

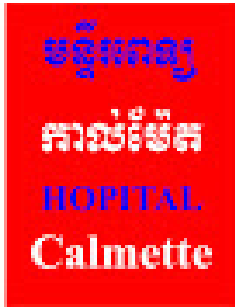


EQA Program for Hematology in Calmette Hospital



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3th and 4th December 2018



Outline

- I. Calmette Laboratory background
- II. Hematology EQA program
- III. Identify Problems, Gap and Corrective Action
- IV. Challenge and Implementation
- V. Benefit of QA

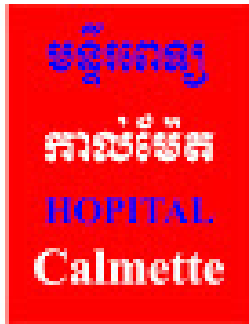
Calmette Laboratory Background

1. Hematology Unit : 14 persons
2. Serology Unit : 06 persons
3. Biochemistry Unit : 10 persons
4. Microbiology Unit : 07 persons
5. Molecular Biology Unit : 03 persons
6. Pathology Unit : 07 persons
7. Phlebotomies : 06 persons

- Clinical Biologist : 03 persons
- Pathologist : 03 persons
- Microbiologist : 01 persons
- Pharmacist : 02 persons
- Technician : 46 persons

Total staffs : 55 persons



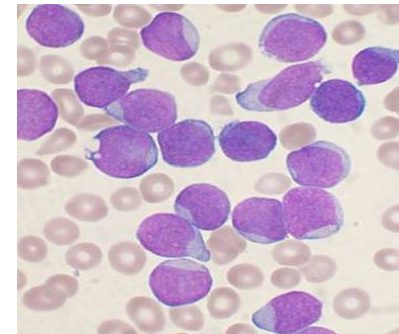
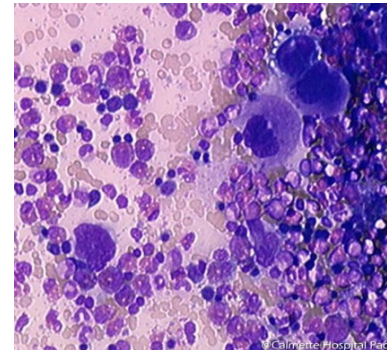


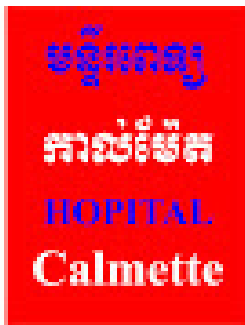
Hematology Unit

- ▶ Activities in Hematology :
 - Completed blood count (Hémogramme)
 - Blood smear (frottis)
 - Blood Group (groupage)
 - Erythrocyte Sedimentation Rate (VS)
 - Coagulation
 - Electrophoresis
 - Bone marrow examination (Myélogramme)
 - Immunophenotyping

Hematology diagnosis

1. Completed blood count
2. Blood Smear
3. Bone Marrow Examination
4. Immunophenotyping
5. Molecular Biology
6. FISH test
7. Cytogenetic test





