

<b>Department:</b>	Laboratory and Blood Bank ( Haematology)		
<b>Document:</b>	Internal Policy and Procedure		
<b>Title:</b>	Prothrombin Time (PT)[Automated Method]		
<b>Applies To:</b>	All Laboratory Staff		
<b>Preparation Date:</b>	January 06, 2025	<b>Index No:</b>	LB-IPP-046
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## 1. PURPOSE

- 1.1 To establish system & set responsibilities for work.
- 1.2 To elucidate the procedure for Prothrombin Time (PT) measurement.

## 2. DEFINITONS:

N/A

## 3. POLICY:

- 3.1 Measuring the extrinsic pathway of the coagulation system

## 4. PROCEDURE:

### 4.1 Principle

- 4.1.1 The one stage PT measures the clotting time of tested plasma after the addition of thromboplastin reagent containing calcium chloride.
- 4.1.2 Use freshly collected blood taken into citrated tube in the ratio 9 parts blood to 1-part anticoagulant.

### 4.2 Procedure:

#### 4.2.1 CALIBRATION:

The pre-calibrated PT values are identically for all vials of each lot to enter the calibration data on the analyzer scan the barcode printed on the assay value insert across the instrument barcode reader

The calibration curve of PT can be examined on the screen of the analyzer in the calibration menu.

#### 4.2.2 PATIENT PLASMAS:

Patient plasmas are tested undiluted. They are loaded in the instrument then select the tests to be performed

#### 4.2.3 QUALITY CONTROL:

It necessary to run controls in order to ensure accuracy and reproducibility of the result. Two different levels of control should be used. Prepare the control reagent and scan the information contained in the barcode printed on their respective assay value insert to the Stago. They used undiluted

#### 4.2.4 ASSAY:

The PT of plasma to be tested is automatically carried out by the analyzer as soon as the sampled have been loaded.

## 5. MATERIALS AND EQUIPMENT:

- 5.1 Automated Coagulometer (STAGO COMPACT)

## 6. RESPONSIBILITIES:

6.1 The assigned technician

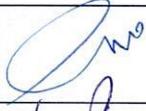
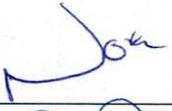
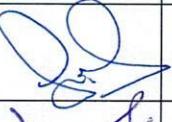
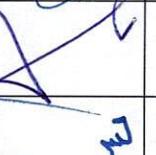
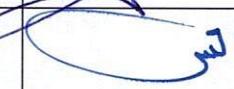
## 7 APPENDICES:

7.1 Reagent Preparation And Storage

## 8 REFERENCES:

- 8.1 Loeliger,E,A Van Den Besselaar A,M,H,P And Reliability and Clinical Impact of the Prothrombin Time In
- 8.2 W.Haemostasis And Thrombosis Basic Principles and Clinical Practices .J.B Lippincott 1994
- 8.3 Oral anticoagulant control F.K Schattauer Verlag GmbH, 1985. 8.2. Colman R.W.Hirsh J, Marder V.J.Salzman

## 9. APPROVALS:

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## Appendix 7.1

### REAGENT PREPARATION AND STORAGE

Reagents	Preparation	Stability after reconstitution/ opening on board STA Compact®	Storage position on STA Compact®
<b>STA® - CaCl<sub>2</sub> 0.025 M</b>	15-ml vial. Allow the solution to stand at room temperature (18°-25 °C) for 30 minutes before use.	3 days	Product drawer
<b>Reagent 1 (STA® - Néoplastine® Cl<sup>-</sup> or )</b>	Transfer the contents of a vial of Reagent 2 (Solvent) of the same kit. Allow the reconstituted reagent to stand at room temperature (18°-25 °C) for 30 minutes. Gently homogenize. Then, place a stirring-bar, a new STA® - Reducer and the perforated cap.*	48 hours	Area with magnetic stirring-motor Product drawer
<b>Reagent 2 (Solvent)</b>	5-ml vial (REF 00605) or 10-ml vial (REF 00666), ready for use.	—	—
<b>STA® - Coag Control N STA® - Coag Control P</b>	Add exactly 1 ml of distilled water. Allow the solution to stand at room temperature (18°-25 °C) for 30 minutes. Then, homogenize.	8 hours	Product drawer