

**In vitro-diagnostik – Utvärdering av prestanda
för in vitro-diagnostiska medicintekniska
produkter**

**Performance evaluation of in vitro diagnostic
medical devices**

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Performance evaluation of in vitro diagnostic medical devices

Détermination des performances des dispositifs médicaux
pour diagnostic in vitro

Leistungsbewertung von In-vitro-Diagnostika

This European Standard was approved by CEN on 5 January 2002.

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CEN members are the national standards bodies of Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Malta, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and United Kingdom.



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Foreword

This document EN 13612:2002 has been prepared by Technical Committee CEN/TC 140 "In vitro diagnostic medical devices", the secretariat of which is held by DIN.

The European Diagnostic Manufacturers Association (EDMA) has contributed to its preparation.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by September 2002, and conflicting national standards shall be withdrawn at the latest by September 2002.

This document has been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association, and supports essential requirements of EU Directive(s).

For relationship with EU Directive(s), see informative annex ZA, which is an integral part of this document.

Annex ZA is for information only.

This standard includes a Bibliography.

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Malta, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and the United Kingdom.

Introduction

Directive 98/79/EC on in vitro diagnostic medical devices (IVD MDs) requires in Annex III, section 3, indent 11 and section 6.1, in Annex IV, section 3.2 c) and in Annex V, section 3, that the manufacturer provides evidence in his technical documentation that the IVD MD performs as claimed, whether these claims are of a technical, analytical or diagnostic nature. Such evidence can be shown by data already available to the manufacturer or by scientific literature or by data originating from performance evaluation studies in a clinical or other appropriate environment in accordance with the intended use.

If a performance evaluation study is necessary and appropriate to support performance claims of the IVD MD, this standard describes how the manufacturer can fulfil his obligation to conduct a scientifically sound performance evaluation study. The evaluation plan is adapted to the nature of the IVD MD and its intended use, taking into account the various recommendations given in standards and scientific literature.

Considering the broad range of IVD MDs covered by Directive 98/79/EC and taking into account that, up to now, there is no uniformly applicable document, it is the purpose of this standard to present the common elements to be considered for a performance evaluation. The applicability of many items described will depend on the level of complexity of the IVD MD.

At the time of drafting this standard it was envisaged that the European Commission would publish a number of Common Technical Specifications (CTSs) which would be relevant to Directive 98/79/EC on in vitro diagnostic medical devices. It was further envisaged that these would be referenced in the Official Journal of the European Communities. In particular these CTSs will apply to in vitro diagnostic medical devices falling into list A of annex II of the Directive 98/79/EC and possibly a number of in vitro diagnostic medical devices in list B of annex II of the same directive. Manufacturers should therefore take these CTSs into account within the context of Article 5 "Reference to standards", of the Directive 98/79/EC.

1 Scope

This European Standard applies to the performance evaluation of in vitro diagnostic medical devices (IVD MDs) including IVD MDs for self-testing. It specifies the responsibilities and general requirements for the planning, conduct, assessment and documentation of a performance evaluation study by the manufacturer. It does not apply to specific evaluation plans for certain IVD MDs or a specific use.

NOTE For a selection of publications on specific evaluation plans see Bibliography.

Where a manufacturer maintains a quality system this standard addresses the compliance with "design validation" and "design changes" as described in EN ISO 9001, EN 46001 and EN 928 especially considering the nature and use of IVD MDs.

In particular, this standard applies to IVD MDs to

- show evidence to notified bodies and national authorities by results of a performance evaluation that the IVD MD performs as claimed by the manufacturer,
- establish adequate performance evaluation data originating from appropriate studies or resulting from available literature, and to
- satisfy the requirements of a quality system for design validation.

2 Terms and definitions

For the purposes of this European Standard, the following terms and definitions apply.

2.1

co-ordinator of a performance evaluation study

person empowered by the manufacturer with responsibility for the entire performance evaluation study of an in vitro diagnostic medical device

2.2

drop out

specimen or proband that had been selected for a performance evaluation study, but cannot be investigated as planned

2.3

evaluation plan

description of a planned performance evaluation study

2.4

evaluation report

description of and conclusions from a performance evaluation study

2.5

investigator

person responsible for the execution of the performance evaluation at a certain location

2.6

lay person

individual who does not have specific medical education
[EN ISO 9000:2000, 3.8.5]

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2.7

performance claim

specification in regard to the performance of an in vitro diagnostic medical device laid down in the information supplied by the manufacturer

2.8

performance evaluation

investigation of the performance of an in vitro diagnostic medical device based upon data already available, scientific literature and/or performance evaluation studies

2.9

performance evaluation study

investigation of an in vitro diagnostic medical device intended to validate the performance claims under the anticipated conditions of use

2.10

performance of an in vitro diagnostic medical device

set of properties of an in vitro diagnostic medical device related to its suitability for the intended purpose

2.11

performance study records

documentation of the experimental steps during the performance evaluation study and results obtained

2.12

proband of a performance evaluation study

individual being part of a study in order to obtain specimen(s) with defined characteristics to be used for the performance evaluation study

2.13

tutor

person responsible for the supervision of lay persons involved in the performance evaluation study

2.14

validation

confirmation, through the provision of objective evidence that the requirements for a specific intended use or application have been fulfilled

NOTE 1 The term "validated" is used to designate the corresponding status.

NOTE 2 The use conditions for validation can be real or simulated.

[ISO 9000, 3.8.5]

3 General requirements for the performance evaluation

3.1 Responsibilities and resources

The manufacturer takes the responsibility for the initiation and/or the conduct of a performance evaluation study. He shall define the responsibility and the interrelation of all personnel who manage and conduct the performance evaluation of IVD MDs, particularly for personnel who need the organisational freedom and authority to