows how to clean the optics of the instrument.		
5	Knows how to verify the temperature of the actuator block as part of routine monthly maintenance, or as required.		
6	Performs daily maintenance & documents on appropriate data sheet.		
7	Knows where cartridges are kept & what the storage requirements are.		
8	Checks Cartridge integrity prior to use & handles cartridge appropriately.		
9	Knows limitations of the cartridge in the actuator testing block.		
10	Knows QC regimen & that QC is performed in duplicate.		
11	Knows where QC is kept & what the storage requirements are.		
12	Knows how to prepare the Quality Control (QC) & identifies steps important in preparation.		
13	Knows the reagent difference between running a QC vs. a patient sample.		
14	Operator knows different sources of error when dispensing QC (or patient) sample into the cartridge well.		
15	Successfully performs one set of QC – Normal & Abnormal Level in duplicate.		
16	Knows limitations for Pass/Fail QC (+/- 10% for normal range; +/- 12% for abnormal range).		
17	Knows what to do if the Average QC value is not within acceptable limits.		
18	Knows to sign and date all results with initials & Operator ID.		
19	Operator knows correct patient collection procedure & why it is important to analyze immediately after collection.		
20	Operator knows where patient results are documented & information required.		
21	Operator successfully performs a patient sample in duplicate. Results are within 12% of the average result.		
22	Knows basic troubleshooting & if there is an error code where to obtain additional information, & where to document.		
23	Operator knows requirements for annual revalidation.		
24	Knows to dispose of all contaminated consumables safely.		
POCT Technologist, Central Lab Services M-F 604-875-2345 X 7521 Pager 41-02190			
POCT Operator Signature:		Competency Trainer Name & Signature:	

Medical Approval: Dr Benjamin Jung

Version: 1.1

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REVISION & APPROVAL LOG

Version	Revision Type	Description of Change	Revision Date	Technical Approval	Medical Approval
1.0		New document	30 Dec 2013	Elvira Kozak	Dr. Cathy Halstead
1.1	Minor	Document title and number change. Upload to QMS document control	22 Dec 2016		Dr. Benjamin Jung

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