

# iMOST-L User Guide

Version 250101A

**Warning!**

Failure to follow instructions could  
cause inaccurate results

## iMOST-L Hematology Analyzer



**iMOST-L**  
Q-Card

## Precautions Before Testing:

- Ensure that the analyzer are used in the proper operating environment (15–30°C).
- Charge the analyzer to greater than 30% battery. System requires 10% battery for the testing.
- Only use the designated Q-Card before its expiration date, and it is intended for single use only.
- Open the Q-Card's sealed pouch only when you are ready to perform the measurement.
- Use the Q-Card immediately after removing it from the pouch.
- Do not touch the surface of the Q-Card.
- Do not attempt to bend, cut, or modify the Q-Card in any way.

# Step-1. Open the Analyzer and Login

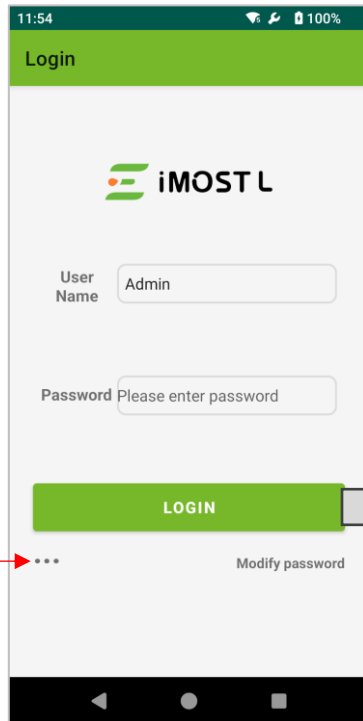
**Warning!** Place the iMOST on a flat, stable surface and do not move it during testing.

## 1.A Power on iMOST System



## 1.B Login and Setup Test Information

(1) Select **User**, Input Password, & **LOGIN**



11:54 100%

Login

iMOST L

User Name: Admin

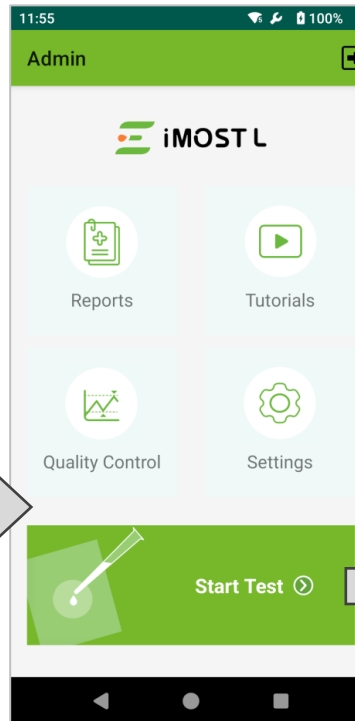
Password: Please enter password

LOGIN

Modify password

Connect WIFI

(2) Click **Start Test**



11:55 100%

Admin

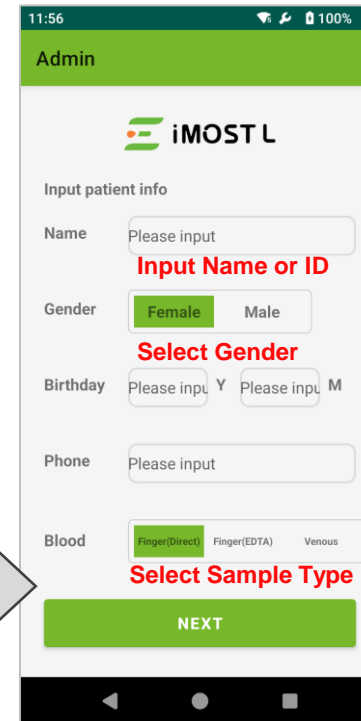
iMOST L

Reports Tutorials

Quality Control Settings

Start Test

(3) Input Name, Gender, Birthday Blood Type, Click **NEXT**



11:56 100%

Admin

iMOST L

Input patient info

Name: Please input

Gender: Female Male

Birthday: Please input Y Please input M

Phone: Please input

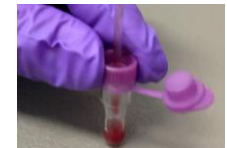
Blood: Finger(Direct) Finger(EDTA) Venous

