

<b>510(k) Summary Information</b> <i>Premarket Notification, Section 510(k)</i>	<b>COLIGNE AG.</b> <b>OCTOBER 21, 2005</b>
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**Regulatory Authority:** Safe Medical Devices Act of 1990, 21 CFR 807.92

**1. Device Name:**

**Trade Name:** *GII OstaPek® Plate*

**Common**

**Name(s):** Pedicle screw spinal system

**Classification**

**Name(s):** Pedicle screw spinal system, spine plate

**2. Establishment Name & Registration Number:**

**Name:** **coLigne AG.**

**Number:** 9614472

**3. Classification(s):**

**Sec. § 888.3070 Pedicle screw spinal system**

(a) **Identification.** Pedicle screw spinal systems are multiple component devices, made from a variety of materials, including alloys such as 316L stainless steel, 316LVM stainless steel, 22Cr-13Ni-5Mn stainless steel, Ti-6Al-4V, and unalloyed titanium, that allow the surgeon to build an implant system to fit the patient's anatomical and physiological requirements. Such a spinal implant assembly consists of a combination of anchors (e.g., bolts, hooks, and/or screws); interconnection mechanisms incorporating nuts, screws, sleeves, or bolts; longitudinal members (e.g., plates, rods, and/or plate/rod combinations); and/or transverse connectors.

(b) **Classification.** (1) Class II (special controls), when intended to provide immobilization and stabilization of spinal segments in skeletally mature patients as an adjunct to fusion in the treatment of the following acute and chronic instabilities or deformities of the thoracic, lumbar, and sacral spine: severe spondylolisthesis (grades 3 and 4) of the L5-S1 vertebra; degenerative spondylolisthesis with objective evidence of neurologic impairment; fracture; dislocation; scoliosis; kyphosis; spinal tumor; and failed previous fusion (pseudarthrosis). These pedicle screw spinal systems must comply with the following special controls:

- (i) Compliance with material standards;
- (ii) Compliance with mechanical testing standards;
- (iii) Compliance with biocompatibility standards; and
- (iv) Labeling that contains these two statements in addition to other appropriate labeling information:

“Warning: The safety and effectiveness of pedicle screw spinal systems have been established only for spinal conditions with significant mechanical instability or deformity requiring fusion with instrumentation. These conditions are significant mechanical instability or deformity of the thoracic, lumbar, and sacral spine secondary to severe spondylolisthesis (grades 3 and 4) of the L5-S1 vertebra, degenerative spondylolisthesis with objective evidence of neurologic impairment, fracture, dislocation, scoliosis, kyphosis, spinal tumor, and failed previous fusion (pseudarthrosis). The safety and effectiveness of these devices for any other conditions are unknown.”

“Precaution: The implantation of pedicle screw spinal systems should be performed only by experienced spinal surgeons with specific training in the use of this pedicle screw spinal system because this is a technically demanding procedure presenting a risk of serious injury to the patient.”

(2) Class III (premarket approval), when intended to provide immobilization and stabilization of spinal segments in the thoracic, lumbar, and sacral spine as an adjunct to fusion in the treatment of degenerative disc disease and spondylolisthesis other than either severe spondylolisthesis (grades 3 and 4) at L5-S1 or degenerative spondylolisthesis with objective evidence of neurologic impairment.

**Device Class:** Class II or Class III for the requested indications  
**Classification Panel:** Orthopaedic and Rehabilitation Devices Panel  
**Product Code(s):** MNI, MNH, KWP

**4. Equivalent Predicate Device:**

COLIGNE AG. believes that the *GII OstaPek® Plate* is substantially equivalent to the plates currently offered in the *GII Spinal Fixation System* identified below:

**K980852 – K032604, *GII Spinal Fixation System***

Equivalence can be seen in the design, material composition, surgical technique and intended use.

**5. Device Description:**

**General description of the new plate.**

The new plates are offered in a series of sizes designated by the number of slots or holes within the plates. The sizes are single slot, double and triple slot. The new plates are provided precurved to more closely match the natural lordotic curve of the lumbar spine. Two different curves are offered in each size.

The devices are produced of a polymer matrix of Polyetherketoneetherketoneketone (PEKEKK) Resins and long fiber carbon filaments.

The new plates are intended to be used with the existing pedicle screws, nuts, washers, cross-links and instrumentation as currently provided with the cleared *GII Spinal Fixation System*. Because the new material is not a metallic material, precautions against mixing dissimilar metals or of a galvanic/corrosive interaction with the existing implants is eliminated.

The previously cleared indications for use are unchanged.

**Testing Summary.** Fatigue, static and biocompatibility testing is complete. Samples were tested according to accepted engineering and scientific principals. Test results demonstrate that the new plates perform in a manner equivalent or superior to the previously cleared *GII Spinal Fixation System* plates.

**Indications for Use.** The *GII Spinal Fixation System* When used as a pedicle screw fixation system in the non-cervical posterior spine in skeletally mature patients, the *GII@ Spinal System* is indicated for one or more of the following: (1) degenerative spondylolisthesis with objective evidence of neurologic impairment, (2) fracture, (3) dislocation, (4) scoliosis, (5) kyphosis, (6) spinal tumor, and/or (7) failed previous fusion (pseudarthrosis).