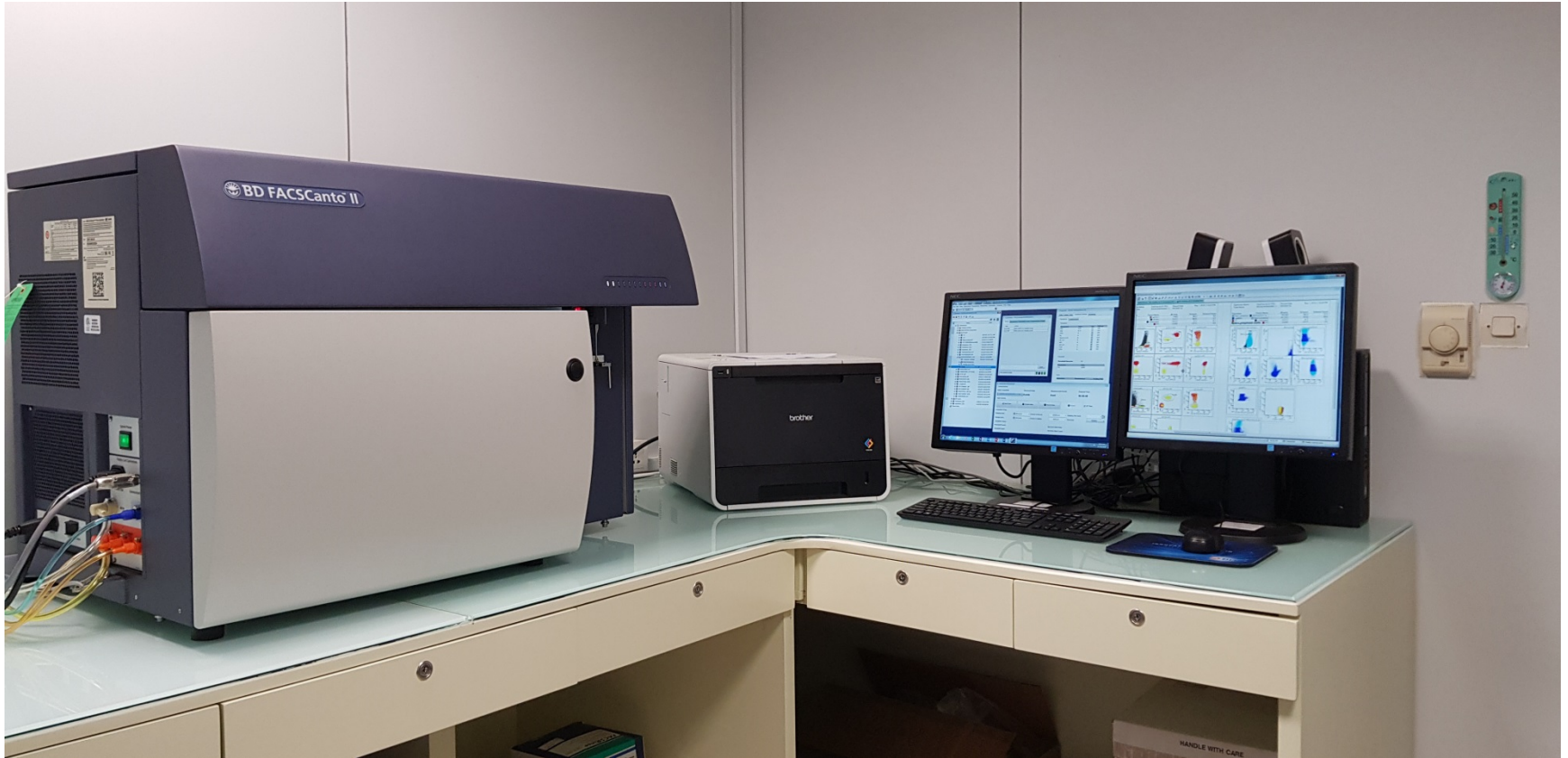
Instruments

Equipment	Number	Model
Completed blood count Analyzer	03	Sysmex XT-2000i Sysmex XT-1800i Sysmex XN-1000
Coagulation analyzer	03	CA 600, CA-50
Microscopy	01	Olympus CX 21
Electrophoresis	01	Sebia minicap
Flow cytometry	01	BD FACSCanto II

