

TEST AND EQUIPMENT EVALUATION, A PRACTICAL APPROACH

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There are many coagulation analysers and accompanying reagents commercially available. Which analyser and reagent combination is suitable for a laboratory depends mainly on the patient population, clinical needs, and the number of samples that are to be analysed. As for the evaluation of the analyser, each laboratory can subject new systems to a thorough evaluation according to CLSI guidelines. However, this is both costly and time consuming. If one laboratory performs an extensive evaluation of an analyser and reagents, other laboratories can benefit from the findings and perform only the necessary tests before using the instrument for patient care or research purposes.

The choice of reagents, especially those for the screening tests aPTT and PT, should not be taken lightly. Reagents can differ substantially in their sensitivity to factor deficiencies, heparin or oral anticoagulation therapy and the presence of Lupus anticoagulant. This implies that laboratory personnel as well as the clinicians who request the test and use the results for their patient care should be informed about the properties of the reagents used by the laboratory. Also, a change in reference values and/or therapeutic range of for instance heparin therapy is not desirable, because in case this is not extremely well communicated to and realised by the clinicians, misinterpretation of the results may lead to severe situations for a patient who will be erroneously treated and be at risk of either bleeding or thrombotic complications.

In this presentation several results of analyser and reagent evaluations will be shown.