Second edition 1997-07-15

# Implants for surgery — Metallic materials —

Part 6: Wrought cobalt-nickel-chromium-molybdenum alloy

Implants chirurgicaux — Produits à base de métaux —

Partie 6: Alliage corroyé à base de cobalt, de nickel, de chrome et de molybdène



### Contents

#### Page

1	Scope	1
2	Normative references	1
3	Chemical composition	1
4	Microstructure	2
5	Mechanical properties	2
6	Test methods	2

© ISO 1997

International Organization for Standardization Case postale 56 • CH-1211 Genève 20 • Switzerland Internet central@iso.ch X.400 c=ch; a=400net; p=iso; o=isocs; s=central

Printed in Switzerland

All rights reserved. Unless otherwise specified, no part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from the publisher.

### 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 nongovernmental, 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.

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.

International Standard ISO 5832-6 was prepared by Technical Committee ISO/TC 150, *Implants for surgery*, Subcommittee SC 1, *Materials*.

This second edition cancels and replaces the first edition (ISO 5832-6:1980), which has been technically revised.

ISO 5832 consists of the following parts, under the general title *Implants for surgery* — *Metallic materials*:

- Part 1: Wrought stainless steel
- Part 2: Unalloyed titanium
- Part 3: Wrought titanium 6-aluminium 4-vanadium alloy
- Part 4: Cobalt-chromium-molybdenum casting alloy
- Part 5: Wrought cobalt-chromium-tungsten-nickel alloy
- Part 6: Wrought cobalt-nickel-chromium-molybdenum alloy
- Part 7: Forgeable and cold-formed cobalt-chromium-nickelmolybdenum-iron alloy
- Part 8: Wrought cobalt-nickel-chromium-molybdenum-tungsten-iron alloy
- Part 9: Wrought high nitrogen stainless steel
- Part 10: Wrought titanium 5-aluminium 2,5-iron alloy
- Part 11: Wrought titanium 6-aluminium 7-niobium alloy
- Part 12: Wrought cobalt-chromium-molybdenum alloy

© ISO

## Introduction

No known surgical implant material has ever been shown to cause absolutely no adverse reactions in the human body. However, long-term clinical experience of the use of the material referred to in this part of ISO 5832 has shown that an acceptable level of biological response can be expected, when the material is used in appropriate applications.