

# **Quality Control**

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**Laboratory Management and Quality Assurance**

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# Quality control

Each laboratory system for recognizing and minimizing analytic errors –or it describe the steps taken by the laboratory to ensure that tests are performed correctly.

- There are some methods used in quality control and according to these it divides in to:-
  - i. Internal quality control.
  - ii. External quality control.

- **Internal quality control**

Achieved by lab it self

# **External quality control**

Such a system of checking using an organization outside the lab .must never be a substitute for internal quality control because it can only assess past performance when test results have already been reported and acted on.

# Comparison between Quality Assurance and Quality Control

	QA	QC
<b>Focus on</b>	On preventing errors.	On identifying errors
<b>Goal</b>	To improve development and test processes so that errors do not arise when the laboratory test is being performed.	To identify errors after a laboratory test is being performed and before it's released.

# **Analytical Errors**

# **1/ Errors of bias**

**(Inaccuracy - Systematic - Regular).**

- Checked by control sera . Are include :-
  - a. Un satisfactory reagent or STD (preparation – storage –impure –expired ).
  - b. In correct calibration .
  - c. In correct wave length .
  - d. Poorly written procedure.



## **2/ Errors of scatter**

**(Imprecision – Random -Irregular)**

- a. Faulty technique (pipetting – mixing – incubation).
- b. Dirty tubes, pipettes, glass ware.
- c. Heavy work load.
- d. Low work load.

- e. Fluctuating of electricity and temperature.
- f. Finger spot on cuvette and air bubbles .
- g. Incomplete removal of interfering substances  
.(such as RBCs).