

Important Information on INR Testing

This document has been written to support clinicians in using the Roche CoaguChek or Abbott i-STAT device for INR screening. The device is NOT suitable for snake bite and/or any other coagulopathy testing.

The following is a list of scenarios of when the PoCT device will most likely be utilised:

1. ED presentation for warfarinised patients who present with other comorbidities which have more than likely upset the VK/VKA balance
2. ED presentation for the bleeding patient who is possibly warfarinised
3. ED presentation the stroke patient who is a candidate for thrombolysis
4. Pre-OP assessment of the warfarinised patient

Due to known variation in measurement methods between PoCT and laboratory instruments, adjusting a patient's therapy using a single INR result from one device after comparing to an INR history from a different method(s) can lead to inaccurate or unnecessary patient treatment.

PoCT INR analysers, including the CoaguChek XS Pro/Pro II & i-STAT use a variety of technologies to determine INR on a small volume of blood collected by finger prick. Whilst convenient, these methods differ considerably to the laboratory INR. PoCT INR cannot be used to assess haemostasis (e.g. liver disease, snake envenomation, or other coagulopathy) as would a laboratory INR.

Comparison of PoCT INR and laboratory INR show good correlation to an INR of 4.0. Beyond a PoCT INR of 4.0 it is recommended a laboratory INR be performed.

Recommended PoCT INR Results Management

- The standard INR reference range for non-warfarinised patients is 0.8 – 1.2;
- PoCT INR is not a suitable test for snakebite assessment (NSW Health Policy GL2014_005);
- Comparison of PoCT INR and laboratory INR shows good correlation to an INR of 4.0.

PoCT INR results greater than 4.0 are not validated and a laboratory INR should be performed.

Actions for PoCT INR of >4.0

1. Immediately re-check PoCT INR (see FAQ 2 below).
2. If INR still >4.0, collect blood for laboratory INR.
3. Consult with the patient's Doctor or a Haematologist immediately.

Recommended target INR ranges during warfarin therapy

Indication	Target INR	Range
Deep vein thrombosis or Pulmonary Embolism	2.5	2-3
Non valvular Atrial fibrillation	2.5	2-3
Prosthetic Heart Valve (low risk)	2.5	2-3
Prosthetic Heart Valve (high risk)	3-3.5	3-4
Rheumatic Heart Disease	3-3.5	3-4

Frequently Asked Questions (taken from www.appn.net.au)

1. Which blood drop should I use?

The first drop of blood should be used to achieve an accurate INR result.

If an insufficient sample was collected the first time, a different finger should be used to collect the sample. Care should be taken not to squeeze the finger to obtain the drop of blood.

2. What should I do if I get an unexpected high or low result that doesn't fit the clinical picture?

In the first instance, repeat the test on a fresh sample from another finger. Make sure that the quality control is within the target limits. If the repeated test result is the same, then a sample should be sent to the laboratory for verification. Notify the medical officer immediately.

3. As INR is a ratio, can I expect my PoCT device to agree with the laboratory?

INR results across different methods may vary due to the different thromboplastins used in the assay.

4. How much different should an INR result obtained from my PoCT device be to my laboratory?

When comparing INR results from stable anticoagulated patients, they should be within 0.5 of each other.

5. My patient is on the new anticoagulant Dabigatran. Can I use INR to monitor them?

Routine lab or PoCT INR testing is of no benefit in monitoring Dabigatran drug dose.