

K111316

JUL 20 2011

**510(K) SUMMARY  
OF SAFETY AND EFFECTIVENESS**

In accordance with the Food and Drug Administration Rule to implement provisions of the Safe Medical Devices Act of 1990 and in conformance with 21 CFR 807, this information serves as a Summary of Safety and Effectiveness for the use of the *aap* Cannulated Screws 2.7-7.5.

Submitted By: *aap* Implantate AG  
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Date: May 6, 2011

Contact Person: Marc Seegers, Dipl.-Ing.  
Director QA/ RA  
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Proprietary Name: *aap* Cannulated Screw

Common Name: Cannulated Screw

Classification Name and Reference: 21 CFR 888.3040 Smooth or threaded  
metallic bone fixation fastener - Class II

Device Product Code and Panel Code: Orthopedics/87/ HWC

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## **DEVICE INFORMATION**

### **A INTENDED USE**

The *aap* Cannulated Screw is intended for use over a guide pin or wire for bone fracture fixation and bone fragment fixation. *aap*'s washers may be used with the screws in certain applications.

- minimally invasive reconstruction of fractures and joints
- adjuvant for osteosynthesis in complex joint fractures
- multifragment joint fractures
- fractures of the femoral head and neck
- supracondylar femoral fractures
- tibial plateau fractures
- simple metaphyseal fractures
- simple epiphyseal fractures such as:
  - fractures of the humeral head
  - fractures of the tibial plateau
  - pilon fractures
  - fractures of the radius
- fractures of the wrist, ankle, elbow, and shoulder
- scaphoid fracture and other fractures of the hand
- metatarsal fractures and other fractures of the foot
- ligament fixation at the proximal humerus
- acetabular fractures
- fractures of the posterior pelvic ring
- condylar fractures
- epiphyseal and metaphyseal fractures in children
- ligament avulsion injuries
- fractures of small joints, such as:
  - ankle fractures
  - navicular fractures
- calcaneal and talar fractures
- arthrodesis of the ankle
- avulsion fractures and fractures of metatarsal V
- tarsal fractures

### **B DEVICE DESCRIPTION**

The *aap* Cannulated Screws are manufactured from Titanium Alloy conforming to ASTM F136 or ISO 5832-3 and Stainless Steel conforming to ASTM F138 or ISO 5832-1. The Screws are offered in varying overall lengths and thread lengths to accommodate variability among patients.

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**C DESCRIPTION OF DEVICE MODIFICATION**

This special 510(k) submission is intended to introduce a line extension to the predicate *aap* Small and Large Cannulated Screw System (K021233) and *aap* Cannulated Screws (K080101), which consists of the addition of new overall lengths and thread lengths both for titanium alloy and stainless steel screws.

**D SUBSTANTIAL EQUIVALENCE INFORMATION**

The design features, material, and indications for use of the *aap* Cannulated Screws 2.7-7.5 are substantially equivalent to the previously cleared *aap* Small and Large Cannulated Screw System (K021233) and *aap* Cannulated Screws (K080101). The safety and effectiveness of the *aap* Cannulated Screws is adequately supported by the substantial equivalence information, materials information, and analysis data provided within this Premarket Notification.

**E SUMMARY OF VERIFICATION ACTIVITIES**

Documentation is provided which demonstrates that the additional screws to be substantially equivalent to the predicate devices in terms of material, design, mechanical performance and indications for use. Mechanical tests per ASTM F543 were conducted for those screws for which no test reports have been provided with the predicate device submissions K021233 and K080101 to verify the safety and effectiveness of the additional screws.



