Hematology Analyzer

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Overview

What is it?

It is a piece of medical gear that is frequently utilized in hospitals and labs to perform tests on blood samples.

frequently the first thing a doctor asks for when trying to establish whether the patient is healthy or not.

Is essential for:

- research labs
- zoos and veterinarians

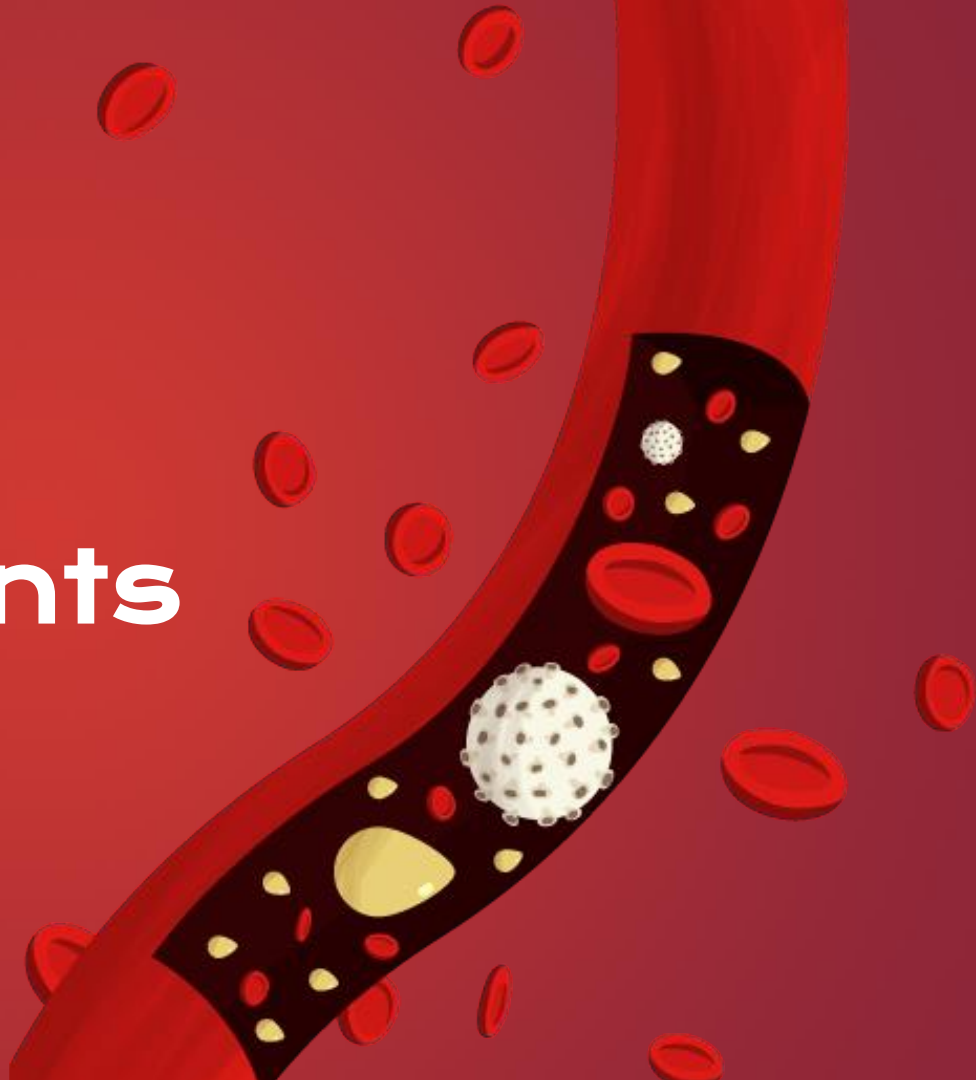
What does it do?

