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Notice

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Subject: Announcement of Changes to the Therapeutic Products Directorate's List of Recognized Standards for Medical Devices

Health Canada is pleased to announce changes to the Therapeutic Products Directorate's (TPD) List of Recognized Standards for medical devices.

The changes consist of:

- a. 11 new standards to be added;
- b. 27 new editions of currently recognized standards to replace previous editions;
- c. 6 standards to be removed.

The TPD *Guidance Document on Recognition and Use of Standards under the Medical Devices Regulations* is posted on the Health Canada website at http://www.hc-sc.gc.ca/dhp-mps/md-im/applic-demande/guide-ld/md_gd_standards_im_ld_normes-eng.php.

For further information on the List of Recognized Standards, please contact:

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List of Recognized Standards for Medical Devices

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Changes to the List of Recognized Standards
Standards Added
IEC 60601-2-10:2012-Ed.2.0 Medical electrical equipment – Part 2-10: Particular requirements for the basic safety and essential performance of nerve and muscle stimulators
IEC 60601-2-50:2009-Ed.2.0 Medical electrical equipment – Part 2-50: Particular requirements for the basic safety and essential performance of infant phototherapy equipment IEC 60601-2-50/Cor.1:2010
ISO 6474-1:2010 Implants for surgery – Ceramic materials – Part 1: Ceramic materials based on high purity alumina
ISO 6474-2:2012 Implants for surgery - Ceramic materials - Part 2: Composite materials based on a highpurity alumina matrix with zirconia reinforcement
ISO 9693-1:2012 Dentistry – Compatibility testing – Part 1: Metal-ceramic systems
ISO 10993-18:2005 Biological evaluation of medical devices – Part 18: Chemical characterization of materials
ISO 11663:2009 Quality of dialysis fluid for haemodialysis and related therapies
ISO 13959:2009 Concentrates for haemodialysis and related therapies
ISO 23640:2011 In vitro diagnostic medical devices – Evaluation of stability of in vitro diagnostic reagents
ISO 26722:2009 Water treatment equipment for haemodialysis applications and related therapies
SAI AS 2869:2008 Tampons – Menstrual
Standards Updated
ASTM F75-12 supersedes ASTM F75-07 Standard specification for cobalt-28chromium-6molybdenum alloy castings and casting alloy for surgical implants (UNS R30075)
ASTM F86-12 supersedes ASTM F86-04 (2009) Standard practice for surface preparation and marking of metallic surgical implants

ASTM F136-12 supersedes ASTM F136-08e1 Standard specification for wrought titanium-6aluminum-4vanadium ELI (Extra Low Interstitial) alloy for surgical implant applications (UNS R56401)
ASTM F799-11 supersedes ASTM F799-06 Standard specification for cobalt-28chromium-6molybdenum alloy forgings for surgical implants (UNS R31537, R31538, R31539)
ASTM F899-12 supersedes ASTM F899-11 Standard specification for wrought stainless steel for surgical instruments
ASTM F1089-10 supersedes ASTM F1089-02 Standard test method for corrosion of surgical instruments
ASTM F1580-12 supersedes ASTM F1580-07 Standard specification for titanium and titanium-6aluminum-4vanadium alloy powders for coatings of surgical implants
ASTM F1717-12 supersedes ASTM F1717-10 Standard test methods for spinal implant constructs in a vertebrectomy model
IEC CISPR 11:2010-Ed.5.1 supersedes IEC CISPR 11:2009-Ed.5.0 Industrial, scientific and medical equipment – Radio-frequency disturbance characteristics – Limits and methods of measurement
IEC 60601-2-31:2008-Ed.2.0 recognition of Amendment 1:2012 Medical electrical equipment – Part 2-31: Particular requirements for the basic safety and essential performance of external cardiac pacemakers with internal power source IEC 60601-2-31/Amd.1:2011
IEC 61000-4-3:2010-Ed.3.2 supersedes IEC 61000-4-3:2008-Ed.3.1 Electromagnetic compatibility (EMC) – Part 4-3: Testing and measurement techniques – Radiated, radio-frequency, electromagnetic field immunity test
IEC 61000-4-4:2012-Ed.3.0 supersedes IEC 61000-4-4:2004-Ed.2.0 Electromagnetic compatibility (EMC) – Part 4-4: Testing and measurement techniques – Electrical fast transient/burst immunity test
ISO 5834-2:2011 supersedes ISO 5834-2:2006 Implants for surgery – Ultra-high molecular weight polyethylene – Part 2: Moulded forms
ISO 6876:2012 supersedes ISO 6876:2001 Dental root canal sealing materials
ISO 7206-4:2010 supersedes ISO 7206-4:2002 Implants for surgery partial and total hip joint prostheses – Part 4: Determination of endurance properties of stemmed femoral components
ISO 10271:2011 supersedes ISO 10271:2001 Dental metallic materials – Corrosion test methods for metallic materials
ISO 10993-1:2009 supersedes ISO 10993-1:2003 Biological evaluation of medical devices – Part 1: Evaluation and testing within a risk management process ISO 10993-1/Cor.1:2010

