
SOP: Urine Sample Collection

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1. Purpose

This SOP is used to describe the urine collection procedure for storage in the SickleInAfrica biorepository. This SOP aims to optimize the collection procedure and reduce the risk of infection to healthcare personnel. All urine samples will be collected by a registered and trained nurse or sister or laboratory technologist.

2. Background

Urine samples will be collected from participants to perform a urine analysis, which checks the appearance, pH, concentration and biochemical content of urine. The data collected will be used to inform the renal function of sickle cell disease patients and a group of controls

3. Scope

To present the procedure for collecting and handling urine samples from study participants.

4. Equipment and reagents

- a. Sterile screw-top container
- b. Gloves
- c. disinfectant

5. Responsibilities

The registered, trained nurse, sister or laboratory technologist is responsible for collecting specimens and that the vials are labeled accordingly. All inventory should be maintained by the researcher.

6. Procedure

- a. Provide one sterile screw-top container to each participant
- b. Practice good hygiene and wash hands and wear gloves
- c. Identify the participant prior to collecting the urine sample.
- d. Instruct the patient to collect midstream urine
- e. Collect containers with urine samples from the participants and ensure sufficient sample was provided
- f. Label the containers with the participant code

- g. Label cryotubes
- h. Aliquot urine supernatant into cryotubes.
- i. Store frozen at -80°C.
- j. Place containers in the freezer until processing to the biorepository

7. Transport

- Samples should always be shipped together with the relevant sample data worksheet.
- To ensure safe transit, samples should be placed in appropriate containers (respect triple packaging)
- Samples should be shipped in suitable (insulated foam) containers, packed in sufficient dry ice to keep them frozen for the duration of the trip.

8. Storage

- Store the cryovials immediately at -80 °C.

9. References

- [https://www.encals.eu/wp-content/uploads/2016/09/2013-12-18-SOP-Blood-urine-sample-collection SOPHIA.pdf](https://www.encals.eu/wp-content/uploads/2016/09/2013-12-18-SOP-Blood-urine-sample-collection_SOPHIA.pdf)
- [https://thepnrr.org/docs/BIO SOP.pdf](https://thepnrr.org/docs/BIO_SOP.pdf)

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