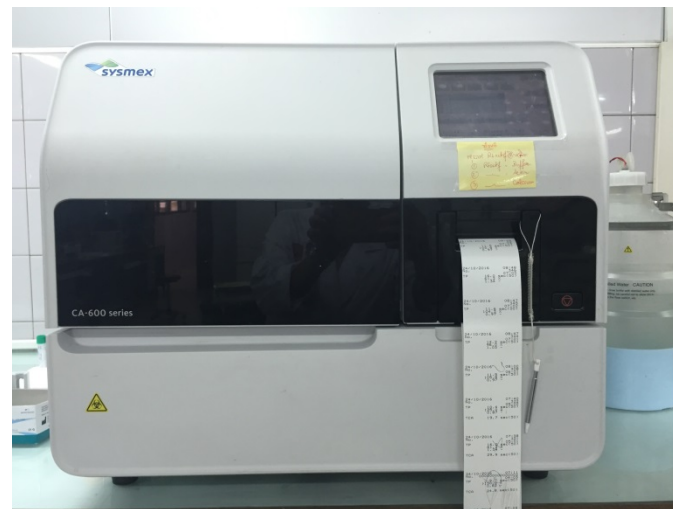
Hematology unit



Flow cytometer

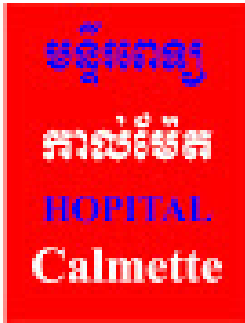


CBC and Coagulation



Electrophoresis

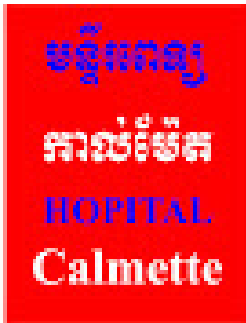




Hematology Unit

- ▶ IQC: one time/day (Sysmex e-check control with 3 levels)
- ▶ SOPs analysis and Job adds
- ▶ Total sample
 - 579 patients/day
 - 3633 tests/day
- ▶ Hematology unit
 - 376 patients/day for CBC
 - 966 tests/day

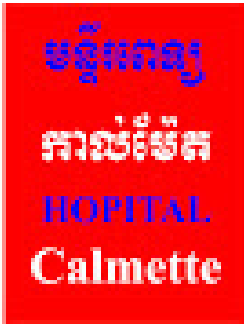




Hematology EQA Program 2017-2018

- ▶ Two times / year provided by Sysmex
- ▶ Hematology EQA with 3 samples

	Identify Problem, Gap	Corrective Action
Automated counting	-2018 : 95% 1. WBC: $1 < PI < 2$ 2. RBC: $1 < SDI < 2$ -2017 : 98% 1. WBC: $1 < SDI < 2$	- Check IQC, follow SOPs, and continue monitoring IQC regularly - Check IQC, follow SOPs, and continue monitoring IQC regularly



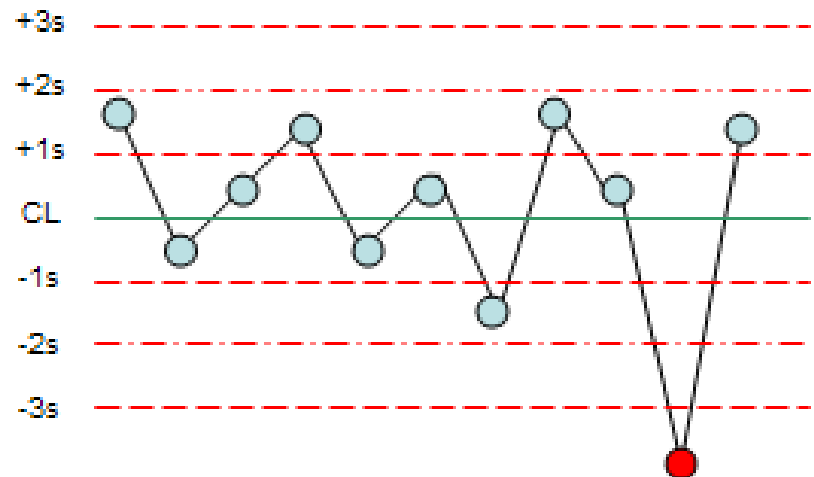
Challenge and Implementation

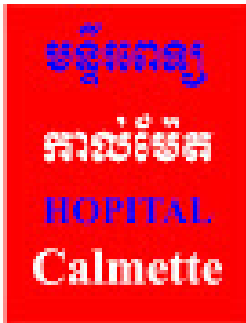
► Challenges:

- Knowledge (staffs and quality officer)
- Analysis SOPs, Equipment SOPs, and Procedure SOPs
- Corrective action

► Implementations:

- Provide a good service with high technology and quality
- Group discussion
- Training staffs weekly
- Working with SOPs
- IQC with LJ chart
- Maintenance