Hematology analyzers are used to run tests on blood samples, so they do:

1. white blood cell counts
2. complete blood counts
3. coagulation tests

02

Measurements



Measurements done

blood cells
“Red & White”

Hemoglobin

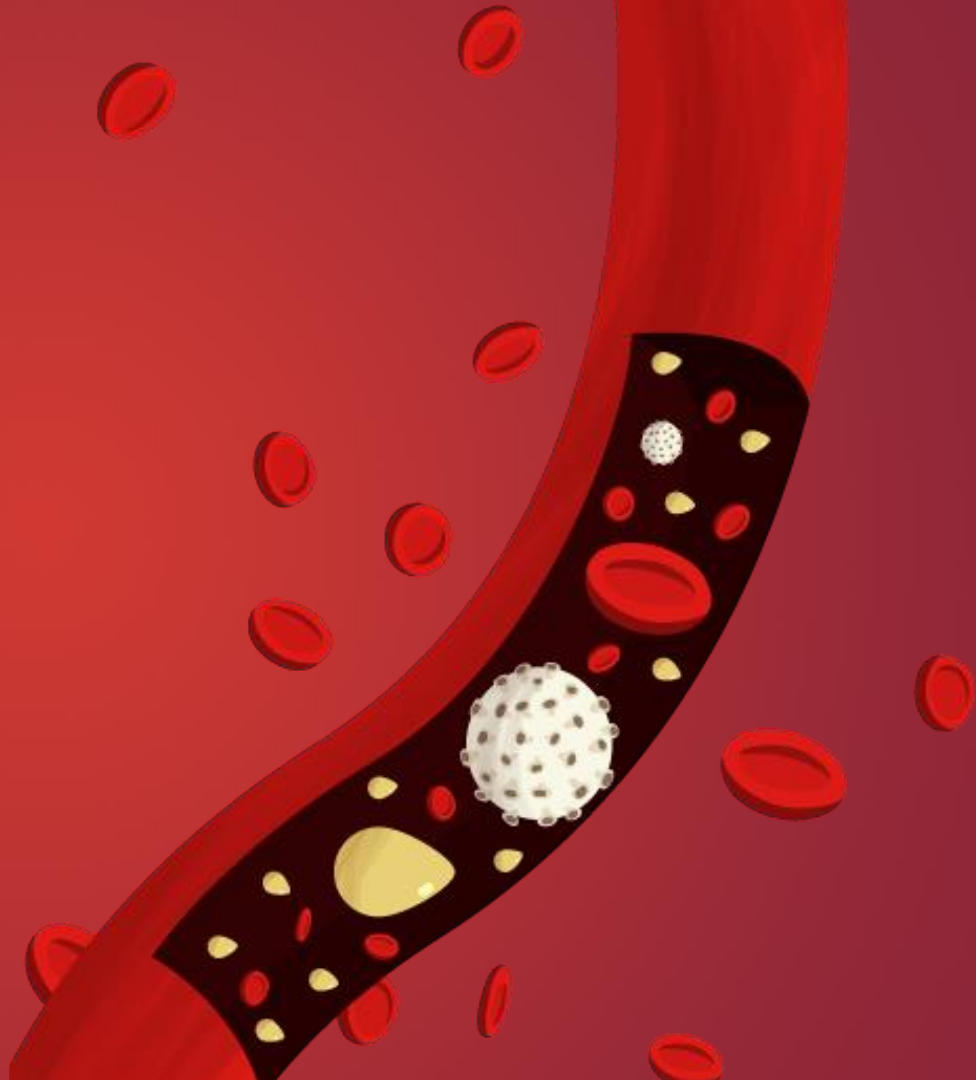
Platelet
counts

Other analyses

- RBC distribution width
- Mean corpuscular hemoglobin
- Platelet distribution width
- Platelet mean volume
- Platelet criteria

