Standard Operating Procedures
Clinical and Translational Research Center

Title:	Blood Glucose Monitoring		
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Number of Pages:	1 of 3	Revised Date:	

Purpose: Obtaining accurate blood glucose measurement is an essential part of the research procedure and the successful management of diabetes. The standardization of monitoring blood glucose may vary slightly in technique widely due to the type of meter used to measure blood glucose. To minimize variability due to known exogenous factors we aim to adhere to the following procedures.

Procedure: IRB approved protocols and participant safety dictate the necessity for performing blood glucose measurements using a glucose meter and results are documented in the participant's chart. Identify the correct participant by asking the participant to state their name and date of birth and compare to information documented in chart prior to initiating any procedures.

Glucose Parameters:

Non-Diabetics

- Diabetes fasting blood glucose level ≤ 180 mg/dl
- Postprandial (2 hours after a meal) blood glucose level would be ≤ 140 mg/dl.

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Diabetics

- Fasting (nothing by mouth ≥ 8hours) blood glucose level ≤100 mg/dl.
- Postprandial (2 hours after a meal) blood glucose level < 180mg/dl
- Hypoglycemia(low blood sugar) ≤ 50mg/dl

Obtaining Blood Glucose:
Note: All consideration and appreciation should be given to manufacturer's instruction as blood glucose monitors may vary.

1. Have participant wash hands with soap and warm water.

2. Wash hands with soap and warm water. Use appropriate personal protective equipment (PPE).

3. Choose a clean, dry work surface and make sure you have the glucose meter, unused sterile lancet and test strip.

4. Press power button. When the code number appears, it must match the code number on the bottle of test strips.

5. Use of lancet:
   - Insert a new, sterile lancet into lancet holder if applicable.
   - Hold the lancet firmly and gently twist and pull off the cap.

6. Obtaining a drop of blood:
   - Hold lancet firmly against the side of the finger to engage or press the top of the penlet if applicable.
   - Squeeze the finger gently while holding hand down; knead the palm if blood does not flow easily.

7. Apply a drop of blood to the test strip as directed (read manufacturer's instruction prior to use as test strip insertion and blood application may vary).

8. Note the allotted time interval given for testing as indicated by the digital clock or count down phase on the glucose meter screen

9. The meter displays your result in ≤ 30 seconds.

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10. Press power button to turn off meter.

11. Appropriately dispose of sharps and bio-hazard materials

12. Wash hands.

13. Document result on appropriate form in participant's chart.

14. Report abnormal results to the investigator.

Alerts /Referrals

Alert levels requiring immediate notification of PI/Co-I or his designee to evaluate participant and discharge from CTRC:

- blood glucose level ≤ 50mg/dl
- blood glucose level ≥ 400mg/dl

Emergency Room Referral for symptomatic participants with alert level glucose includes but not limited to the following:

-Shortness of breath
-Nausea and vomiting
-Visual disturbances
-Breath that smells fruity
-Blurriness or loss of good vision quality
-Headache
-Dilated eye pupils

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