NEXT

Finger (Direct)



Finger (EDTA)



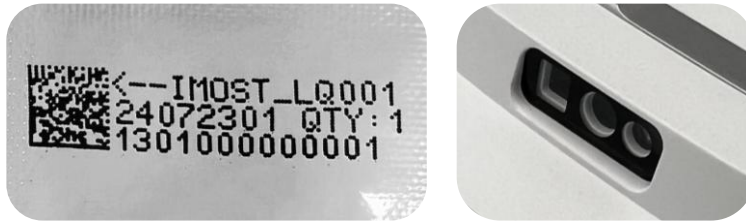
Venous



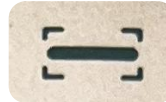
Selecting an inappropriate sample type can lead to errors.

## Step-2. Scan the Q-Card QR Code on Pouch

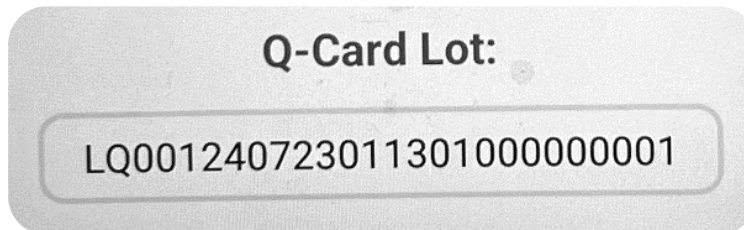
- (1) Align the scanner at the front of the analyzer with the QR code on the Q-Card pouch



- (2) Tap **the scan icon** on the screen or **the scan button** on the top right of the analyzer



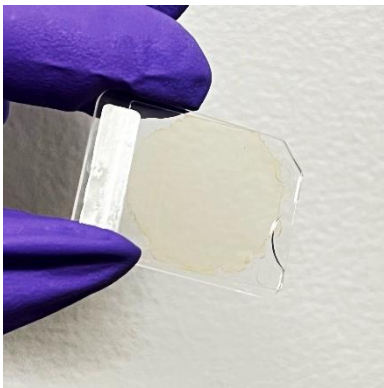
- (3) After the scan is complete, click "Next"



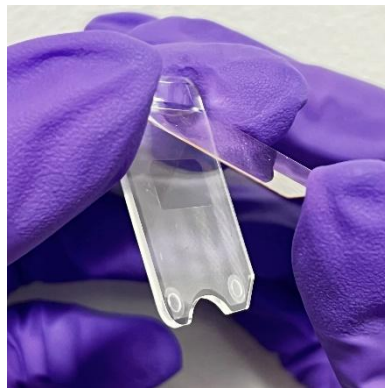
If scanning the barcode is difficult, please enter it manually.

## Step-3. Open and Place the Q-Card

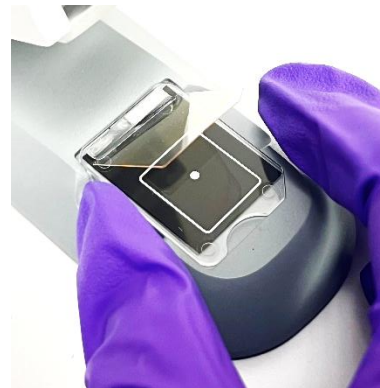
- It is recommended to use the Q-Card immediately after opening.
- The entire process—from blood collection, to preparing the card, to inserting it for testing—should be carried out **continuously**, without pausing or waiting in between. This helps prevent sample evaporation or blood cell coagulation or changes, which could lead to inaccurate or failed test results.



