

# Plan and Strategy for Implementation of Regional ICSH Activities

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## **Introduction**

The International Council for Standardization in Hematology (ICSH) is organized to promote the development of international standards to achieve best practice and therefore international harmonisation of results in hematology analysis. Standards relate to specifications for biological and chemical reagents or reference preparations, to reference methods or reference procedures, to systems of nomenclature and classification, to operating methods, controls and calibrators for equipment and test procedures, and other relevant matters.

The ICSH is an international, nonprofit, and non-governmental organization devoted to standardization in hematology, and its activities are supported on a voluntary basis by the membership. The organization is the coordinating committee of representatives from national and/or international societies of hematology, clinical pathology and related areas, with which a relationship has been established. ICSH is recognised by the WHO as an official non-governmental organisation (NGO). ICSH is composed of a General Assembly, a Managing Board, a Secretariat, Expert Panels, Standing Committees, Task Forces, and Working Groups. Each Expert Panel focuses on special subjects requiring standardization. The end result is a written standard that has been subjected to a consensus procedure, which is ultimately published in the peer-reviewed literature. Some of those standards have been released as cooperative works with the World Health Organization (WHO) and National Committee for Clinical Laboratory Standards in the USA (NCCLS). ICSH Standards define selected and reference procedures for hematological testing and are thus important for routine laboratories.

## **Current ICSH activities**

ICSH now has a number of Expert Panels covering a wide range of hematological topics: Cytometry, Hemoglobinometry, Vitamin B12 and Folate, Iron, Diagnostic Tests with Radionuclides, Serology, Abnormal Hemoglobins, Stains and Staining Methods, Cyto-chemistry, Thrombosis and Hemostasis, Platelet Function Studies, Leukemia and Lymphoma, Blood Rheology and Granulocyte Function. An Expert Panel in Molecular Biology is being set up. An Expert Panel is appointed to develop standards for a specific area. When such a Panel is appointed to produce a specific standard, the Chairperson of the Panel and the liaison representative from the Managing Board will confer on the approach to be followed and establish a schedule for completion of the proposed standard. The Panel should have appropriate representation from professional, industrial and government-

tal organizations. The work of ICSH is based on consensus. It is the responsibility of each Panel Chairperson to organise his/her committee and to follow the established rules of procedure for the development of the standard. International standards may be pursued in collaboration with other standardising bodies such as the WHO, the International Standards Organization (ISO), the International Society of Hematology (ISH), the Scientific and Standards Committees of the International Society on Thrombosis and Hemostasis (SSC-ISTH), and other organizations.

The performance shown by recent types of blood cell analyzer is one of the successes arising from ICSH activities. All of coefficients of variation for red cell count, hemoglobin, and hematocrit now are less than 3% in national external quality assessment schemes. All analyzers are manufactured on the basis of ICSH standards and provide accurate and precise data. ICSH has established a protocol for the evaluation of equipment. Material standards and method standards are equally important to achieve reliable laboratory measurement. ICSH prepares an international biological hemoglobin standard for WHO, which is available to national health authorities and to manufacturers. The FAB (French-American-British) classification is frequently used in the diagnosis of acute leukemia and myelodysplastic syndromes. To analyze cell types, ICSH-defined histochemical staining methods are widely used. Extensive work by ICSH in collaboration with ISTH and WHO has led to recommendations for a standardized method for performing the prothrombin time estimation using the INR (International Normalized Ratio), which should markedly improve the reliability of the procedure.

## **Plan for ICSH regionalization in Asia**

ICSH standards are very useful for clinicians, laboratory staff and manufacturers, but most of these standards are for medical laboratory practice. Some medical laboratories in Asia use sophisticated analyzers while others use only simple photometers for hemoglobinometry and glass counting chambers for enumeration of red cells, white cells, and platelets. Compared with western countries, the economic situation in Asia is not so strong, having declined recently, which impacts the provision of local health care. These local effects can make the implementation of ICSH standards difficult if not impossible. Testing methods and measurement results seem to be different, but so far no international external quality surveillance has been conducted among Asian countries. Reliability and decision levels for laboratory data are method specific, but this is not clearly documented in many Asian countries. As a result, the 1998 General As-

sembly of ICSH in Amsterdam adopted the plan for regionalization which will divide the world into five regions, each with its own management structure linked to the ICSH central Managing Board and Secretariat. Following this decision, many doctors and scientists willingly joined discussions on reorganization and they are actively working on the structuring process. The 1st Colloquium for Standardization in Laboratory Medicine was held on 19th-20th Feb, 1999 in Jakarta, Indonesia. Representatives from Indonesia, Japan, Korea, Malaysia, Thailand, and the Philippines joined this meeting. Following the meeting, they agreed that further efforts were required.

### **Conclusion**

People, wherever they live in the world, have equal rights to live in a healthful environment and to receive good medical care. Medical laboratory tests help to raise the quality of health care, and both medical and laboratory workers

must devote their efforts to producing high quality data from laboratory testing. Our new goal is to establish a new society, ICSH-Asia, to encourage the harmonization of hematological testing, to practice standardization and quality assurance, and to transfer new and standardized technology to people hitherto denied this opportunity. The work of ICSH is never-ending. We expect all of you to join our restructuring activities in Asia and to work together to establish international concordance in hematology.

### **References**

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