

Operating Procedure for TEG/ROTEM – Factsheet 2

Area of Application

Both devices require a certain level of expertise in order to operate them correctly. Although the devices' technology is similar, there are differences in their set up and initiation processes.

Staff

All staff who have the responsibility for operating the device.

Procedure:

TEG device

If time allows, the patient's details need to be entered onto the computer. If not, this can be entered once the test is running. Select the test required for each channel.

The cup and pin cover need to be located on the carrier. This involves placing the whole assembly into the carrier, sliding the carrier firmly upwards whilst counterbalancing with one hand top of the device. The pin cover is then put firmly into position by depressing the button underneath the carrier. The carrier is then be lowered and the cup seated by pressing on its edge. Sufficient kaolin tubes, calcium chloride and other specific reagents that are required for the tests need to be brought up to room temperature prior to testing. These are stored in a designated refrigerator.

Suitable pipettes and sufficient pipette tips need to be available.

If using a citrated blood sample for the test, calcium chloride needs to be added to the sample cup prior to the addition of the blood sample. If 'whole' blood is used, no calcium chloride is required.

Upon collection of the blood sample, the first 3ml of the blood draw must be discarded.

For kaolin activated analyses, the blood sample is added to the kaolin tube, inverted 5 times, and then the relevant volume of the tube contents delivered into the sample cup.

Once the blood sample has been dispensed into the sample cup the carrier is carefully moved upwards to meet the pin and locked into position with the lever. The test is then commenced.

If the test is to be viewed and/or interpreted in a remote location away from the device, ensure the relevant department/person is aware that the test is in progress.

ROTEM device

The patient's details and the test required for each channel needs to be entered onto the computer. Select the test required for each channel by using the drop down menus.

The cup and pin cover need to be located on the carrier. This involves firmly pushing the whole assembly onto the pin, releasing the cup and placing it in the holder and securing the cup with the MC rod.

The specific reagents that are required for the tests need to be brought up to room temperature prior to testing. These are stored in a designated refrigerator.

Sufficient pipette tips need to be available. The device has an integral pipette.

If using a citrated sample for the test, this can be collected and placed in the warming holder. If 'whole' blood is used, this should be tested as soon as possible after it has been taken.

If using single shot reagents, start the relevant channel on the device, dispense the blood into the relevant reagent vial, wait 5 seconds and then remove and dispense the blood into the sample cup. If using multi shot reagents, start the relevant channel on the device, and dispense the relevant reagents and blood samples according to the on screen prompts.

Once dispensed, move the sample cup assembly into position.

If the test is to be viewed and/or interpreted in a remote location away from the device, ensure the relevant department/person is aware that the test is in progress.