ISO 10993-4:2002 recognition of Amendment 1:2006 Biological evaluation of medical devices – Part 4: Selection of tests for interactions with blood ISO 10993-4/Amd.1:2006
ISO 10993-5:2009 supersedes ISO 10993-5:1999 Biological evaluation of medical devices – Part 5: Tests for in vitro cytotoxicity
ISO 10993-9:2009 supersedes ISO 10993-9:1999 Biological evaluation of medical devices – Part 9: Framework for identification and quantification of potential degradation products
ISO 10993-10:2010 supersedes ISO 10993-10:2002 Biological evaluation of medical devices – Part 10: Tests for irritation and skin sensitization
ISO 10993-13:2010 supersedes ISO 10993-13:1998 Biological evaluation of medical devices – Part 13: Identification and quantification of degradation products from polymeric medical devices
ISO 10993-16:2010 supersedes ISO 10993-16:1997 Biological evaluation of medical devices – Part 16: Toxicokinetic study design for degradation products and leachables
ISO 11193-1:2008 recognition of Amendment 1:2012 Single-use medical examination gloves – Part 1: Specification for gloves made from rubber latex or rubber solution ISO 11193-1/Amd.1:2012
ISO 11979-7:2006 recognition of Amendment 1:2012 Ophthalmic implants – Intraocular lenses – Part 7: Clinical investigations ISO 11979-7/Amd.1:2012
ISO 11979-8:2006 recognition of Amendment 1:2011 Ophthalmic implants – Intraocular lenses – Part 8: Fundamental requirements ISO 11979-8/Amd.1:2011
ISO 18369-1:2006 recognition of Amendment 1:2009 Ophthalmic optics – Contact lenses – Part 1: Vocabulary, classification system and recommendations for labelling specifications ISO 18369-1/Amd.1:2009
Standards Removed
ASTM F745-07 Standard specification for 18chromium-12.5nickel-2.5 molybdenum stainless steel for cast and solution-annealed surgical implant applications
ASTM F1612-95 (2005) Standard practice for cyclic fatigue testing of metallic stemmed hip arthroplasty femoral components with torsion
IEC 61000-4-2:2001-Ed.1.2 Electromagnetic compatibility (EMC) – Part 4-2: Testing and measurement techniques – Electrostatic discharge immunity test

IEC 61000-4-3:2006-Ed.3.0 Electromagnetic compatibility (EMC) – Part 4-3: Testing and measurement techniques – Radiated, radio-frequency, electromagnetic field immunity test IEC 61000-4-3/Amd.1:2007
IEC 61000-4-6:2006-Ed.2.2 Electromagnetic compatibility (EMC) – Part 4-6: Testing and measurement techniques – Immunity to conducted disturbances, induced by radio-frequency fields
ISO 6474:1994 Implants for surgery – Ceramic materials based on high purity alumina

List of Recognized Standards
Anaesthetic and Respiratory
ISO 7199:2009 Cardiovascular implants and artificial organs – Blood-gas exchangers (oxygenators)
ISO 9919:2005 Medical electrical equipment – Particular requirements for the basic safety and essential performance of pulse oximeter equipment for medical use
ISO 21647:2004 Medical electrical equipment – Particular requirements for the basic safety and essential performance of respiratory gas monitors ISO 21647:2004/Cor.1:2005
ISO 80601-2-55:2011-Ed.1.0 Medical electrical equipment – Part 2-55: Particular requirements for the basic safety and essential performance of respiratory gas monitors - First Edition
ISO 80601-2-61:2011-Ed.1.0 Medical electrical equipment – Part 2-61: Particular requirements for basic safety and essential performance of pulse oximeter equipment - First Edition
Biocompatibility
ASTM F981-04 Standard practice for assessment of compatibility of biomaterials for surgical implants with respect to effect of materials on muscle and bone
ISO 10993-1:2009 Biological evaluation of medical devices – Part 1: Evaluation and testing within a risk management process ISO 10993-1:2009/Cor.1:2010
ISO 10993-2:2006 Biological evaluation of medical devices – Part 2: Animal welfare requirements
ISO 10993-3:2003 Biological evaluation of medical devices – Part 3: Tests for genotoxicity, carcinogenicity and reproductive toxicity
ISO 10993-4:2002 Biological evaluation of medical devices – Part 4: Selection of tests for interactions with blood ISO 10993-4:2002/Amd.1:2006
ISO 10993-5:2009 Biological evaluation of medical devices – Part 5: Tests for in vitro cytotoxicity

ISO 10993-6:2007 Biological evaluation of medical devices – Part 6: Tests for local effects after implantation
ISO 10993-7:2008 Biological evaluation of medical devices – Part 7: Ethylene oxide sterilization residuals ISO 10993-7:2008/Cor.1:2009
ISO 10993-9:2009 Biological evaluation of medical devices – Part 9: Framework for identification and quantification of potential degradation products
ISO 10993-10:2010 Biological evaluation of medical devices – Part 10: Tests for irritation and skin sensitization
ISO 10993-11:2006 Biological evaluation of medical devices – Part 11: Tests for systemic toxicity
ISO 10993-12:2007 Biological evaluation of medical devices – Part 12: Sample preparation and reference materials
ISO 10993-13:2010 Biological evaluation of medical devices – Part 13: Identification and quantification of degradation products from polymeric medical devices
ISO 10993-14:2001 Biological evaluation of medical devices – Part 14: Identification and quantification of degradation products from ceramics
ISO 10993-15:2000 Biological evaluation of medical devices – Part 15: Identification and quantification of degradation products from metals and alloys
ISO 10993-16:2010 Biological evaluation of medical devices – Part 16: Toxicokinetic study design for degradation products and leachables
ISO 10993-17:2002 Biological evaluation of medical devices – Part 17: Establishment of allowable limits for leachable substances
ISO 10993-18:2005 Biological evaluation of medical devices – Part 18: Chemical characterization of materials
Cardiovascular
ISO 5840:2005 Cardiovascular implants – Cardiac valve prostheses
ISO 5841-3:2000 Implants for surgery – Cardiac pacemakers – Part 3: Low-profile connectors (IS-1) for implantable pacemakers ISO 5841-3:2000/Cor.1:2003
ISO 7198:1998 Cardiovascular implants – Tubular vascular prostheses