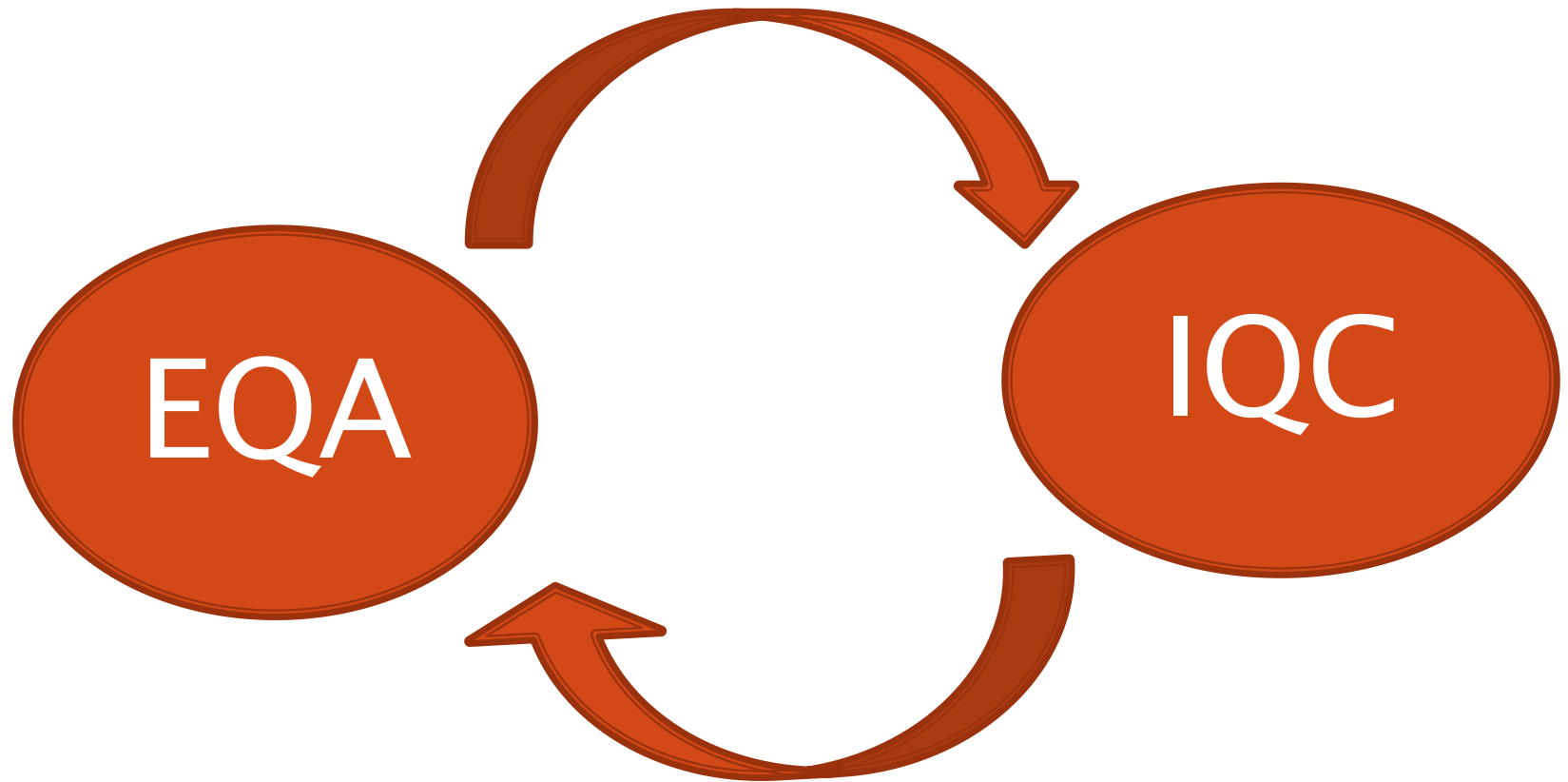




Benefit of QA activity

- ▶ Accurate result for patient
- ▶ True diagnosis -> true treatment
- ▶ Accurate data for Ministry of health -prevention of diseases.
- ▶ All patients can receive the reliable test results at any time and anywhere

We need the quality control materials for hematology testing!



The corrective action
(report) and keep the
accuracy

