

K091239

SEP 22 2009

**510(k) Summary****Astra Tech AB  
Astra Tech Implant System****ADMINISTRATIVE INFORMATION**

Manufacturer Name: Astra Tech AB  
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**DEVICE NAME AND CLASSIFICATION**

Trade/Proprietary Name: Astra Tech Implant System  
 Common Name: Dental implant, dental implant abutment  
 Classification Regulations: Implant, endosseous, root form  
 Endosseous dental implant abutment  
 Class II, 21 CFR 872.3640

Product Code: DZE  
 Classification Panel: Dental Products Panel  
 Reviewing Branch: Dental Devices Branch

**INTENDED USE**

Astra Tech Implant System is intended to be used to replace missing masticatory functional units (teeth) in single or multiple unit applications within the mandible or maxilla. The device may be used equally well in a single-stage or two-stage surgical procedure. It is indicated for immediate implantation in extraction sites or implantation in partially healed or completely healed alveolar ridge situations. When a one-stage surgical approach is applied, the implant may be immediately loaded when good primary stability is achieved and the functional load is appropriate. The OsseoSpeed Narrow product line shall be used only to replace maxillary lateral incisors and mandibular lateral and central incisors.

The fluoride-modified implant surface, though having a fluoride ion level far below that needed for caries prevention in teeth, provides a favorable substrate for bone attachment and osseointegration. Astra Tech Implant System is especially indicated for use in soft bone applications where implants with other implant surface treatments may be less effective. Because initial stability may be difficult to obtain in Type IV bone, immediate loading of single tooth restorations may not be appropriate in such situations. Immediate loading of single tooth restorations is not recommended for the OsseoSpeed™ 4.0S - 6 mm implant.

#### DEVICE DESCRIPTION

Astra Tech Implant System implants, abutments, prosthetic components and accessories are intended for supporting prosthetic devices in edentulous or partially edentulous patients to restore esthetics and chewing function. All components of the Astra Tech Implant System are identical to those presently marketed. The purpose of this submission is to expand device claims.

#### EQUIVALENCE TO MARKETED DEVICE

Astra Tech AB demonstrated that, for the purposes of FDA's regulation of medical devices, the Astra Tech Implant System is substantially equivalent in indications and design principles to predicate devices, each of which has been determined by FDA to be substantially equivalent to pre-amendment devices.



DEPARTMENT OF HEALTH & HUMAN SERVICES

SEP 22 2009

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

Astra Tech AB  
C/O Ms. Linda K. Schulz  
Regulatory Affairs  
PaxMed International, LLC  
11234 El Camino Real, Suite 200  
San Diego, California 92130

Re: K091239  
Trade/Device Name: Astra Tech Implant System  
Regulation Number: 21 CFR 872.3640  
Regulation Name: Endosseous Dental Implant  
Regulatory Class: II  
Product Code: DZE  
Dated: September 17, 2009  
Received: September 18, 2009

Dear Ms. Schulz:

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.

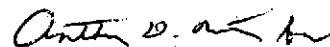
If your device is classified (see above) into either class II (Special Controls) or class III (PMA), it may be subject to additional controls. Existing major regulations affecting your device can be found in the Code of Federal Regulations, Title 21, Parts 800 to 898. In addition, FDA may publish further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



Susan Runner, D.D.S., M.A.

Acting Director

Division of Anesthesiology, General Hospital,

Infection Control and Dental Devices

Office of Device Evaluation

Center for Devices and

Radiological Health

Enclosure

**Indications for Use**510(k) Number (if known): K091239

Device Name: Astra Tech Implant System

**Indications for Use:**

Astra Tech Implant System is intended to be used to replace missing masticatory functional units (teeth) in single or multiple unit applications within the mandible or maxilla. The device may be used equally well in a single-stage or two-stage surgical procedure. It is indicated for immediate implantation in extraction sites or implantation in partially healed or completely healed alveolar ridge situations. When a one-stage surgical approach is applied, the implant may be immediately loaded when good primary stability is achieved and the functional load is appropriate. The OsseoSpeed Narrow product line shall be used only to replace maxillary lateral incisors and mandibular lateral and central incisors.

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Prescription Use  X   
(Part 21 CFR 801 Subpart D)

AND/OR Over-The-Counter Use \_\_\_\_\_  
(21 CFR 801 Subpart C)

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

Concurrence of CDRH, Office of Device Evaluation (ODE)

Kevin Mahony for HSR  
(Division Sign-Off)

Division of Anesthesiology, General Hospital  
Infection Control, Dental Devices

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