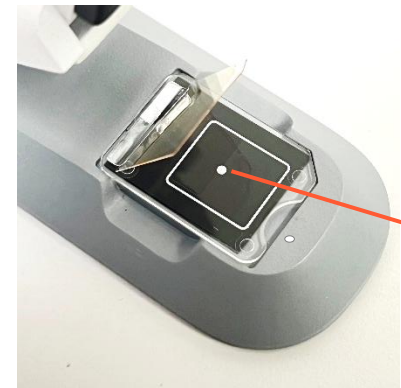
(a) Hold the Q-Card by its sides with two fingers.



(b) Open Q-Card by lifting the thin film of the top plate at the notch.



(c) Hold Q-Card by its sides.



(d) Put Q-Card on and secure it in the “Card Slot” of Presser.

**Blood  
Landing Zone  
(White Spot)**

### Warning!

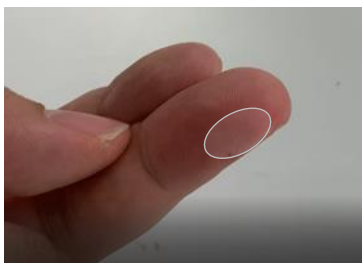
Never touch the inside surfaces of Q-Cards.

## Step-4. Finger Capillary or Venous Blood

### 4.A Finger Prick

(1)

Use middle finger or ring finger. Clean with disinfectant (allow it to dry).



**Warning!**

Warm the hand, if it is cold

(2)

Apply light pressure on the fingertip. Puncture the finger using the **lancet**.



(3)

Wipe away first **2** blood drops with gauze.



(4)

Re-apply light pressure. Collect the blood drop with transfer tube. Do not milk the finger.



Ensure a smooth blood flow during blood collection, avoiding excessive squeezing that could expel interstitial fluid and lead to inaccurate results.

Before collecting the sample, wipe away the first 2–3 drops of blood with gauze or a dry cotton ball. This helps avoid contamination from residual alcohol or other substances on the fingertip.

## Step-4. Finger Capillary or Venous Blood

**Finger (Direct) uses a disposable micro-tube (10  $\mu$ L, without anticoagulant)**

- (1) Ensure that **the blood drop on the finger is large enough** to prevent air bubbles during collection.

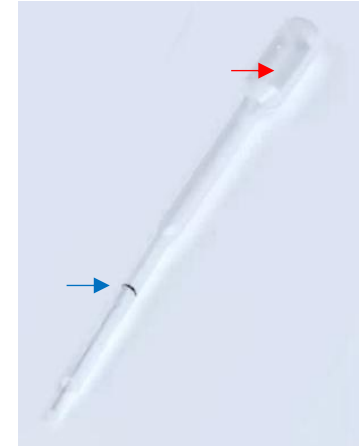


Mung bean size

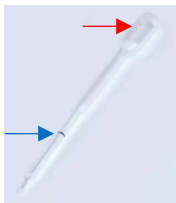
- (2) To collect the blood, touch the tip of the transfer tube or pipette to the blood drop.



Ensure that **the top opening** remains open during the collection process. Collect the blood up to **the indicated line**.



- (3) Dispense the blood onto the "**blood landing zone**" by slowly pressing the plunger of the transfer tube or pipette.



Ensure that **the top opening** is closed during the pressing process.



**Blood  
Landing Zone  
(White Spot)**

If the sample is not applied at the white spot, it may lead to measurement errors.



Leave last bit of blood inside the tube. Stop pushing before all sample is dispensed out.



Do not push air bubble into droplet.



## Step-4. Finger Capillary or Venous Blood

**Finger (EDTA) Using Capillary Collection Tube recommended by Essenlix**

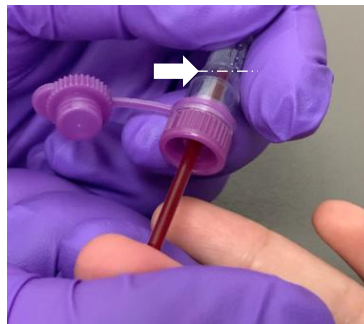
(1)

Keep **Capillary “straw”** horizontal while collecting blood from fingertips  
(Do not lift it in the middle to avoid air bubbles)



