



K093142

FEB - 4 2010

**510(k) Summary Of Safety And Effectiveness**

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**Summary Date**                      October 1, 2009

**Submitter Name and Address**                      Boston Scientific Corporation  
47900 Bayside Parkway  
Fremont, CA. 94538

**Contact Person:**                      Jim Leathley  
Regulatory Affairs Project Manager  
Phone: 510 440 7836  
Fax: 510 440 7752  
Email: leathlej@bsci.com

**Trade Name:**                              Target® Detachable Coils  
InZone Detachment System

**Common Name:**                              Occlusion Coil, Vascular Occlusion Coil, Neurovascular Occlusion Coil

Power Supply

**Classification Name:**                      Target Detachable Coils are classed as vascular and neurovascular embolization devices under 21 CFR 870.3300 (KRD) and 21 CFR 882.5950 (HCG), respectively, and are Class II devices (special controls).

The special control for the devices is FDA's guidance document, *Class II Special Controls Guidance Document: Vascular and Neurovascular Embolization Devices* (issued 29 Dec 2004).

The InZone Detachment System is intended for use with all currently marketed Boston Scientific Detachable Coils in the embolization of intracranial aneurysms and other vascular malformations of the neuro and peripheral vasculature.

**510(k) Summary Of Safety And Effectiveness (cont.)**

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**Legally Marketed  
Predicate Devices:**

Reference (Clearance Date)	Device
K002181 (11 Aug 2000)	GDC 10-UltraSoft® Coils (introduction of UltraSoft coils)
K021494 (6 June 2002)	GDC Power Supply and Detachable Coil Connecting Cables
K031049 (3 June 2003)	Clearance of ISAT indication for all GDC devices
K042539 (19 Oct 2004)	GDC 360 Detachable Coils (introduction of 360 shape coils)
K050700 (15 April 2005)	Matrix® Detachable Coils

**Device Description:**

Boston Scientific Corporation's **Target Detachable Coils** are comprised of four coil types: **Target Coil 360 STANDARD**, **Target Coil 360 SOFT**, **Target Coil 360 ULTRA** and **Target Coil HELICAL ULTRA**. All Target Coils are stretch resistant coils. Target Coils incorporate a length of multi-strand material through the center of the coil designed to help resist stretching. Target Coils are designed for use with Boston Scientific's InZone™ Detachment System (sold separately).

Each Target Coil type consists of a platinum-tungsten alloy coil attached to a stainless steel delivery wire. For Target Coil 360 STANDARD, Target Coil 360 SOFT and Target Coil 360 ULTRA coils the distal end of the main coil is formed such that there is a smaller distal loop at the end of the main coil to facilitate placement of the coil. The diameter of the distal loop is 75% that of the rest of the main coil loops.

Boston Scientific's InZone Detachment System is intended for use with all Boston Scientific Detachable Coils in the embolization of intracranial aneurysms and other vascular malformations of the neuro and peripheral vasculature.

## **510(k) Summary Of Safety And Effectiveness (cont.)**

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### **Accessories:**

Target Detachable Coils are packaged within a flushing dispenser coil assembly. The dispenser coil is an accessory item with an attached flushport used to hydrate the coil prior to use.

There are no accessories to the InZone Detachment System.

### **Indications for Use / Intended Use:**

Target Detachable Coils are intended for use in the treatment of intracranial aneurysms and other neuro and peripheral vascular abnormalities such as arteriovenous malformations and arteriovenous fistulae.

Target Coils are indicated for endovascular embolization of:

- Intracranial aneurysms
- Other neurovascular abnormalities such as arteriovenous malformations and arteriovenous fistulae
- Arterial and venous embolizations in the peripheral vasculature

Boston Scientific's InZone Detachment System is intended for use with all Boston Scientific Detachable Coils in the embolization of intracranial aneurysms and other vascular malformations of the neuro and peripheral vasculature.

### **Comparison to Predicate Device:**

#### Target Detachable Coils

Boston Scientific Corporation's Target Detachable Coils have the same intended use/indications for use as the predicate devices.

Although the coils incorporate modifications in design, materials, packaging, and instructions for use, the modifications do not alter the fundamental scientific technology of the predicate devices.