<p>ISO 10555-1:1995 Sterile, single-use intravascular catheters – Part 1: General requirements ISO 10555-1:1995/Amd.1:1999 ISO 10555-1:1995/Amd.2:2004</p>
<p>ISO 10555-2:1996 Sterile, single-use intravascular catheters – Part 2: Angiographic catheters ISO 10555-2:1996/Cor.1:2002</p>
<p>ISO 10555-3:1996 Sterile, single-use intravascular catheters – Part 3: Central venous catheters ISO 10555-3:1996/Cor.1:2002</p>
<p>ISO 10555-4:1996 Sterile, single- use intravascular catheters – Part 4: Balloon dilatation catheters supplied in the sterile condition, and intended for single use ISO 10555-4:1996/Cor.1:2002</p>
<p>ISO 10555-5:1996 Sterile, single-use intravascular catheters – Part 5: Over-Needle Peripheral Catheters ISO 10555-5:1996/Amd.1:1999 ISO 10555-5:1996/Cor.1:2002</p>
<p>ISO 11318:2002 Cardiac defibrillators – Connector assembly DF-1 for implantable defibrillators - Dimensions and test requirements</p>
<p>ISO 14708-1:2000 Implants for surgery – Active implantable medical devices – Part 1: General requirements for safety, marking and for information to be provided by the manufacturer</p>
<p>ISO 14708-2:2005 Implants for surgery – Active implantable medical devices – Part 2: Cardiac pacemakers</p>
<p>ISO 14708-5:2010 Implants for surgery – Active implantable medical devices – Part 5: Circulatory support devices</p>
<p>ISO 25539-1:2003 Cardiovascular implants – Endovascular devices – Part 1: Endovascular prostheses ISO 25539-1:2003/Amd.1:2005</p>
<p>ISO 27186:2010 Active implantable medical devices – Four-pole connector system for implantable cardiac rhythm management devices – Dimensional and test requirements</p>
<p>Contraception</p>
<p>ISO 4074:2002 Natural latex rubber condoms – Requirements and test methods ISO 4074:2002/Cor.1:2003 ISO 4074:2002/Cor.2:2008</p>

Dental
ISO 3107:2011 Dentistry – Zinc oxide/eugenol and zinc oxide/non-eugenol cements
ISO 4049:2009 Dentistry – Polymer-based restorative materials
ISO 6872:2008 Dentistry – Ceramic materials
ISO 6874:2005 Dentistry – Polymer-based pit and fissure sealants
ISO 6876:2012 Dental root canal sealing materials
ISO 6877:2006 Dentistry – Root-canal obturating points
ISO 7405:2008 Dentistry – Preclinical evaluation of biocompatibility of medical devices used in dentistry – Test methods for dental materials
ISO 9693:1999 Metal-ceramic dental restorative systems ISO 9693:1999/Amd.1:2005
ISO 9693-1:2012 Dentistry – Compatibility testing – Part 1: Metal-ceramic systems
ISO 9917-1:2007 Dentistry – Water-based cements – Part 1: Powder/liquid acid-base cements
ISO 9917-2:2010 Dental water-based cements – Part 2: Light-activated cements
ISO 10271:2011 Dental metallic materials – Corrosion test methods for metallic materials
ISO/TS 11405:2003 Dental materials – Testing of adhesion to tooth structure
ISO 14801:2007 Dentistry – Fatigue test for endosseous dental implants
ISO 22674:2006 Dentistry – Metallic materials for fixed and removable restorations and appliances
ISO 22794:2007 Dentistry – Implantable materials for bone filling and augmentation in oral and maxillofacial surgery – Contents of a technical file
ISO 22803:2004 Dentistry – Membrane materials for guided tissue regeneration in oral and maxillofacial surgery – Contents of a technical file

