



JUN 18 2008

**G SPECIAL 510(k) SUMMARY**

For the modification to Bioretec ActivaScrew™ (K072848)

**MANUFACTURER**

Bioretec Ltd.  
Hermiankatu 22, Modulight Building  
FI-33720 Tampere  
FINLAND

**Contact person:**

Mrs. Mari Ruotsalainen  
Quality and Regulatory Affairs Manager  
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Fax: +358 3 317 0225  
Mari.Ruotsalainen@bioretec.com

**Date prepared:** May 16<sup>th</sup>, 2008

**DEVICE NAME**

Trade Names: Bioretec ActivaScrew™, ActivaScrew™ Cannulated and ActivaScrew™ Cannulated with ActivaPin™

Common Name: Screw, Fixation, Bone

**ESTABLISHMENT REGISTRATION NUMBER**

3005536892

**DEVICE CLASSIFICATION AND PRODUCT CODE**

Device Classification Name: Screw, Fixation, Bone

Classification Panel: Orthopedic

Regulation Number: 21 CFR 888.3040

Product Code: HWC

**PREDICATE DEVICES**

1. Bioretec ActivaScrew™ (K072848)
2. Inion OTPS™ Biodegradable Fixation System (K030900 and K062617)

129/242



bioretec

#### DEVICE DESCRIPTION AND PRINCIPLES OF OPERATION

The **ActivaScrew™ Products** are indicated for fixation of bone fractures, osteotomies, arthrodeses, bone grafts and osteochondral fractures of upper extremity, ankle and foot in the presence of appropriate immobilization. Screws are available as non-cannulated and cannulated, fully and partially threaded, in several different sizes, including diameters of 2.0 – 4.5 mm and lengths of 10 – 90 mm.

The **ActivaScrew™ Products** are made of the completely bioabsorbable poly(L-lactide-co-glycolide) (PLGA) material, and they degrade *in vivo* by hydrolysis into alpha-hydroxy acids that are metabolized by the body. As the operated bone fracture or osteotomy gains strength during healing, the **ActivaScrew™** gradually loses its strength, however, maintaining its function at least 8 weeks. Bioabsorption takes place within approximately two years thus eliminating the need for implant removal surgery.

#### EQUIVALENCE TO MARKETED PRODUCTS

The **ActivaScrew™** bioabsorbable screw is substantially equivalent to biodegradable screws cited as predicate devices above.

**The Bioretec ActivaScrew™ has the same intended use, principles of operation and technological characteristic as the previously cleared Bioretec ActivaScrew™ (K072848).** The modifications do not raise any questions of safety and effectiveness.

*In vitro* and mechanical bench testing determined that the **ActivaScrew™** has substantially similar performance as compared to its predicate devices.



Food and Drug Administration  
9200 Corporate Boulevard  
Rockville MD 20850

JUN 18 2008

Bioretec Ltd.  
c/o Mrs. Mari Ruotsalainen  
Quality and Regulatory Affairs Manager  
Hermiankatu 22, Modulight Building  
FI-33720 Tampere  
FINLAND

Re: K081392  
Trade/Device Name: ActivaScrew™, ActivaScrew™ Cannulated and  
ActivaScrew™ Cannulated with ActivaPin™  
Regulation Number: 21 CFR 888.3040  
Regulation Name: Smooth or threaded metallic bone fixation fastener  
Regulatory Class: Class II  
Product Code: HWC  
Dated: May 16, 2008  
Received: May 19, 2008

Dear Mrs. Ruotsalainen:

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 such 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); 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.

This letter will allow you to begin marketing your device as described in your Section 510(k) premarket notification. The FDA finding of substantial equivalence of your device to a legally marketed predicate device results in a classification for your device and thus, permits your device to proceed to the market.

If you desire specific advice for your device on our labeling regulation (21 CFR Part 801), please contact the Center for Devices and Radiological Health's (CDRH's) Office of Compliance at (240) 276-0120. Also, please note the regulation entitled, "Misbranding by reference to premarket notification" (21CFR Part 807.97). For questions regarding postmarket surveillance, please contact CDRH's Office of Surveillance and Biometric's (OSB's) Division of Postmarket Surveillance at (240) 276-3474. For questions regarding the reporting of device adverse events (Medical Device Reporting (MDR)), please contact the Division of Surveillance Systems at (240) 276-3464. 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 (240) 276-3150 or at its Internet address <http://www.fda.gov/cdrh/industry/support/index.html>.

Sincerely yours,



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

Enclosure

K081392



**F Indications for Use Statement**

**Submitter:** Bioretec Ltd.

**510(k) Number:**

**Device Name:** ActivaScrew™, ActivaScrew™ Cannulated and ActivaScrew™ Cannulated with ActivaPin™

**Indications for Use:**

The ActivaScrew™ Products are indicated for fixation of bone fractures, osteotomies, arthrodeses, bone grafts and osteochondral fractures of upper extremity, ankle and foot in the presence of appropriate immobilization.

**Contraindications:**

1. Fractures and osteotomies of diaphyseal bone (except those in the hand and foot).
2. Situations where internal fixation is otherwise contraindicated, e.g., active or potential infection and where patient's co-operation cannot be guaranteed.

Prescription Use  (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 OF NEEDED)

Concurrence of CDRH, Office of Device Evaluation (ODE)

Neil R. P. Dyl *for mdr*  
(Division Sign-Off)

**Division of General, Restorative,  
and Neurological Devices**

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