03

Common Errors

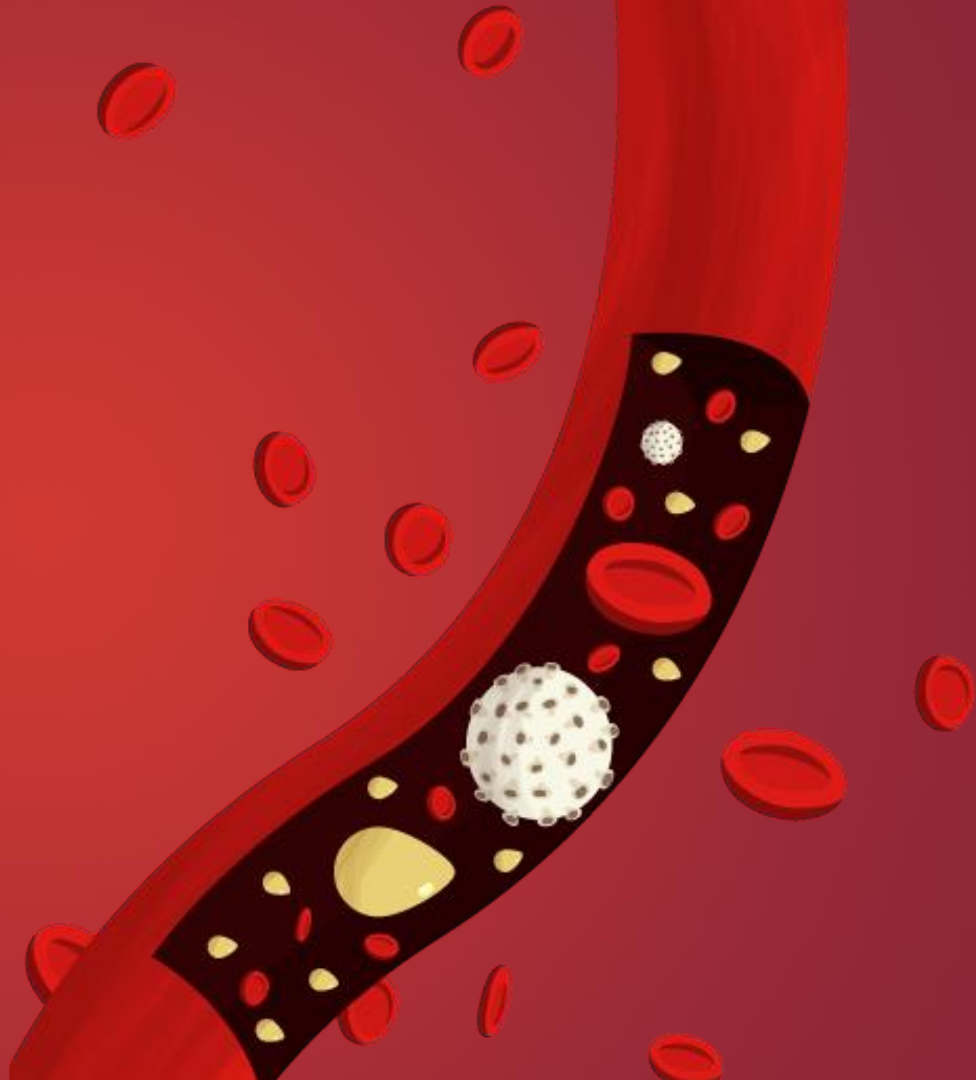


This is a table with estimated proportions of errors in the phases of the total testing process (TTP):

TTP phase	Examples of error	Estimated proportion of errors
Pre-preanalytical	Test ordering, patient identification, patient preparation, sample collection, sample quality, transportation, storage	**46%-68%**
Preanalytical	Sample sorting, centrifugation, labelling, separation	**3%-5%**
Analytical	Sample analysis	**7%-13%**
Postanalytical	Validation, interpretation, turnaround time, critical value reporting	**13%-20%**
Post-postanalytical	Interpretation, delayed reaction, lack of follow-up or referral	**25%-46%**

04

Factors and types



Factors

Accuracy level

Lab space

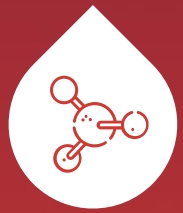
Warranty period

Cost effectiveness

Noise-free operation

Available accessories and reagents

Types



3-Part Differential Cell Counter

- find the size and volume of the cell
- differentiate between 3 types of WBC's, neutrophils and lymphocytes

5-Part Differential Cell Counter:

- determine the granularity, diameter, and inner complexity of the cells
- It is more expensive than the first type

THANKS

Do you have any questions ?

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