ISO 24234:2004 Dentistry – Mercury and alloys for dental amalgam
Electromedical
ANSI/AAMI DF80:2003 Medical electrical equipment – Part 2: Particular requirements for the safety of cardiac defibrillators [including automated external defibrillators] withdrawn - replaced by 60601-2-4
ANSI/AAMI PC69:2000 Active implantable medical devices – Electromagnetic compatibility – EMC test protocols for implantable cardiac pacemakers and implantable cardioverter defibrillators
ANSI/AAMI PC69:2007 Active implantable medical devices – Electromagnetic compatibility – EMC test protocols for implantable cardiac pacemakers and implantable cardioverter defibrillators ANSI/AAMI PC69:2007/ERTA:2008
CSA C22.2 NO. 601.1 M90 (R2006) Medical electrical equipment – Part 1: General requirements for safety (adopted amendment 2:1995 to IEC 601-1:1990)
CSA C22.2 NO 60601-1-08 Medical electrical equipment – Part 1: General requirements for basic safety and essential performance
CSA C22.2 NO 60601-1-2-08 Medical electrical equipment – Part 1-2: General requirements for basic safety and essential performance – Collateral standard: Electromagnetic compatibility – Requirements and tests
CSA C22.2 NO. 60601-1-2A-03 (R2006) Medical electrical equipment – Part 1-2: General requirements for safety – Collateral standard: Electromagnetic compatibility – Requirements and tests (Adopted Amendment 1:2004 to IEC 60601-1-2:2001)
IEC CISPR 11:2010-Ed.5.1 Industrial, scientific and medical equipment – Radio-frequency disturbance characteristics – Limits and methods of measurement
IEC 60529:2001-Ed.2.1 Degrees of protection provided by enclosures (IP Code) IEC 60529:2001-Ed.2.1/Cor.1:2001 IEC 60529:2001-Ed.2.1/Cor.2:2007 IEC 60529:2001-Ed.2.1/Cor.3:2009
IEC 60601-1:1988-Ed.2.0 Medical electrical equipment – Part 1: General requirements for basic safety IEC 60601-1:1988-Ed.2.0/Amd.1:1991 IEC 60601-1:1988-Ed.2.0/Amd.2:1995 IEC 60601-1:1988-Ed.2.0/Cor.1:1995

IEC 60601-1:2005-Ed.3.0 Medical electrical equipment – Part 1: General requirements for basic safety and essential performance IEC 60601-1:2005-Ed.3.0/Cor.1:2006 IEC 60601-1:2005-Ed.3.0/Cor.2:2007
IEC 60601-1-2:2004-Ed.2.1 Medical electrical equipment – Part 1-2: General requirements for safety – Collateral standard – Electromagnetic compatibility – Requirements and tests
IEC 60601-1-2:2007-Ed.3.0 Medical electrical equipment – Part 1-2: General requirements for basic safety and essential performance – Collateral standard: Electromagnetic compatibility – Requirements and tests
IEC 60601-1-4:2000-Ed.1.1 Medical electrical equipment – Part 1-4: General requirements for safety – Collateral standard: Programmable electrical medical systems
IEC 60601-1-6:2006-Ed.2.0 Medical electrical equipment – Part 1-6: General requirements for safety – Collateral standard: Usability
IEC 60601-1-6:2010-Ed.3.0 Medical electrical equipment – Part 1-6: General requirements for safety – Collateral standard: Usability
IEC 60601-1-8:2006-Ed.2.0 Medical electrical equipment – Part 1-8: General requirements for safety – Collateral standard: General requirements, tests and guidance for alarm systems in medical electrical equipment and medical electrical systems
IEC 60601-2-2:2009-Ed.5.0 Medical electrical equipment – Part 2-2: Particular requirements for the basic safety and essential performance of high frequency surgical equipment and high frequency surgical accessories
IEC 60601-2-4:2002-Ed.2.0 Medical electrical equipment – Part 2-4: Particular requirements for the safety of cardiac defibrillators IEC 60601-2-4:2002-Ed.2.0/Cor.1:2004
IEC 60601-2-4:2010-Ed.3.0 Medical electrical equipment – Part 2-4: Particular requirements for the basic safety and essential performance of cardiac defibrillators - Edition 3.0
IEC 60601-2-5:2009-Ed.3.0 Medical electrical equipment – Part 2-5: Particular requirements for the basic safety and essential performance of ultrasonic physiotherapy equipment

IEC 60601-2-10:1987-Ed.1.0 Medical electrical equipment – Part 2-10: Particular requirements for the safety of nerve and muscle stimulators IEC 60601-2-10:1987-Ed.1.0/Cor.1:1987 IEC 60601-2-10:1987-Ed.1.0/Amd.1:2001
IEC 60601-2-10:2012-Ed.2.0 Medical electrical equipment – Part 2-10: Particular requirements for the basic safety and essential performance of nerve and muscle stimulators
IEC 60601-2-16:2008-Ed.3.0 Medical electrical equipment – Part 2-16: Particular requirements for basic safety and essential performance of haemodialysis, haemodiafiltration and haemofiltration equipment IEC 60601-2-16:2008-Ed.3.0/Cor.1:2008
IEC 60601-2-18:2009-Ed.3.0 Medical electrical equipment – Part 2-18: Particular requirements for the basic safety and essential performance of endoscopic equipment
IEC 60601-2-22:2007-Ed.3.0 Medical electrical equipment – Part 2-22: Particular requirements for basic safety and essential performance of surgical, cosmetic, therapeutic and diagnostic laser equipment
IEC 60601-2-23:1999-Ed.3.0 Medical electrical equipment – Part 2-23: Particular requirements for the safety, including essential performance, of transcutaneous partial pressure monitoring equipment
IEC 60601-2-23:2011-Ed.3.0 Medical electrical equipment – Part 2-23: Particular requirements for the basic safety and essential performance of transcutaneous partial pressure monitoring equipment - Edition 3.0
IEC 60601-2-24:1998-Ed.1.0 Medical electrical equipment – Part 2-24: Particular requirements for the safety of infusion pumps and controllers
IEC 60601-2-25:1993-Ed.1.0 Medical electrical equipment – Part 2-25: Particular requirements for the safety of electrocardiographs IEC 60601-2-25:1993-Ed.1.0/Amd.1:1999
IEC 60601-2-25:2011-Ed.2.0 Medical electrical equipment – Part 2-25: Particular requirements for the basic safety and essential performance of electrocardiographs - Edition 2.0
IEC 60601-2-26:2002-Ed.2.0 Medical electrical equipment – Part 2-26: Particular requirements for the safety of electroencephalographs
IEC 60601-2-26:2012-Ed.3.0 Medical electrical equipment – Part 2-26: Particular requirements for the basic safety and essential performance of electroencephalographs - Edition 3.0

