

SINGAPORE STANDARD

**Point-of-care testing (POCT) — Requirements
for quality and competence**

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Contents

	Page
National Foreword	6
Foreword	7
Introduction	8
1 Scope	9
2 Normative references	9
3 Terms and definitions	9
4 Management requirements	9
4.1 Organization and management.....	9
4.2 Quality management system.....	10
4.3 Document control.....	12
4.4 Review of contracts.....	12
4.5 Examination by referral laboratories.....	12
4.6 External services and supplies.....	12
4.7 Advisory services.....	12
4.8 Resolution of complaints.....	12
4.9 Identification and control of nonconformities.....	12
4.10 Corrective action.....	13
4.11 Preventive action.....	13
4.12 Continual improvement.....	14
4.13 Quality and technical records.....	14
4.14 Internal audits.....	14
4.15 Management review.....	14
5 Technical requirements	15
5.1 Personnel.....	15
5.2 Accommodation and environmental conditions.....	17
5.3 Laboratory equipment.....	17
5.4 Pre-examination procedures.....	17
5.5 Examination procedures.....	17
5.6 Assuring the quality of examination procedures.....	18
5.7 Post-examination procedure.....	19
5.8 Reporting of results.....	19
Bibliography	20

National Foreword

This Singapore Standard was prepared by the National Mirror Technical Committee for ISO/TC 212 under the direction of the Biomedical and Health Standards Committee. This Singapore Standard is an identical adoption of International Standard ISO 22870 : 2016 “Point-of-care testing (POCT) — Requirements for quality and competence” published by the International Organization for Standardization.

Where appropriate, the words ‘International Standard’ shall be read as ‘Singapore Standard’. The references to ISO 15189 shall be replaced by SS ISO 15189.

Attention is drawn to the possibility that some of the elements of this Singapore Standard may be the subject of patent rights. Enterprise Singapore shall not be held responsible for identifying any or all of such patent rights.

NOTE

1. *Singapore Standards (SSs) and Technical References (TRs) are reviewed periodically to keep abreast of technical changes, technological developments and industry practices. The changes are documented through the issue of either amendments or revisions.*
2. *An SS or TR is voluntary in nature except when it is made mandatory by a regulatory authority. It can also be cited in contracts making its application a business necessity. Users are advised to assess and determine whether the SS or TR is suitable for their intended use or purpose. If required, they should refer to the relevant professionals or experts for advice on the use of the document. Enterprise Singapore shall not be liable for any damages whether directly or indirectly suffered by anyone or any organisation as a result of the use of any SS or TR.*
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Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

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Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

For an explanation on the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT) see the following URL: www.iso.org/iso/foreword.html.

The committee responsible for this document is ISO/TC 212, *Clinical laboratory testing and in vitro diagnostic test systems*.

This second edition cancels and replaces the first edition (ISO 22870:2006), of which it constitutes a minor revision.

The changes compared to the previous edition are as follows:

- inclusion of cross-references to the applicable clauses in ISO 15189:2012.

Introduction

Traditional examinations of a patient's body fluids, excreta and tissues are carried out generally in the controlled and regulated environment of a recognized medical laboratory. The introduction of quality management systems and accreditation of these laboratories are gaining increasing interest.

Advances in technology have resulted in compact, easy-to-use *in vitro* diagnostic (IVD) medical devices that make it possible to carry out some examinations at, or close to, the location of the patient. Point-of-care/near-patient testing may benefit the patient as well as healthcare facilities.

Risk to the patient and to the facility can be managed by a well-designed, fully implemented quality management system that facilitates

- evaluation of new or alternative POCT instruments and systems,
- evaluation and approval of end-user proposals and protocols,
- purchase, installation and maintenance of equipment,
- maintenance of consumable supplies and reagents,
- training, certification and recertification of POCT system operators, and
- quality control and quality assurance.

Bodies that recognize the competence of POCT facilities may use this document as the basis for their activities. If a healthcare facility seeks accreditation for a part or all of its activities, it should select an accreditation body that operates in a manner which takes into account the special requirements of POCT.

Point-of-care testing (POCT) — Requirements for quality and competence

1 Scope

This document gives specific requirements applicable to point-of-care testing and is intended to be used in conjunction with ISO 15189. The requirements of this document apply when POCT is carried out in a hospital, clinic and by a healthcare organization providing ambulatory care. This document can be applied to transcutaneous measurements, the analysis of expired air, and *in vivo* monitoring of physiological parameters.

Patient self-testing in a home or community setting is excluded, but elements of this document can be applicable.

NOTE Local, regional and national regulations are to be taken into consideration.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 15189:2012, *Medical laboratories — Requirements for quality and competence*