HEALTH HOLDING

HAFER ALBATIN HEALTH CLUSTER
MATERNITY AND CHILDREN HOSPITAL

Department:	Laboratory and Blood Bank (Haematology)		
Document:	Internal Policy and Procedure		
Title:	Quick Guide for Atelica CI		
Applies To:	All Haematology Staff		
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1. PURPOSE:

1.1 This policy provides all the information about the handling and operational technique for the Atelica CI.

2. DEFINITONS:

2.1 Atelica CI is one of series of Siemens chemistry and hormone assay machines

3. POLICY:

3.1 The Atelica CI is an auto analysers used in Clinical chemistry and hormone section for analysis of different chemistry and hormone parameters after performing complete and correct calibration and running quality control for these different chemistry parameters.

4. PROCEDURE:

4.1 Principle of the Atelica CI is Photometric , ion selective electrode and chemilumenescence methods.

4.2 **Safety Precaution:**

- 4.2.1 Biological: Treat all samples material as infectious
- 4.2.2 Chemical: Beware of some chemical that may causes irritation.
- 4.2.3 Physical: Avoid touching the probes and other moving parts during operation, which may cause injury
- 4.2.4 Electrical: Make sure that machine is directly plugged to emergency socket (not through an extension cord).

4.3 **Method:**

- 4.3.1 Review Atelica CI assay summary table

4.4 **Operating the machine:**

- 4.4.1 Start up
- 4.4.2 Scan user and password or type it manually

4.5 **Calibration: Main screen**

- 4.5.1 Go to order on the main screen then calibration order then choose the test then place order then press print barcode (confirm the lot number of calibrator) put the barcode on the tube containing the calibrator then put the tube in any rack and put it in the machine
- 4.5.2 Go to work list check calibration result if ok run quality control if failed do corrective action plan
- 4.5.3 Corrective action plan :
  - 4.5.3.1 Repeat with fresh calibration
  - 4.5.3.2 If failed repeat with another lot calibrator
  - 4.5.3.3 If failed change the reagent
  - 4.5.3.4 If failed call the supervisor

4.6 **Control: Main screen**

- 4.6.1 Go to order on the main screen then quality control order then place order then print barcode than place the barcode on the tubes of qulity control and put the tubes in the rack and put it the machine
- 4.6.2 Go to work list check the QC results if ok run samples if out of range do corrective action
- 4.6.3 Corrective action is to repeat control from the same lot if failed repeat from another lot if failed

recalibrate the reagent then do new control and document your action in QC corrective action form

4.7 **Running of Sample: Main screen**

4.7.1 Put the sample in the rack with barcode towards opened side

4.7.2 Put racks with barcoded samples in the machine

4.7.3 Review results from careware system

4.7.4 If the system is not working go to order from the main screen then patient order then add tests then place order print barcode and put it on the tube and put it in the rack and run in the machine

4.8 **Daily Maintenance: done automatically**

4.8.1 If any maintenance needed go to arrow in the left corner (navigator) then choose maintenance and choose the needed maintenance and follow instructions of the machine

4.9 **Weekly/ Monthly maintenance: done automatically**

4.9.1 If any maintenance needed go to arrow in the left corner (navigator) then choose maintenance and choose the needed maintenance and follow instructions of the machine

4.10 **Quality Control Check: automatically programmed**

4.10.1 Run normal and pathological control every day as per laboratory policy

4.10.2 The analytical value must fall within assigned range.

4.10.3 Quality control activities on daily basis reviewed by the department supervisor.

4.10.4 If any test is out in one or more levels stop running this tests till corrective action done

4.11 **Results Reporting:**

4.11.1 Review results on care ware system then approve it

4.11.2 Turnaround time following the TAT policy for ER, Stat and routine samples.

4.12 **How to make dilution: the machine do auto dilution**

4.12.1 For example, to make a 1:5 dilution of 100 L of sample. you would add 400ul of diluents to the 100 ul of sample.

Volume of Sample Dilution Factor = Total Dilution Volume 100 ul, * 5 = 500 ul Total Dilution Volume— Volume of Sample = Volume of Diluent 500 µL — 100 ul = 400 ul

4.13 **Test Limitation:**

4.13.1 Recognizing Errors.

4.13.2 Reagent deterioration.

4.13.3 Variation in reconstitution of control material

4.13.4 Instability of the control material.

4.13.5 Inaccuracy of the standard.

4.13.6 Hemolyzed sample

4.13.7 Lipemic sample.

4.13.8 Icteric sample

4.14 **Avoiding Errors:**

4.14.1 Discard deteriorated or outdated reagents.

4.14.2 Exercise proper preparation, storage and shell-life of control material.

4.14.3 Kit calibration.

4.14.4 Adjustment of machine by maintenance Daily. Weekly and monthly.

4.15 **Errors Correction:**

4.15.1 Check the sample cups for sufficient amount, air bubble.

4.15.2 Check fibrin clots for patient's samples.

4.15.3 Repeat control.

4.15.4 Repeat calibration

4.15.5 Repeat the patient's samples from original tube.

4.15.6 Ask for fresh sample if required.

5. MATERIALS AND EQUIPMENT:

5.1 **Materials:**

5.1.1 Non-consumable material

5.1.1.1 Dimension machines.

5.1.1.2 Computer terminal

5.1.1.3 Water supply

5.1.2 Consumable materials:

5.1.2.1 Calibrators.

5.1.2.2 Controls

5.1.2.3 Serum / Plasma / Body fluids

5.1.2.4 Distilled water

5.1.2.5 Reagents

6. RESPONSIBILITIES:

6.1 Chemistry shift on charge is responsible for maintenance, running calibration and control and samples

6.2 Chemistry staff are responsible for running samples all over the day

7. APPENDICES:

7.1 Maintenance Dimension

8. REFERENCES:

8.1 Operative manual of the instrument

9. APPROVALS:

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