IEC 60601-2-27:2005-Ed.2.0 Medical electrical equipment – Part 2-27: Particular requirements for the safety, including essential performance, of electrocardiographic monitoring equipment
IEC 60601-2-27:2011-Ed.3.0 Medical Electrical Equipment – Part 2-27: Particular Requirements For The Basic Safety And Essential Performance Of Electrocardiographic Monitoring Equipment - Edition 3.0 IEC 60601-2-27:2011-Ed.3.0/Cor.1:2012
IEC 60601-2-31:2008-Ed.2.0 Medical electrical equipment – Part 2-31: Particular requirements for the basic safety and essential performance of external cardiac pacemakers with internal power source IEC 60601-2-31:2008-Ed.2.0/Amd.1:2011
IEC 60601-2-33:2008-Ed.2.2 Medical electrical equipment – Part 2-33: Particular requirements for the safety of magnetic resonance equipment for medical diagnosis
IEC 60601-2-33:2010-Ed.3.0 Medical electrical equipment – Part 2-33: Particular requirements for the basic safety and essential performance of magnetic resonance equipment for medical diagnosis - Edition 3.0 IEC 60601-2-33:2010-Ed.3.0/Cor.1:2012
IEC 60601-2-34:2000-Ed.2.0 Medical electrical equipment – Part 2-34: Particular requirements for the safety, including essential performance, of invasive blood pressure monitoring equipment
IEC 60601-2-34:2011-Ed.3.0 Medical electrical equipment – Part 2-34: Particular requirements for the basic safety and essential performance of invasive blood pressure monitoring equipment - Edition 3.0
IEC 60601-2-36:1997-Ed.1.0 Medical electrical equipment – Part 2: Particular requirements for the safety of equipment for extracorporeally induced lithotripsy
IEC 60601-2-47:2001-Ed.1.0 Medical electrical equipment – Part 2-47: Particular requirements for the safety, including essential performance, of ambulatory electrocardiographic systems
IEC 60601-2-47:2012-Ed.2.0 Medical electrical equipment – Part 2-47: Particular requirements for the basic safety and essential performance of ambulatory electrocardiographic systems - Edition 2.0
IEC 60601-2-49:2001-Ed.1.0 Medical electrical equipment – Part 2-49: Particular requirements for the safety of multifunction patient monitoring equipment
IEC 60601-2-49:2011-Ed.2.0 Medical electrical equipment – Part 2-49: Particular requirements for the basic safety and essential performance of multifunction patient monitoring equipment - Edition 2.0

IEC 60601-2-50:2009-Ed.2.0 Medical electrical equipment – Part 2-50: Particular requirements for the basic safety and essential performance of infant phototherapy equipment IEC 60601-2-50:2009-Ed.2.0/Cor.1:2010
IEC 60601-2-51:2003-Ed.1.0 Medical electrical equipment – Part 2-51: Particular requirements for safety, including essential performance, of recording and analysing single channel and multichannel electrocardiographs
IEC 60825-1:2007-Ed.2.0 Safety of laser products - Part 1: Equipment classification and requirements
IEC 61000-3-2:2009-Ed.3.2 Electromagnetic compatibility (EMC) – Part 3-2: Limits – Limits for harmonic current emissions (equipment input current ≤ 16 A per phase) IEC 61000-3-2:2009-Ed.3.2/Cor.1:2009
IEC 61000-3-3:2008-Ed.2.0 Electromagnetic compatibility (EMC) – Part 3-3: Limits – Limitation of voltage changes, voltage fluctuations and flicker in public low-voltage supply systems, for equipment with rated current ≤ 16 A per phase and not subject to conditional connection
IEC 61000-4-2:2008-Ed.2.0 Electromagnetic compatibility (EMC) – Part 4-2: Testing and measurement techniques – Electrostatic discharge immunity test
IEC 61000-4-3:2010-Ed.3.2 Electromagnetic compatibility (EMC) – Part 4-3: Testing and measurement techniques – Radiated, radio-frequency, electromagnetic field immunity test
IEC 61000-4-4:2012-Ed.3.0 Electromagnetic compatibility (EMC) – Part 4-4: Testing and measurement techniques – Electrical fast transient/burst immunity test
IEC 61000-4-5:2005-Ed.2.0 Electromagnetic compatibility (EMC) – Part 4-5: Testing and measurement techniques – Surge immunity test IEC 61000-4-5:2005-Ed.2.0/Cor.1:2009
IEC 61000-4-6:2008-Ed.3.0 Electromagnetic compatibility (EMC) – Part 4-6: Testing and measurement techniques – Immunity to conducted disturbances, induced by radio-frequency fields
IEC 61000-4-8:2009-Ed.2.0 Electromagnetic compatibility (EMC) – Part 4-8: Testing and measurement techniques – Power frequency magnetic field immunity test
IEC 61000-4-11:2004-Ed.2.0 Electromagnetic compatibility (EMC) – Part 4-11: Testing and measurement techniques – Voltage dips, short interruptions and voltage variations immunity tests