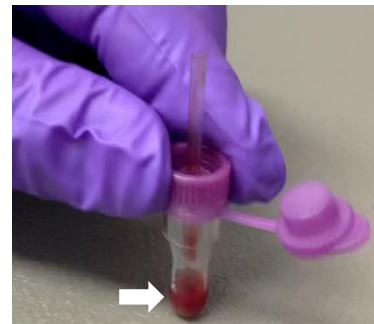
(2)

Until **Capillary “straw”** is full



(3)

Tap downward to allow the blood in **Capillary “straw”** to enter the **Microtube**

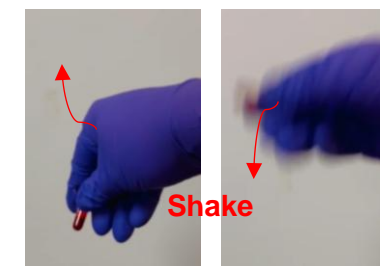
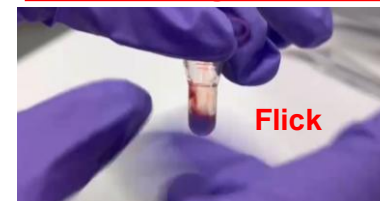


(4)

Discard **Capillary “straw”**



**Flick bottom 10-15 times.  
Shake tube 10 times.  
Before Adding to Q-Cards!**

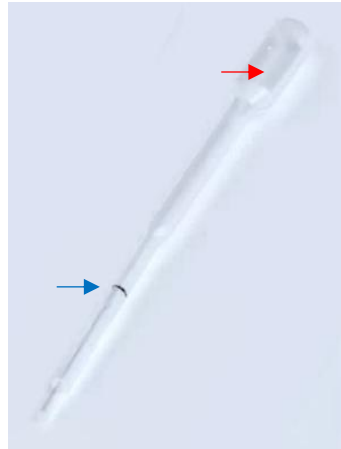


**When using Finger (EDTA) samples:** Use the transfer pipette with an attached pipette tip to draw 10 µL of the sample and add it to the Q-Card.

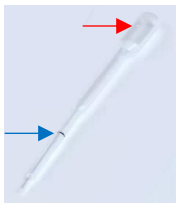
## Step-4. Finger Capillary or Venous Blood

**Finger (EDTA) uses a pipet or disposable micro-tube (10  $\mu$ L, without anticoagulant)**

- (1) Ensure that **the top opening** remains open during the collection process. Collect the blood up to **the indicated line**.



- (2) Dispense the blood onto the **"blood landing zone"** by slowly pressing the plunger of the transfer tube or pipette.



Ensure that **the top opening** is closed during the pressing process.



**Blood  
Landing Zone  
(White Spot)**

If the sample is not applied at the white spot, it may lead to measurement errors.



Leave last bit of blood inside the tube.  
Stop pushing before all sample is dispensed out.



Do not push air bubble into droplet.

## Step-4. Finger Capillary or Venous Blood

### 4.B Venous Blood

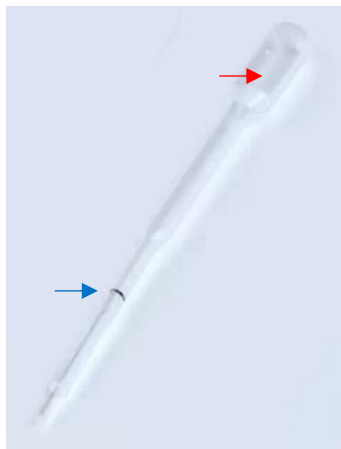
- (1) **Draw the venous blood** into a standard K<sub>2</sub>EDTA tube. (Collected within 8 hours)
- (2) **If the sample was stored in the refrigerator**, leave the samples undisturbed at room temperature for at least 30 min.
- (3) **Mix thoroughly before dropping on Q-Card by:**
  - 3.a Manually and gently inverting the tube 10 - 15 times, **or**
  - 3.b Mixing it using a tube rocker for at least two minutes.

