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## **Implants for surgery — Ceramic materials —**

Part 2:

### **Composite materials based on a high-purity alumina matrix with zirconia reinforcement**

*Implants chirurgicaux — Produits céramiques —*

*Partie 2: Matériaux composites à matrice alumine de haute pureté renforcée par des grains de zirconie*



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Case postale 56 • CH-1211 Geneva 20  
Tel. + 41 22 749 01 11  
Fax + 41 22 749 09 47  
E-mail [copyright@iso.org](mailto:copyright@iso.org)  
Web [www.iso.org](http://www.iso.org)

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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.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

The main task of technical committees is to prepare International Standards. Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

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

ISO 6474-2 was prepared by Technical Committee ISO/TC 150, *Implants for surgery*, Subcommittee SC 1, *Materials*.

ISO 6474 consists of the following parts, under the general title *Implants for surgery — Ceramic materials*:

- *Part 1: Ceramic materials based on high purity alumina*
- *Part 2: Composite materials based on a high-purity alumina matrix with zirconia reinforcement*

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## **Introduction**

No known surgical implant material has ever been found to be completely free of adverse reactions in the human body. However, long-term clinical experience of use of alumina and zirconia (the main components of the material referred to in this part of ISO 6474) as biomaterials has shown that an acceptable level of biological response can be expected when the material is used in appropriate applications.