IEC 80601-2-30:2009-Ed.1.0 Medical electrical equipment – Part 2-30: Particular requirements for the basic safety and essential performance of automated non-invasive sphygmomanometers IEC 80601-2-30:2009-Ed.1.0/Cor.1:2010
General
ASME PVHO-1:2007 Safety standard for pressure vessels for human occupancy
ASTM F1929-98 (2004) Standard test method for detecting seal leaks in porous medical packaging by dye penetration
CSA-ISO 14971-07 Medical devices – Application of risk management to medical devices
CSA Z364.2.2-03 Water treatment equipment and water quality requirements for hemodialysis
IEC 62304:2006-Ed.1.0 Medical device software – software life cycle processes
ISO 11193-1:2008 Single-use medical examination gloves – Part 1: Specification for gloves made from rubber latex or rubber solution ISO 11193-1:2008/Amd.1:2012
ISO 11663:2009 Quality of dialysis fluid for haemodialysis and related therapies
ISO 13959:2009 Concentrates for haemodialysis and related therapies
ISO 14155:2011 Clinical investigation of medical devices for human subjects – Good clinical practice ISO 14155:2011/Cor.1:2011
ISO 14971:2007 Medical devices – Application of risk management to medical devices
ISO 22442-1:2007 Medical devices utilizing animal tissues and their derivatives – Part 1: Application of risk management
ISO 22442-2:2007 Medical devices utilizing animal tissues and their derivatives – Part 2: Controls on sourcing, collection and handling
ISO 22442-3:2007 Medical devices utilizing animal tissues and their derivatives – Part 3: Validation of the elimination and/or inactivation of viruses and transmissible spongiform encephalopathy (TSE) agents
ISO 26722:2009 Water treatment equipment for haemodialysis applications and related therapies

SAI AS 2869:2008 Tampons – Menstrual
<i>In Vitro Diagnostic</i>
CLSI C28-A3:2008 Defining, establishing, and verifying reference intervals in the clinical laboratory; Approved guideline
CLSI C46-A2:2009 Blood gas and pH analysis and related measurements; Approved guideline
CLSI EP5-A2:2004 Evaluation of precision performance of quantitative measurement methods; Approved guideline
CLSI EP6-A:2003 Evaluation of the linearity of quantitative measurement procedures: A statistical approach; Approved guideline
CLSI EP7-A2:2005 Interference testing in clinical chemistry; Approved guideline
CLSI EP12-A2:2008 User protocol for evaluation of qualitative test performance; Approved guideline
CLSI EP14-A2:2005 Evaluation of matrix effects; Approved guideline
CLSI EP17-A:2004 Protocols for determination of limits of detection and limits of quantitation; Approved guideline
CLSI EP25-A:2009 Evaluation of stability of in vitro diagnostic reagents; Approved guideline (Except: Section 7.1.3)
CLSI GP10-A:1995 (R2001) Assessment of the clinical accuracy of laboratory tests using Receiver Operating Characteristic (ROC) plots; Approved guideline
CLSI H15-A3:2000 Reference and selected procedures for the quantitative determination of hemoglobin in blood; Approved standard
CLSI H20-A2:2007 Reference leukocyte (WBC) differential count (proportional) and evaluation of instrumental methods; Approved standard
CLSI H49-A:2004 Point-of-care monitoring of anticoagulation therapy; Approved guideline
CLSI I/LA6-A:1997 Detection and quantitation of rubella IgG antibody: Evaluation and performance criteria for multiple component test products, specimen handling, and use of test products in the clinical laboratory; Approved guideline