Risk assessment of the modifications in the form of design and use failure modes and effects analysis (design and use FMEAs) has been conducted in accordance with EN ISO 14971 +A1:2003. Boston Scientific has determined the modifications to the predicate devices raise no new questions of safety or effectiveness.

Verification testing has demonstrated Target Detachable Coils are substantially equivalent to the current legally marketed predicate devices.

## 510(k) Summary Of Safety And Effectiveness (cont.)

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### **Comparison to Predicate Device (cont.):**

#### InZone Detachment System

Boston Scientific Corporation's InZone Detachment System has the same intended use and indications for use as the current legally marketed predicate device, Boston Scientific's Detachable Coil Power Supply cleared under premarket notification K021494 (cleared 6 June 2002).

Although the InZone Detachment System incorporates modifications in materials, firmware, packaging, and instructions for use, the modifications do not alter the fundamental scientific technology of the predicate device.

Risk assessment of the modifications, in the form of design and use failure modes and effects analysis (design and use FMEAs), has been conducted in accordance with EN ISO 14971 +A1:2003. Boston Scientific has determined the modifications to the predicate device raise no new questions of safety or effectiveness.

Verification testing of the InZone Detachment System, including electrical safety testing in accordance with applicable parts of the EN 60601-series of standards, has demonstrated the devices to be substantially equivalent to the current legally marketed predicate device.

### **Conclusion:**

Because the subject modifications do not alter the intended use or indications for use of the predicate devices, or the fundamental scientific technology of the predicate devices; and because risk assessment of the modifications and successful verification testing raise no new questions of safety and effectiveness, Boston Scientific has determined the Target Detachable Coils and InZone Detachment System to be substantially equivalent to the current legally marketed predicate devices.



DEPARTMENT OF HEALTH & HUMAN SERVICES

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

James Leathley  
Regulatory Affairs Project Manager  
Boston Scientific Neurovascular  
47900 Bayside Parkway  
Fremont, CA 94538-6515

FEB - 4 2010

Re: K093142

Trade/Device Name: Target Detachable Coils and InZone Detachment System  
Regulation Number: 21 CFR 882.5950  
Regulation Name: Neurovascular Embolization Device  
Regulatory Class: II  
Product Code: HCG and KRD  
Dated: January 22, 2010  
Received: January 25, 2010

Dear Mr. Leathley:

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.

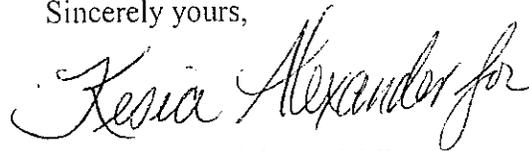
If your device is classified (see above) into either class II (Special Controls) or class III (PMA), it may be subject to additional controls. Existing major regulations affecting your device can be found in the Code of Federal Regulations, Title 21, Parts 800 to 898. In addition, FDA may publish further 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/cdrh/mdr/> 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 (240) 276-3150 or at its Internet address <http://www.fda.gov/cdrh/industry/support/index.html>.

Sincerely yours,

A handwritten signature in black ink that reads "Kesia Alexander for". The signature is written in a cursive, flowing style.

Malvina B. Eydelman, M.D.

Director

Division of Ophthalmic, Neurological,  
and Ear, Nose and Throat Devices

Office of Device Evaluation

Center for Devices and

Radiological Health

Enclosure

**INDICATIONS FOR USE STATEMENT**

510(k) Number: K093142

**Device Name:** Target Detachable Coils

**Indications for Use:**

Target Detachable Coils are indicated for the endovascular embolization of:

- Intracranial aneurysms
- Other neurovascular abnormalities such as arteriovenous malformations and arteriovenous fistulae
- Arterial and venous embolizations in the peripheral vasculature

**Device Name:** InZone Detachment System

**Intended Use:**

The InZone Detachment System is intended for use with all Boston Scientific Detachable Coils in the embolization of intracranial aneurysms and other vascular malformations of the neuro and peripheral vasculature.

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

Concurrence of CDRH, Office of Device Evaluation (ODE)

Prescription Use X  
(Per 21 CFR 801.109)

OR Over The Counter Use \_\_\_\_\_

KRISTEN BOWSHER  
(Division Sign-Off)  
Division of Ophthalmic, Neurological and Ear,  
Nose and Throat Devices

510(k) Number K 093142