

510(k) Summary of Safety and Effectiveness  
for the  
**Phantom™ Plus Cage System**  
**510(k) Number : K082801**

In accordance with 21 CFR 807.92 of the Federal Code of Regulations  
The following 510(k) summary is submitted for the Phantom™ Plus Cage System.

DEC 22 2008

**1. Submitter :**

US Spine, Inc.  
3600 FAU Blvd, Suite 101  
Boca Raton, FL 33431

**Contact Person :**

Peter Harris  
US Spine, Inc.  
3600 FAU Blvd, Suite 101  
Boca Raton, FL 33431  
Telephone: 561-367-7463

Date Prepared: September 22, 2008

**2. Tradename:**

Phantom™ Plus Cage System

**Common Name:**

Intervertebral Body Fusion Device

**Classification Name:**

Intervertebral Body Fusion Device- Lumbar  
Intervertebral Body Fusion Device- Cervical  
21 CFR §888.3080  
MAX/ODP  
Class II

**3. Predicate or legally marketed device(s) which are substantially equivalent:**

- BAK™ Interbody Fusion System, BP/Lordotic Device: Sulzer Spine-Tech (P950002)
- LUMBAR I/F Cage® System: Depuy Acromed (P960025)
- PATRIOT™ Spacers: Globus Medical (K072970)
- SHELL/WAVE/LOOP Cages: Advanced Medical Technologies AG (K080401)

**4. Description of the device:**

The Phantom™ Plus Cage System consists of a variety of hollow vertebral body spacers featuring convex, bullet nose design and an axial void designed to hold bone graft material. The subject device is made of various lengths. The subject devices are designed with angular teeth to allow the implant to grip the superior and inferior end plates, thus allowing expulsion resistance. The devices range from 6mm to 22mm in height and 11mm to 45mm in length.

**Materials:** The devices are manufactured from Medical Grade PEEK (Polyetheretherketone) OPTIMA® LT1 (Invibio™) per ISO 10993-1 USP Class VI and ASTM F2026. Tantalum rods to be Grade UNS R05200 according to ASTM F560.

**5. Intended Use:**

The Phantom™ Plus Cages-Lumbar are intervertebral body fusion devices indicated for use with autogenous bone graft in patients with degenerative disc disease (DDD) at one level or two contiguous levels from L2 to S1.

DDD is defined as back pain of discogenic origin with degeneration of the disc confirmed by history and radiographic studies. The DDD patients may also have up to Grade I spondylolisthesis at the involved level(s). These patients should be skeletally mature and have six (6) months of nonoperative therapy.

The Phantom™ Plus Cage System- Lumbar is to be filled with autogenous bone graft material. The Phantom™ Plus Cages- Lumbar are intended to be used with supplemental spinal fixation systems, such as Preference Pedicle Screw System.

Phantom™ Plus Cages-Cervical are indicated for use in skeletally mature patients with degenerative disc disease (DDD) of the cervical spine with accompanying radicular symptoms at one disc level.

DDD is defined as discogenic pain with degeneration of the disc confirmed by patient history and radiographic studies. Phantom™ Plus Cages-Cervical are used to facilitate intervertebral body fusion in the cervical spine and are placed via an anterior approach at the C3 to C7 disc levels using autograft bone.

Phantom™ Plus Cages-Cervical are to used with supplemental fixation. Patients should have at least six (6) months of non-operative treatment prior to treatment with an intervertebral cage.

**6. Comparison of the technological characteristics of the device to predicate and legally marketed devices :**

There are no significant differences between the Phantom™ Plus Cage System and other systems currently being marketed which would adversely affect the use of the product. It is substantially equivalent to these other devices in design, function, material and intended use.



DEPARTMENT OF HEALTH & HUMAN SERVICES

Public Health Service

Food and Drug Administration  
9200 Corporate Boulevard  
Rockville MD 20850

US Spine, Inc.  
% Mr. Peter Harris  
3600 FAU Boulevard, Suite 101  
Boca Raton, Florida 33431

DEC 22 2008

Re: K082801

Trade/Device Name: Phantom™ Plus Cage System - Lunbar  
Regulation Number: 21 CFR 888.3080  
Regulation Name: Intervertebral body fusion device  
Regulatory Class: II  
Product Code: ODP, MAX  
Dated: September 22, 2008  
Received: September 24, 2008

Dear Mr. Harris:

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 toll-free number (800) 638-2041 or (240) 276-3150 or the 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

## Indications for Use

**510(k) Number: K082801**

**Device Name: Phantom™ Plus Cage System- Lumbar**

### Indications-For-Use:

The Phantom™ Plus Cages- Lumbar are intervertebral body fusion devices indicated for use with autogenous bone graft in patients with degenerative disc disease (DDD) at one level or two contiguous levels from L2 to S1.

DDD is defined as back pain of discogenic origin with degeneration of the disc confirmed by history and radiographic studies. The DDD patients may also have up to Grade I spondylolisthesis at the involved level(s). These patients should be skeletally mature and have six (6) months of nonoperative therapy.

The Phantom™ Plus Cage System- Lumbar is to be filled with autogenous bone graft material. The Phantom™ Plus Cages- Lumbar are intended to be used with supplemental spinal fixation systems, such as Preference Pedicle Screw System.

Prescription use X  
( Part 21 CFR 801.109)

AND/OR

Over-the-counter use \_\_\_\_\_

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

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Concurrence of CDRH, Office of Device Evaluation ( ODE )

David Krone for MXM  
(Division Sign-Off)

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

**510(k) Number K082801**

12/22/2008

## Indications for Use

510(k) Number: K082801

Device Name: Phantom™ Plus Cage System- Cervical

### Indications-For-Use:

Phantom™ Plus Cages-Cervical are indicated for use in skeletally mature patients with degenerative disc disease (DDD) of the cervical spine with accompanying radicular symptoms at one disc level.

DDD is defined as discogenic pain with degeneration of the disc confirmed by patient history and radiographic studies. Phantom™ Plus Cages-Cervical are used to facilitate intervertebral body fusion in the cervical spine and are placed via an anterior approach at the C3 to C7 disc levels using autograft bone.

Phantom™ Plus Cages-Cervical are to used with supplemental fixation. Patients should have at least six (6) months of non-operative treatment prior to treatment with an intervertebral cage.

Prescription use X  
( Part 21 CFR 801.109)

AND/OR

Over-the-counter use \_\_\_\_\_

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Concurrence of CDRH, Office of Device Evaluation ( ODE )

David Krone for MKM 12/22/2008  
(Division Sign-Off)  
Division of General, Restorative,  
and Neurological Devices

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