CLSI I/LA18-A2:2001 Specifications for immunological testing for infectious diseases; Approved guideline
CLSI I/LA21-A2:2008 Clinical evaluation of immunoassays; Approved guideline
CLSI MM01-A2:2006 Molecular diagnostic methods for genetic diseases; Approved guideline
CLSI MM07-A:2004 Fluorescence in situ hybridization (FISH) methods for medical genetics; Approved guideline
CLSI MM12-A:2006 Diagnostic nucleic acid microarrays; Approved guideline
CLSI MM13-A:2006 Collection, transport, preparation, and storage of specimens for molecular methods; Approved guideline (Except: Section 6.1.1)
CLSI MM16-A:2006 Use of external RNA controls in gene expression assays; Approved guideline
CLSI MM17-A:2008 Verification and validation of multiplex nucleic acid assays; Approved guideline
EN 13640:2002 Stability testing of in vitro diagnostic reagents
IEC 61010-1:2001-Ed.2.0 Safety requirements for electrical equipment for measurement, control, and laboratory use – Part 1: General requirements IEC 61010-1:2001-Ed.2.0/Cor.1:2002 IEC 61010-1:2001-Ed.2.0/Cor.2:2003
IEC 61010-2-101:2002-Ed.1.0 Safety requirements for electrical equipment for measurement, control, and laboratory use – Part 2-101: Particular requirements for in vitro diagnostic (IVD) medical equipment
IEC 61326-1:2005-Ed.1.0 Electrical equipment for measurement, control and laboratory use – EMC requirements Part 1: General requirements IEC 61326-1:2005-Ed.1.0/Cor.1:2008
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ASTM F75-12 Standard specification for cobalt-28chromium-6molybdenum alloy castings and casting alloy for surgical implants (UNS R30075)
ASTM F90-09 Standard specification for wrought cobalt-20chromium-15tungsten-10nickel alloy for surgical implant applications (UNS R30605)
ASTM F136-12 Standard specification for wrought titanium-6aluminum-4vanadium ELI (Extra Low Interstitial) alloy for surgical implant applications (UNS R56401)
ASTM F138-08 Standard specification for wrought 18chromium-14nickel-2.5molybdenum stainless steel bar and wire for surgical implants (UNS S31673)
ASTM F139-08 Standard specification for wrought 18chromium-14nickel-2.5molybdenum stainless steel sheet and strip for surgical implants (UNS S31673)
ASTM F560-08 Standard specification for unalloyed tantalum for surgical implant applications (UNS R05200, UNS R05400)
ASTM F562-07 Standard specification for wrought 35cobalt-35nickel-20chromium-10molybdenum alloy for surgical implant applications (UNS R30035)
ASTM F620-06 Standard specification for alpha plus beta titanium alloy forgings for surgical implants
ASTM F621-08 Standard specification for stainless steel forgings for surgical implants
ASTM F648-07e1 Standard specification for ultra-high-molecular weight polyethylene powder and fabricated form for surgical implants
ASTM F688-05 Standard specification for wrought cobalt-35 nickel-20 chromium-10 molybdenum alloy plate, sheet, and foil for surgical implants (UNS R30035)
ASTM F799-11 Standard specification for cobalt-28chromium-6molybdenum alloy forgings for surgical implants (UNS R31537, R31538, R31539)
ASTM F899-12 Standard specification for wrought stainless steel for surgical instruments

ASTM F961-08 Standard specification for 35cobalt-35nickel-20chromium-10molybdenum alloy forgings for surgical implants (UNS R30035)
ASTM F1088-04a (R2010) Standard specification for beta-tricalcium phosphate for surgical implantations
ASTM F1091-08 Standard specification for wrought cobalt-20chromium-15tungsten-10nickel alloy surgical fixation wire (UNS R30605)
ASTM F1108-04 (R2009) Standard specification for titanium-6aluminum-4vanadium alloy castings for surgical implants (UNS R56406)
ASTM F1295-05 Standard specification for wrought titanium-6 aluminum-7 niobium alloy for surgical implant applications (UNS R56700)
ASTM F1314-07 Standard specification for wrought nitrogen strengthened 22chromium-13nickel-5manganese-2.5molybdenum stainless steel alloy bar and wire for surgical implants (UNS S20910)
ASTM F1350-08 Standard specification for wrought 18chromium-14nickel-2.5molybdenum stainless steel surgical fixation wire (UNS S31673)
ASTM F1472-08e1 Standard specification for wrought titanium-6aluminum-4vanadium alloy for surgical implant applications (UNS R56400)
ASTM F1537-08 Standard specification for wrought cobalt-28 chromium-6 molybdenum alloy for surgical implants (UNS R31537, UNS R31538, and UNS R31539)
ASTM F1580-12 Standard specification for titanium and titanium-6aluminum-4vanadium alloy powders for coatings of surgical implants
ASTM F1586-08 Standard specification for wrought nitrogen strengthened 21chromium-10nickel-3manganese-2.5molybdenum stainless steel bar for surgical implants (UNS S31675)
ASTM F1713-08 Standard specification for wrought titanium-13niobium-13zirconium alloy for surgical implant applications (UNS R58130)
ASTM F2565-06 Standard guide for extensively irradiation-crosslinked ultra-high molecular weight polyethylene fabricated forms for surgical implant applications
CSA Z900.1-03 (R2008) Cells tissues, and organs for transplantation and assisted reproduction: General requirements

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ISO 5832-4:1996 Implants for surgery – Metallic materials – Part 4: Cobalt-chromium-molybdenum casting alloy
ISO 5832-5:2005 Implants for surgery – Metallic materials – Part 5: Wrought cobalt-chromium-tungsten-nickel alloy
ISO 5832-6:1997 Implants for surgery – Metallic materials – Part 6: Wrought cobalt-nickel-chromium-molybdenum alloy
ISO 5832-9:2007 Implants for surgery – Metallic materials – Part 9: Wrought high nitrogen stainless steel
ISO 5832-11:1994 Implants for surgery – Metallic materials – Part 11: Wrought titanium 6-aluminium 7-niobium alloy
ISO 5832-12:2007 Implants for surgery – Metallic materials – Part 12: Wrought cobalt-chromium-molybdenum alloy ISO 5832-12:2007/Cor.1:2008
ISO 5834-2:2011 Implants for surgery – Ultra-high molecular weight polyethylene – Part 2: Moulded forms
ISO 6474:1994 Implants for surgery – Ceramic materials based on high purity alumina
ISO 6474-1:2010 Implants for surgery – Ceramic materials – Part 1: Ceramic materials based on high purity alumina
ISO 6474-2:2012 Implants for surgery - Ceramic materials - Part 2: Composite materials based on a highpurity alumina matrix with zirconia reinforcement
ISO 7153-1:1991 Surgical instruments – Metallic materials – Part 1: Stainless steel ISO 7153-1:1991/Amd.1:1999