**When using Venous samples:** Use the transfer pipette with an attached pipette tip to draw 10 µL of the sample and add it to the Q-Card.

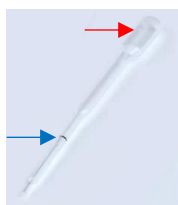
## Step-4. Finger Capillary or Venous Blood

Venous uses a pipet or disposable micro-tube (10  $\mu$ L, without anticoagulant)

- (1) Ensure that **the top opening** remains open during the collection process. Collect the blood up to **the indicated line**.



- (2) Dispense the blood onto the **"blood landing zone"** by slowly pressing the plunger of the transfer tube or pipette.



Ensure that **the top opening** is closed during the pressing process.



**Blood  
Landing Zone  
(White Spot)**

If the sample is not applied at the white spot, it may lead to measurement errors.



Leave last bit of blood inside the tube.  
Stop pushing before all sample is dispensed out.



Do not push air bubble into droplet.

## Step-5. Close the Q-Card

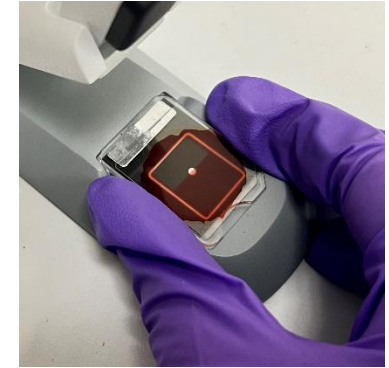
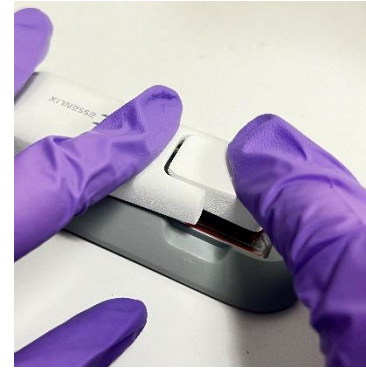
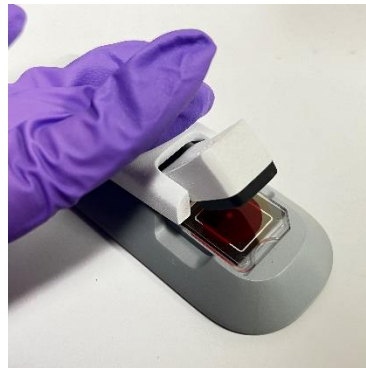


**Immediately** (within 15 sec), smoothly close the card by pressing **the arm at (A)**.

**Press the arm at (A)** gently and smoothly at a rate of ~4 sec from beginning to end until the blood **stops spreading (wait ~2 sec)**.