In addition, when used as a pedicle screw fixation system, the *GII@ Spinal System* is indicated for skeletally mature patients: (1) having severe spondylolisthesis (Grades 3 and 4) of the fifth lumbar/first sacral (L5-S 1) joint; (2) who are receiving fusions using autogenous bone graft only; (3) who are having the device fixed or attached to the lumbar and sacral spine (L3 and below); and (4) who are having the device removed after the development of a solid fusion mass.

The *GII* system is also a hook and sacral/ilic screw fixation system of the non-cervical spine indicated for (1) degenerative disc disease (defined as back pain of discogenic origin with degeneration of the disc confirmed by patient history and radiographic studies), (2) degenerative spondylolisthesis with objective evidence of neurologic impairment, (3) fracture, (4) dislocation, (5) scoliosis, (6) kyphosis, (7) spinal tumor, and/or (8) failed previous fusion (pseudarthrosis).

**6. Applicant Name & Address:**

coLigne AG  
Utoquai 43  
Zurich, Switzerland 8008  
41-433-438000  
41-433-438009 – fax  
**Registration Number:** 9614472

**7. Company Contact:**

Robert Lange  
coLigne AG  
Utoquai 43  
Zurich, Switzerland 8008  
41-433-438000  
41-433-438009 – fax

**8. Submission Correspondent:**

Mr. David W. Schlerf  
Buckman Company, Inc.  
200 Gregory Lane, Suite C-100  
Pleasant Hill, CA 94523-3389  
925.356.2640 - 925.356.2654 - fax

**9. Performance Standards:**

United States Food and Drug Administration mandated performance standards for this device do not exist. Various voluntary performance standards are utilized. Voluntary standards utilized include ASTM, Standard Operating Procedures, vendor & process certification and qualification procedures, Quality Systems Regulations, ISO materials standards and ISO 13485 series quality regulations.

**coLigne AG.** also meets appropriate general controls authorized under Sections 501, 502, 510, 516, 518, 519, and 520 of the Food, Drug, and Cosmetic Act.



Food and Drug Administration  
9200 Corporate Boulevard  
Rockville MD 20850

OCT 26 2005

CoLigne AG  
c/o David W. Schlerf  
Buckman Company, Incorporated  
200 Gregory Lane, Suite C-100  
Pleasant Hill, California 94523-3389

Re: K051089  
Trade/Device Name: GII Spinal Fixation System  
Regulation Number: 21 CFR 888.3070  
Regulation Name: Pedicle screw spinal system  
Regulatory Class: II  
Product Code: MNI, KWP, MNII  
Dated: September 22, 2005  
Received: September 26, 2005

Dear Mr. Schlerf:

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.

Page 2- David W. Schlerf

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 Office of Compliance at (240) 276-0120. Also, please note the regulation entitled, "Misbranding by reference to premarket notification" (21CFR Part 807.97). 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) 443-6597 or at its Internet address <http://www.fda.gov/cdrh/industry/support/index.html>

Sincerely yours,



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

Enclosure

510(k) Number : K051089

Device Name(s): *GII Spinal Fixation System*

**Indications For Use:**

The *GII Spinal Fixation System* When used as a pedicle screw fixation system in the non-cervical posterior spine in skeletally mature patients, the GII@ Spinal System is indicated for one or more of the following: (1) degenerative spondylolisthesis with objective evidence of neurologic impairment, (2) fracture, (3) dislocation, (4) scoliosis, (5) kyphosis, (6) spinal tumor, and/or (7) failed previous fusion (pseudarthrosis).

In addition, when used as a pedicle screw fixation system, the GII@ Spinal System is indicated for skeletally mature patients: (1) having severe spondylolisthesis (Grades 3 and 4) of the fifth lumbar/first sacral (L5-S 1) joint; (2) who are receiving fusions using autogenous bone graft only; (3) who are having the device fixed or attached to the lumbar and sacral spine (L3 and below); and (4) who are having the device removed after the development of a solid fusion mass.

The GII system is also a hook and sacral/iliac screw fixation system of the non-cervical spine indicated for (1) degenerative disc disease (defined as back pain of discogenic origin with degeneration of the disc confirmed by patient history and radiographic studies), (2) degenerative spondylolisthesis with objective evidence of neurologic impairment, (3) fracture, (4) dislocation, (5) scoliosis, (6) kyphosis, (7) spinal tumor, and/or (8) failed previous fusion (pseudarthrosis).

Prescription Use   X   OR Over-The-Counter Use \_\_\_\_\_

PLEASE DO NOT WRITE BELOW THIS LINE - CONTINUE ON ANOTHER PAGE IF NECESSARY  
Concurrence of CDRH, Office of Device Evaluation (ODE)

  
**(Division Sign-Off)**  
**Division of General, Restorative,  
and Neurological Devices**

(Per 21 CFR 801.109)

(Optional format 1-2-96)

**510(k) Number** K051089