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ISO 13782:1996 Implants for surgery – Metallic materials – Unalloyed tantalum for surgical implant applications
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ISO 11979-1:2006 Ophthalmic implants – Intraocular lenses – Part 1: Vocabulary
ISO 11979-2:1999 Ophthalmic implants – Intraocular lenses – Part 2: Optical properties and test methods ISO 11979-2:1999/Cor.1:2003
ISO 11979-3:2006 Ophthalmic implants – Intraocular lenses – Part 3: Mechanical properties and test methods
ISO 11979-5:2006 Ophthalmic implants – Intraocular lenses – Part 5: Biocompatibility
ISO 11979-6:2007 Ophthalmic implants – Intraocular lenses – Part 6: Shelf-life and transport stability
ISO 11979-7:2006 Ophthalmic implants – Intraocular lenses – Part 7: Clinical investigations ISO 11979-7:2006/Amd.1:2012
ISO 11979-8:2006 Ophthalmic implants – Intraocular lenses – Part 8: Fundamental requirements ISO 11979-8:2006/Amd.1:2011
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ISO 18369-3:2006 Ophthalmic optics – Contact lenses – Part 3: Measurement methods

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Orthopaedics
ASTM F86-12 Standard practice for surface preparation and marking of metallic surgical implants
ASTM F746-04 Standard test method for pitting or crevice corrosion of metallic surgical implant materials
ASTM F897-02 (2007) Standard test method for measuring fretting corrosion of osteosynthesis plates and screws
ASTM F983-86 (2009) Standard practice for permanent marking of orthopaedic implant components
ASTM F1044-05 Standard test method for shear testing of calcium phosphate coatings and metallic coatings
ASTM F1089-10 Standard test method for corrosion of surgical instruments
ASTM F1147-05 Standard test method for tension testing of calcium phosphate and metal coatings
ASTM F1160-05 Standard test method for shear and bending fatigue testing of calcium phosphate and metallic medical and composite calcium phosphate/metallic coatings
ASTM F1377-08 Standard specification for cobalt-28chromium-6molybdenum powder for coating of orthopedic Implants (UNS R30075)
ASTM F1609-08 Standard Specification for calcium phosphate coatings for implantable materials
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ASTM F1798-97 (2008) Standard guide for evaluating the static and fatigue properties of interconnection mechanisms and subassemblies used in spinal arthrodesis implants
ASTM F1800-07 Standard test method for cyclic fatigue testing of metal tibial tray components of total knee joint replacements
ASTM F1801-97 (2004) Standard practice for corrosion fatigue testing of metallic implant materials
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ISO 5838-2:1991 Implants for surgery – Skeletal pins and wires – Part 2: Steinmann skeletal pins – Dimensions

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ISO 7206-8:1995 Implants for surgery – Partial and total hip joint prostheses – Part 8: Endurance performance of stemmed femoral components with application of torsion
ISO 9583:1993 Implants for surgery – Non-destructive testing – Liquid penetrant inspection of metallic surgical implants
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IEC 60601-2-28:1993-Ed.1.0 Medical electrical equipment – Part 2: Particular requirements for the safety of X-ray source assemblies and X-ray tube assemblies for medical diagnosis
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IEC 60601-2-37:2007-Ed.2.0 Medical electrical equipment – Part 2-37: Particular requirements for the basic safety and essential performance of ultrasonic medical diagnostic and monitoring equipment - Edition 2.0
IEC 60601-2-43:2000-Ed.1.0 Medical electrical equipment – Part 2-43: Particular requirements for the safety of X-ray equipment for interventional procedures
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IEC 60601-2-44:2009-Ed.3.0 Medical electrical equipment – Part 2-44: Particular requirements for the basic safety and essential performance of X-ray equipment for computed tomography - Edition 3.0 IEC 60601-2-44:2009-Ed.3.0/Cor.1:2010
IEC 60601-2-54:2009-Ed.1.0 Medical electrical equipment – Part 2-54: Particular requirements for the basic safety and essential performance of X-ray equipment for radiography and radioscopy - Edition 1.0 IEC 60601-2-54:2009-Ed.1.0/Cor.1:2010
Sterilization
ASTM F1980-07 Standard guide for accelerated aging of sterile medical device packages sterilization of health care products – Requirements for validation and routine control – Radiation sterilization
CSA Z17665-1-09 Sterilization of health care products – Moist heat Part 1: Requirements for the development, validation and routine control of a sterilization process for medical devices
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ISO 11138-1:2006 Sterilization of health care products – Biological indicators – Part 1: General
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