**Press the front head (B)** against the Q-Card ~3 sec to make sure the Q-card is tightly closed.

**Lift** by holding sides of Q-Card

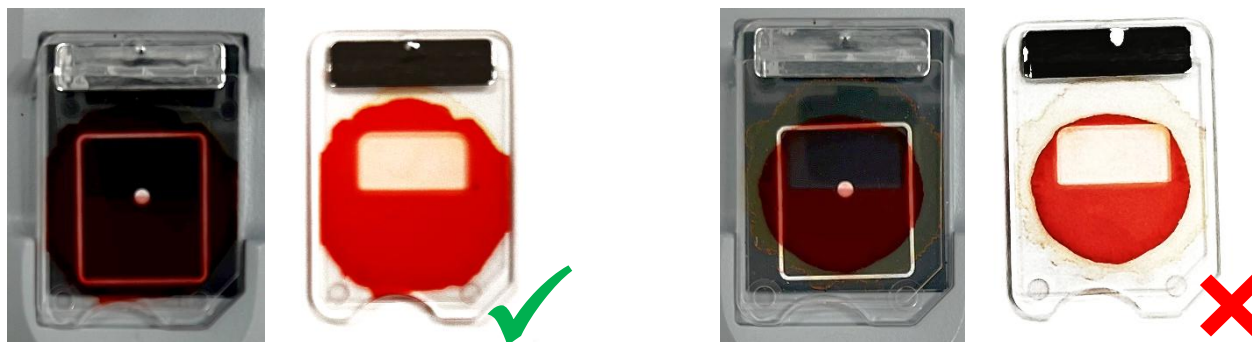


### Warning!

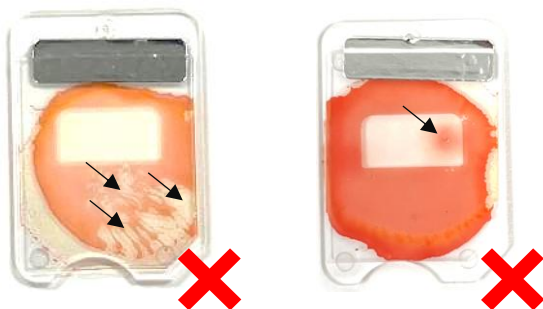
Never reopen the Q-Card before testing. If the Q-Card is accidentally opened, discard the Q-Card and make a new one.

## Step-6. Inspect the Sample in Q-Card

- (1) The blood must cover the white reference square, otherwise discard the Q-Card and make a new one.

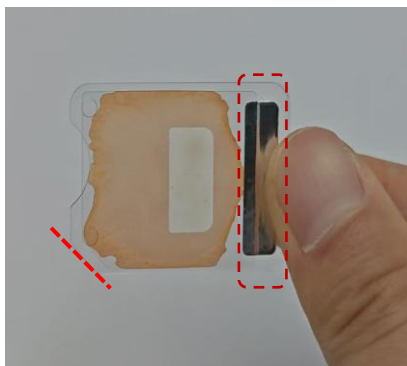


- (2) No large visible air bubble or dust, otherwise discard the Q-Card and make a new one.



## Step-7. Insert the Card into the Analyzer

Hold the card on silver strip, with the **front side** facing you



**Immediately**, gently insert the Q-Card into the analyzer until a **physical stop** is reached.



**Close the cap.**



### Warning!

If the card is accidentally opened during insertion, discard it and prepare a new one.

