TIPS ON USING POCT INR METHODS

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. **How frequently should I measure INR in stable patients?**
   In patients on warfarin who are stable, INR measurement intervals of 4-6 weeks are suggested.

3. **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.

4. **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. Samples tested in 18 different lab instrument/reagent pairs showed a variability of ≤ 2.5 – with the greatest variation found at higher INR levels. PoCT methods may show an analytical difference with your local laboratory.

5. **Can I use different INR methods to monitor my patient on warfarin?**
   When monitoring a patient on warfarin best practice is to use the same method whether it is a laboratory method or a PoCT method. If you change methods you may mistake an analytical variation as a pharmacological variation potentially leading to inappropriate patient management.

6. **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.

7. **When should I verify my PoCT INR result?**
   Results > 4.0 should be repeated by the laboratory. If this isn't possible, repeat the PoCT INR and check quality control results have been within the target range. For PoCT > 8.0 a venous sample should be sent to the lab for

verification but appropriate treatment should be commenced.

8. **How much should the INR increase or decrease before changing the warfarin dose?**
   INR results can vary in patients on stable warfarin due to:
   - Analytical variation
   - Within-subject biological variation

   Critical difference (CD) is the difference between 2 INR results which cannot be explained by analytical or within-subject variation. The CD is considered to represent change due to pharmacological effect of anticoagulation.

   An INR has to increase or decrease by 25% to be sure with 95% probability that the change is a CD resulting from a pharmacological effect of anticoagulation.

   eg. If target INR is 2.5, dose should not be changed unless it is < 1.9 or >3.1

9. **My patient is on one of the new oral anticoagulants (NOACs) i.e Dabigatran, Apixaban, Rivaroxaban. Can I use INR to monitor them?**
   Routine lab or PoCT INR testing is of no benefit in monitoring the NOACs drug dose.