Food and Drug Administration  
10903 New Hampshire Avenue  
Document Control Room - WO66-G609  
Silver Spring, MD 20993-0002

aap Implantate AG  
% Marc Seegers, Dipl.-Ing.  
Director, Quality Assurance/Regulatory Affairs  
Lorenzweg 5  
Berlin, Germany 12099

JUL 20 2011

Re: K111316

Trade/Device Name: aap Cannulated Screws  
Regulation Number: 21 CFR 888.3040  
Regulation Name: Smooth or threaded metallic bone fixation fastener  
Regulatory Class: Class II  
Product Code: HWC  
Dated: June 30, 2011  
Received: July 05, 2011

Dear Mr. Seeger:

We have reviewed your Section 510(k) premarket notification of intent to market the device referenced above and have determined the device is substantially equivalent (for the indications for use stated in the enclosure) to legally marketed predicate devices marketed in interstate commerce prior to May 28, 1976, the enactment date of the Medical Device Amendments, or to devices that have been reclassified in accordance with the provisions of the Federal Food, Drug, and Cosmetic Act (Act) that do not require approval of a premarket approval application (PMA). You may, therefore, market the device, subject to the general controls provisions of the Act. The general controls provisions of the Act include requirements for annual registration, listing of devices, good manufacturing practice, labeling, and prohibitions against misbranding and adulteration. Please note: CDRH does not evaluate information related to contract liability warranties. We remind you; however, that device labeling must be truthful and not misleading.

If your device is classified (see above) into either class II (Special Controls) or class III (PMA), it may be subject to additional controls. Existing major regulations affecting your device can be found in the Code of Federal Regulations, Title 21, Parts 800 to 898. In addition, FDA may publish further announcements concerning your device in the Federal Register.

Please be advised that FDA's issuance of a substantial equivalence determination does not mean that FDA has made a determination that your device complies with other requirements of the Act or any Federal statutes and regulations administered by other Federal agencies. You must comply with all the Act's requirements, including, but not limited to: registration and listing (21 CFR Part 807); labeling (21 CFR Part 801); medical device reporting (reporting of medical device-related adverse events) (21 CFR 803); good manufacturing practice requirements as set

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forth in the quality systems (QS) regulation (21 CFR Part 820); and if applicable, the electronic product radiation control provisions (Sections 531-542 of the Act); 21 CFR 1000-1050.

If you desire specific advice for your device on our labeling regulation (21 CFR Part 801), please go to <http://www.fda.gov/AboutFDA/CentersOffices/CDRH/CDRHOffices/ucm115809.htm> for the Center for Devices and Radiological Health's (CDRH's) Office of Compliance. Also, please note the regulation entitled, "Misbranding by reference to premarket notification" (21CFR Part 807.97). For questions regarding the reporting of adverse events under the MDR regulation (21 CFR Part 803), please go to <http://www.fda.gov/MedicalDevices/Safety/ReportaProblem/default.htm> for the CDRH's Office of Surveillance and Biometrics/Division of Postmarket Surveillance.

You may obtain other general information on your responsibilities under the Act from the Division of Small Manufacturers, International and Consumer Assistance at its toll-free number (800) 638-2041 or (301) 796-7100 or at its Internet address <http://www.fda.gov/MedicalDevices/ResourcesforYou/Industry/default.htm>.

Sincerely yours,



for Mark N. Melkerson  
Director  
Division of Surgical, Orthopedic  
and Restorative Devices  
Office of Device Evaluation  
Center for Devices and  
Radiological Health

Enclosure

## Indications for Use

510(k) Number (if known): K111316

Device Name: *aap* Cannulated Screws 2.7-7.5

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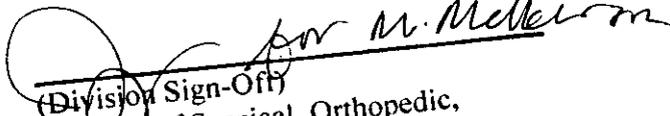
Prescription Use   X    
(Part 21 CFR 801 Subpart D)

AND/OR

Over-The-Counter Use \_\_\_\_\_  
(21 CFR 807 Subpart C)

(PLEASE DO NOT WRITE BELOW THIS LINE-CONTINUE ON ANOTHER PAGE IF NEEDED)

Concurrence of CDRH, Office of Device Evaluation (ODE)

  
(Division Sign-Off)  
Division of Surgical, Orthopedic,  
and Restorative Devices

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