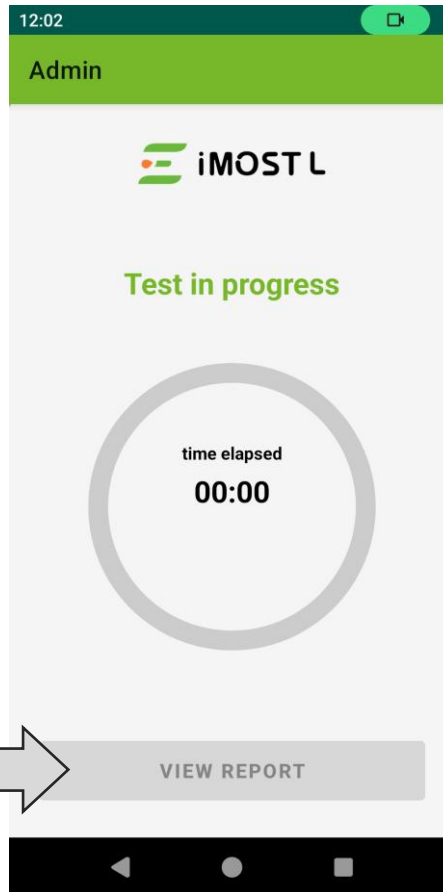


## Step-8. Measure

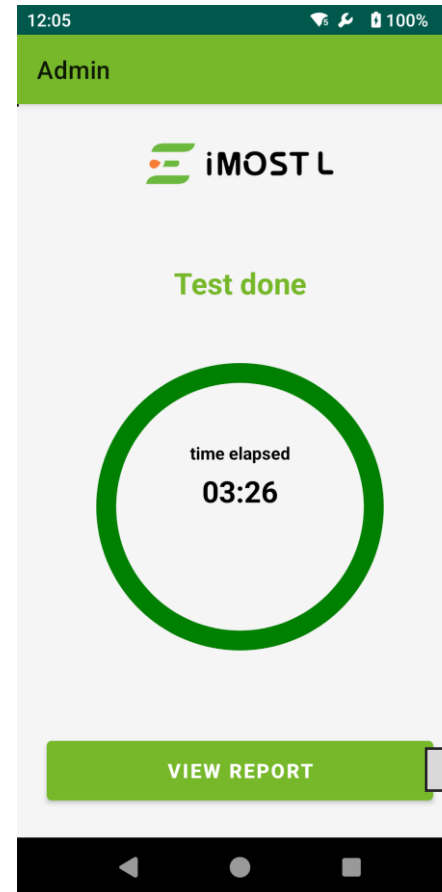
(1) Click **NEXT**



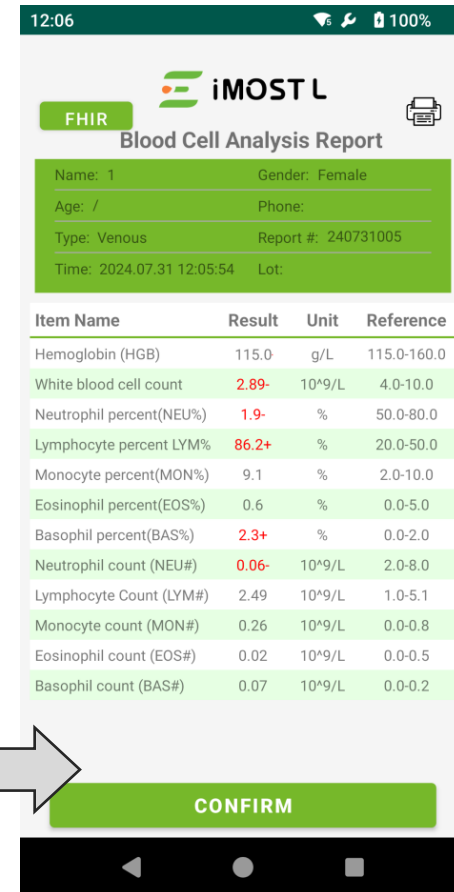
(2) Wait **3.5 min**



(3) Click **VIEW REPORT**



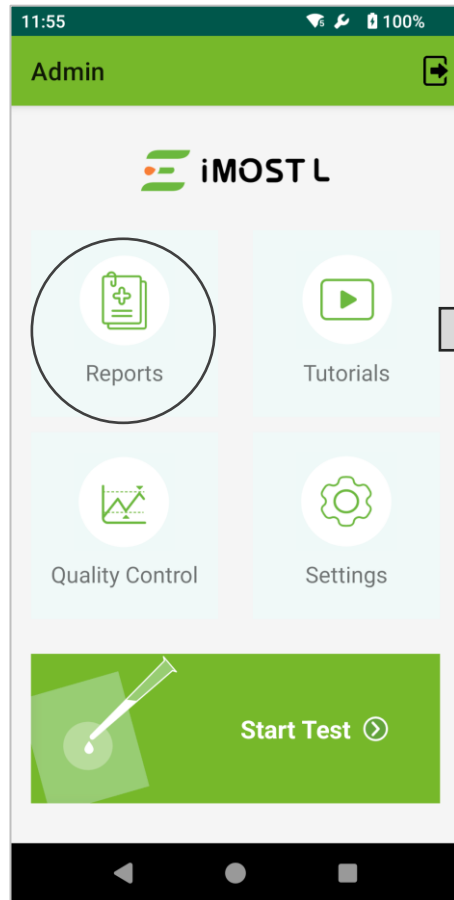
(4) **CONFIRM**



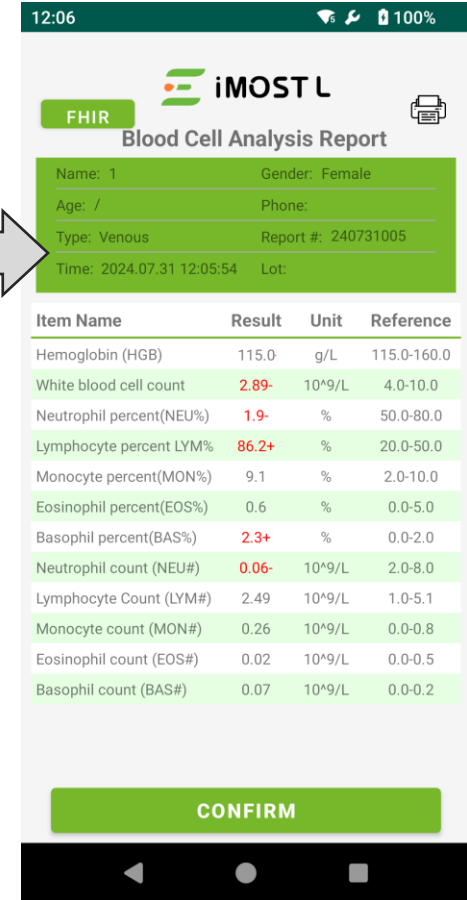


## Step-9. Observe Results

(1) Click **REPORTS**



(2) CLICK **Individual Results**



Long press to delete specific results

## Maintenance

<b>Before Test</b>	Charge the system to greater than <b>30%</b> battery. System requires <b>10%</b> battery for the testing.
<b>After Test</b>	You may choose to clean the exterior surface of the iMOST-L with a disinfectant reagent, as needed. Note: After wiping, remove any residual liquid with a tissue.

## Troubleshooting – Error Messaging and Action Required

Warning/Symbol	Possible Cause	Action
<b>Warning:</b> Q-Card not detected or incorrect Q-Card used.	No Q-Card inserted, incorrect Q-Card inserted, or Q-Card inserted incorrectly.	Please verify that you are using the correct Q-Card and retest.
<b>Warning:</b> Q-Card is not fully inserted.	The Q-Card is not fully inserted into the slot.	Please remove and reinsert the Q-Card until it reaches the physical stop position.
<b>Warning:</b> Insufficient blood sample.	Insufficient blood sample in the Q-Card.	Please refer to the user guide and ensure that the Q-Card contains enough blood.
<b>N/A in certain parameter in “Results”</b>	Certain parameters are rejected due to improper samples, incorrect Q-Cards, or defects on the card.	Use a new Q-Card, repeat the measurement
