

**B. 510(k) SUMMARY (as required by 21 CFR 807.92)**

**Aesculap Implant Systems Laminoplasty Plating System**

October 1, 2010

DEC - 2 2010

**COMPANY:** Aesculap® Implant Systems (AIS), Inc.  
3773 Corporate Parkway  
Center Valley, PA 18034  
Establishment Registration Number: 3005673311

**CONTACT:** Lisa M. Boyle  
800-258-1946 (phone)  
610-791-6882 (fax)

**TRADE NAME:** AIS Laminoplasty Plating System

**COMMON NAME:** Appliance, Fixation, Interlaminar

**CLASSIFICATION NAME:** Orthosis, Spine, Plate, Laminoplasty, Metal

**REGULATION NUMBER:** 21 CFR 888.3050

**PRODUCT CODE:** NQW

**INDICATIONS FOR USE**

The AIS Laminoplasty Plating System is intended for use in the lower cervical and upper thoracic spine (C3-T3) after a laminoplasty has been performed. The AIS Laminoplasty Plating System holds or buttresses the allograft in place in order to prevent expulsion of the allograft, or impingement of the spinal cord.

**DEVICE DESCRIPTION**

The AIS Laminoplasty Plating System is an implant system comprised of various sizes of plates that are designed to fit anatomy of the elevated lamina. The plates have screw holes, which allow for attachment to the vertebral body and the allograft. The screws to be used with the plates are available in a 2mm length with various diameters and are designed to match the anatomical requirements. The AIS Laminoplasty Plating System is manufactured from Titanium/Titanium Alloy and will be provided non-sterile and or sterile.

**PERFORMANCE DATA**

Testing of the Laminoplasty Plating System was performed in accordance with ASTM F2193 and F543 (static and dynamic bending and screw pull-out testing). Testing results demonstrate the AIS Laminoplasty Plating System is safe and effective comparable to other predicate systems currently on the market. No clinical testing was performed.

**SUBSTANTIAL EQUIVALENCE**

Aesculap® Implant Systems (AIS) believes that the Laminoplasty Plating System is substantially equivalent to the AIS Laminoplasty Plating System (K090354) and the Synthes AFS (K032534).

**TECHNOLOGICAL CHARACTERISTICS(compared to Predicate(s))**

As established in this submission, the components of the AIS Laminoplasty Plating System is shown to be substantially equivalent and has the same technological characteristics to its predicate devices through comparison in design, intended use, material, function and range of sizes.



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

Aesculap Implant Systems, Inc.  
% Ms. Lisa M. Boyle  
Senior Regulatory Affairs Specialist  
3773 Corporate Parkway  
Center Valley, Pennsylvania 18034

DEC - 2 2010

Re: K103284

Trade/Device Name: AIS Laminoplasty Plating System  
Regulation Number: 21 CFR 888.3050  
Regulation Name: Spinal interlaminar fixation orthosis  
Regulatory Class: Class II  
Product Code: NQW  
Dated: November 04, 2010  
Received: November 05, 2010

Dear Ms. Boyle:

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 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.

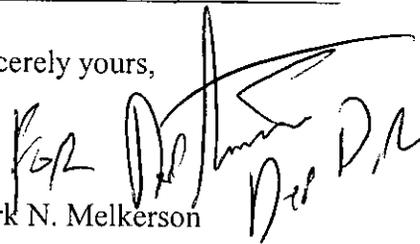
If you desire specific advice for your device on our labeling regulation (21 CFR Part 801), please go to <http://www.fda.gov/AboutFDA/CentersOffices/CDRH/CDRHOffices/ucm115809.htm> for the Center for Devices and Radiological Health's (CDRH's) Office of Compliance. Also, please note the regulation entitled, "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,

A handwritten signature in black ink, appearing to read 'Mark N. Melkerson', is written over a horizontal line. The signature is stylized and includes a large flourish at the end.

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

Enclosure

**A. INDICATIONS FOR USE STATEMENT**

DEC - 2 2010

510(k) Number: K103284

**Device Name: Aesculap Implant Systems Laminoplasty Plating System**

**Indications for Use:**

The Aesculap Implant Systems Laminoplasty Plating System is intended for use in the lower cervical and upper thoracic spine (C3-T3) after a laminoplasty has been performed. The Laminoplasty Plating System holds or buttresses the allograft in place in order to prevent expulsion of the allograft, or impingement of the spinal cord.

Prescription Use   X   and/or Over-the-Counter Use                       
(Part 21 CFR 801 Subpart D) (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)

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

510(k) Number K103284