
Biological evaluation of absorbable medical devices —

Part 1: General requirements

*Évaluation biologique des dispositifs médicaux résorbables —
Partie 1: Exigences générales*



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Contents

	Page
Foreword.....	iv
Introduction.....	v
1 Scope.....	1
2 Normative references.....	1
3 Terms and definitions.....	1
4 General considerations.....	2
5 Test article considerations.....	4
6 Sterilization considerations.....	4
7 Drug-device combination product considerations.....	4
8 Evaluation of absorbable medical devices in the context of the ISO 10993 series.....	4
8.1 General.....	4
8.2 ISO 10993-1, evaluation and testing within a risk management process.....	5
8.3 ISO 10993-2, animal welfare requirements.....	5
8.4 ISO 10993-3, tests for genotoxicity, carcinogenicity, and reproductive toxicity.....	5
8.5 ISO 10993-4, selection of tests for interactions with blood.....	6
8.6 ISO 10993-5, tests for <i>in vitro</i> cytotoxicity.....	6
8.7 ISO 10993-6, Tests for local effects after implantation.....	6
8.8 ISO 10993-7, ethylene oxide sterilization residuals.....	7
8.9 ISO 10993-9, framework for identification and quantification of potential degradation products.....	7
8.10 ISO 10993-10, tests for skin sensitization.....	7
8.11 ISO 10993-11, tests for systemic toxicity.....	7
8.12 ISO 10993-12, sample preparation and reference materials.....	8
8.13 ISO 10993-13, identification and quantification of degradation products from polymeric medical devices.....	8
8.14 ISO 10993-14, identification and quantification of degradation products from ceramics.....	8
8.15 ISO 10993-15, identification and quantification of degradation products from metals and alloys.....	9
8.16 ISO 10993-16, toxicokinetic study design for degradation products and leachables.....	9
8.17 ISO 10993-17, establishment of allowable limits for leachable substances.....	9
8.18 ISO 10993-18, chemical characterization of materials.....	9
8.19 ISO/TS 10993-19, physico-chemical, morphological and topographical characterization of materials.....	9
8.20 ISO/TS 10993-20, principles and methods for immunotoxicology testing of medical devices.....	10
8.21 ISO/TR 10993-22, guidance on nanomaterials.....	10
8.22 ISO 10993-23, tests for irritation.....	10
8.22.1 General.....	10
8.22.2 Tests for irritation.....	10
Annex A (informative) Nomenclature of absorb, degrade and related terms.....	11
Bibliography.....	12

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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For an explanation of the voluntary nature of standards, 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 www.iso.org/iso/foreword.html.

This document was prepared by Technical Committee ISO/TC 194, *Biological and clinical evaluation of medical devices*.

A list of all parts in the ISO 37137 series can be found on the ISO website.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at www.iso.org/members.html.

Introduction

Absorbable implants are intentionally designed to degrade and therefore release degradation products into the patient, a feature making these products fundamentally different from other medical devices that are not intended to be absorbed by the patient's body.

The provided content is intended to describe potential approaches to perform biological evaluation of absorbable implants to support the safety of such absorbable medical devices.

Biological evaluation of absorbable medical devices —

Part 1: General requirements

1 Scope

This document specifies the requirements for the evaluation of absorbable medical devices during a biological risk assessment based on ISO 10993-1, including a clarification of the terms "absorb", "degrade" and other related terms (see [Annex A](#)).

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 10993 (all parts), *Biological evaluation of medical devices*

3 Terms and definitions

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

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- ISO Online browsing platform: available at <https://www.iso.org/obp>
- IEC Electropedia: available at <http://www.electropedia.org/>

NOTE For further discussion of utilized terminology and for a list of potential terms to be included in a literature search see [Annex A](#).

3.1

absorb

absorption

<biomaterials> action of a non-endogenous (foreign) material or substance, or its decomposition products passing through or being assimilated by either cells or tissue, or both over time

[SOURCE: ISO 10993-6:2016, 3.1]

3.2

degradation product

intermediate or final substance which results from the physical, metabolic, and/or chemical decomposition of a material or agent

3.3

degrade

physically, metabolically, and/or chemically decompose a material or substance