## **Supplementary**

#### **Contents**

		Page
Scope		4
	ve	4
Termin	ology	5
1.0.	Introduction	6
2.0.	Aims of EQAS Program	8
3.0.	Quality Aspects of EQAS Program	8
4.0.	Authority of EQAS Program.	8
4.1.	Educational EQAS.	9
4.2.	Non-sanctioned EQAS.	9
4.3.	Sanctioned EQAS	9
5.0.	EQAS Process	9
5.1.	Program Plan	10
5.2.	Internal Structure of EQAS Organization	11
5.2.1	. Personnel	11
5.2.2	. Equipment and Space	12
6.0	Participant Registration	13
7.0.	Decision on Analytes to Provide	13
7.1.	Process to determine EQAS Program and Analytes	14
8.0.	Initial (Yearly) Process of the EQA Scheme	15
9.0.	Number of Analytes per Distribution	15
10.0.	Sample Type, Production and Distribution	16
10.1.	Sample Type	16
10.2.	Sample Production	17
10.3.	Sample Distribution	18
11.0.	Time Frame for Completion of Testing	19
12.0.	Data Collection and Data Entry	19
13.0.	Statistical Analysis of Data	21
14.0.	Criteria for Result Acceptance	22
15.0.	Final Report	23
16.0.	Erroneous Result Investigation.	25
17.0.	References	25

## Guidance for the Establishment, Implementation and Performance for Proficiency Testing Programs

#### Scope

Thrombosis and hemostasis testing is one of the most difficult areas of pathology testing for obtaining accurate results. Coagulation testing is difficult because of a number of factors. There is variability in the pre-analytical, analytical and post-analytical processes, variability of reagents, differences in reference intervals, and arbitrary expression of units. With these shortcomings, attempting to compare patient results is sometimes close to impossible. Because of this, it is extremely important that a good External Quality Assurance Scheme (EQAS) be in-place to evaluate the assays and analytes of the coagulation laboratory.

The objective of this document is to outline the major requirements of an EQAS for thrombosis and hemostasis testing. In this document, the establishment of EQAS, the major components necessary for the program, the basic methods to evaluate data and the reporting of results will be discussed. Since thrombosis and hemostasis testing is unique, the differences associated with thrombosis and hemostasis testing will be highlighted.

### **Objectives:**

- \* To provide guidance to ensure adequate planning for the EQAS program
- \* Outline the process for providing an EQAS service
- \* Assess the quality of the EQAS system
- \* Provide the components for running an EQAS service
- \* Provide information necessary for the report to participants

# **Terminology**

**Quality Assurance:** the maintenance of a desired level of quality in a service or product, especially by means of attention to every stage of the process of delivery or production.

Quality Control (QC): The process through which a laboratory seeks to ensure that test result quality is maintained or improved with reduced or zero errors. QC requires the laboratory to create an environment in which all aspects of the laboratory strives for perfection.

**Quality Assessment:** An evaluation of the extent to which the laboratory's design and management are able to prevent systematic errors and biases.

**Regulatory Agency:** Government body formed or mandated under the terms of a legislative act (statute) to ensure compliance with the provisions of the act, and in carrying out its purpose.

**EQAS Organization:** An organization either mandated by the regulatory agency or part of the regulatory agency to provide an external quality assessment program for clinical laboratories.