BIOGENIX

# POLICY PROCEDURE FOR BLOOD SAMPLE HANDLING, PREPARATION AND STORAGE

| | NAME | DESIGNATION | SIGNATURE | DATE |
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| **Prepared by** | Ms Preety Raheja | Quality Manager |  | 30/06/2020 |
| **Reviewed by** | Dr Bhagyashree Thakre | Deputy Lab Director |  | 01/07/2020 |
| **Approved by** | Dr Sally Abdulla Ibrahim | Lab Director |  | 01/07/2020 |

# TABLE OF CONTENT

## 1. REVISION HISTORY

| # | Version | Date | Changes Made by | Reason for Changes | Clause Changed |
|---|---|---|---|---|---|
| 1 | 1.0 | | | | |
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## 3. POLICY STATEMENT

3.1 The Blood sample handling, preparation and storage has to be done as per the following procedure.

## 4. PURPOSE

4.1 This procedure is in accordance with ISO15189:2012 clause 5.4.7. Biogenix laboratory follows this procedure of Sample handling, preparation and storage to assure that the samples which are coming from the outsides centers /clinicians/labs, can be handled, prepared and store following proper conditions. This procedure explains the activities involved in the preparation and storage of the sample to provide efficient services. The integrity of the sample is not to be compromised at any stage.

## 5. SCOPE

5.1 The scope this procedure extends to Sample preparation, handling and Storage.
5.2 Target Audience: All BIOGENIX Laboratory staff

## 6. DEFINITIONS

6.1 Processing: Preparing the specimen for analysis.
6.2 Retention: To keep the samples in favorable condition to avoid deterioration

## 7. ACRONYMS

7.1 QNS: quantity not sufficient

## 8. RESPONSIBILITIES

8.1 All BIOGENIX Laboratory **Technical staff**

## 9. PROCEDURE

9.1 **General Precautions:**

- 9.1.1 Treat all specimens as possibly infectious.
- 9.1.2 Wear laboratory coat.
- 9.1.3 Gloves are worn when handling any specimens.
- 9.1.4 Gloves are changed when contaminated and hands to be washed/sanitized after removal of gloves.
- 9.1.5 Masks and Facial protection devices are used when there is a possibility of specimen splashing.
- 9.1.6 Follow PPE procedure
- 9.1.7 Laboratory surface (benches) is always being kept clean.
- 9.1.8 Dispose off the bio hazard waste carefully (special bags).
- 9.1.9 Sharps are disposed in their special containers.

9.2 Specimen Preparation:

9.2.1 Whole Blood Specimens:

Whole blood specimens are used for HbA1C and CBC.

9.2.2 Plasma / Serum:

9.2.2.1 For tests requiring plasma: the blood is centrifuged at 3500rpm for 15 minutes. Separate the plasma from the cells within 2 hours from collection.

9.2.2.2 For tests requiring serum: serum specimens are allowed to clot for 10 minutes in an upright position prior to centrifugation. Centrifugation is done at 3,500rpm for 15minutes to separate the serum from cells.

9.2.2.3 Anti-coagulated specimens are centrifuged immediately upon arrival to the laboratory. Collection tube stoppers are not being removed prior to centrifugation. Centrifuge for 15 minutes at 3500rpm.

9.2.2.4 Blood collection tubes containing gel separators are widely used and they are the most convenient and have the advantages that the tubes does not need to be opened prior to centrifugation, processing time is shortened, aerosols are avoided and the closed system prevents evaporation and creates a safe barrier between serum and cells.

9.3 Urine Sample:

9.3.1 After checking all the demographic details samples are labeled with bar-coded sticker.

9.3.2 Samples are checked if they are for routine microscopy or for culture sensitivity.

9.3.3 If for culture sensitivity samples are kept for microbiology processing.

9.3.4 If for routine microscopy transfer approx 10ml of sample after mixing in a centrifuge tube and process as urine processing policy.

9.4 Blood Specimens Storage and Stability:

9.4.1 Generally, serum or plasma are separated within 2 hours. If analysis is delayed keep at 2-80C for up to one week. For longer periods, keep frozen. Serum or plasma samples are not repeatedly freeze and thaw.

9.4.2 Care is taken when dealing with some enzymes that need to be frozen as soon as possible.

9.4.3 The samples are retained observing proper storage conditions, so that integrity of the samples is not compromised.

9.5 Urine sample storage and stability:

Urine samples: are kept in refrigerator between 2-8◦C if processing is delayed for more than 1hr.

9.5.1 After the samples are properly labeled and centrifuged as per the requirement sample is ready to process

## 10. CROSS REFERENCE

10.1 ISO 15189 :2012 Medical laboratories – Requirements for Quality and Competence.;

10.2 DoH standard for clinical laboratories.

## 11. RELEVANT DOCUMENTS & RECORDS

10.3 BG/PP/INF/001 PPE Procedure AND Procedure