<b>N/A in certain parameter in “Results” <u>again</u></b>	This sample’s parameter is improper to be tested in iMOST system.	This sample’s parameter is improper to be tested in iMOST system.
<b>Abnormal noise from inside the device</b>	Foreign matter is present inside the device.	Please turn off the power and unplug the device. Check the Q-Card compartment and heat dissipation holes, then remove any foreign matter.
<b>Hardware Error</b>	Hardware Error.	Please retest or use a new Q-Card. If the same error persists, contact customer support.
<b>Warning: Over Temperature Protection</b>	The internal temperature of the iMOST system is exceeding acceptable levels.	Please check the surrounding environment, as well as whether the Q-Card cover and the vent at the bottom of the instrument are blocked.
<b>Long test duration warning</b>	The duration of a single test is longer than usual.	Please retest or use a new Q-Card. If the same error persists, contact customer support.

# Account and Password Record

Please ensure accurate recording of your account and password information and store it in a secure place.

Date: \_\_\_\_\_  
Account: \_\_\_\_\_  
Password: \_\_\_\_\_

Date: \_\_\_\_\_  
Account: \_\_\_\_\_  
Password: \_\_\_\_\_

Date: \_\_\_\_\_  
Account: \_\_\_\_\_  
Password: \_\_\_\_\_

Date: \_\_\_\_\_  
Account: \_\_\_\_\_  
Password: \_\_\_\_\_

Date: \_\_\_\_\_  
Account: \_\_\_\_\_  
Password: \_\_\_\_\_

Date: \_\_\_\_\_  
Account: \_\_\_\_\_  
Password: \_\_\_\_\_