



MSI France  
Gerard Bouana  
5 Rue des Halles  
Paris 75001  
France

January 31, 2018

Re: K172240

Trade/Device Name: SPI Dental Implant System  
Regulation Number: 21 CFR 872.3640  
Regulation Name: Endosseous Dental Implant  
Regulatory Class: Class II  
Product Code: DZE, NHA  
Dated: October 24, 2017  
Received: November 2, 2017

Dear Gerard Bouana:

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.

Also, please note the regulation entitled, "Misbranding by reference to premarket notification" (21 CFR 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.

For comprehensive regulatory information about medical devices and radiation-emitting products, including information about labeling regulations, please see Device Advice (<https://www.fda.gov/MedicalDevices/DeviceRegulationandGuidance/>) and CDRH Learn (<http://www.fda.gov/Training/CDRHLearn>). Additionally, you may contact the Division of Industry and Consumer Education (DICE) to ask a question about a specific regulatory topic. See the DICE website (<http://www.fda.gov/DICE>) for more information or contact DICE by email ([DICE@fda.hhs.gov](mailto:DICE@fda.hhs.gov)) or phone (1-800-638-2041 or 301-796-7100).

Sincerely,

Mary S. Runner -S

For Tina Kiang, Ph.D.  
Acting Director  
Division of Anesthesiology,  
General Hospital, Respiratory,  
Infection Control, and Dental Devices  
Office of Device Evaluation  
Center for Devices and Radiological Health

Enclosure

## Indications for Use

510(k) Number (if known)

K172240

Device Name

SPI Dental Implant System

Indications for Use (Describe)

The SPI Dental Implant System is indicated for use in surgical and restorative applications for placement in the bone of the upper or lower jaw to provide support for prosthetic devices, such as artificial teeth, in order to restore the patient's chewing function.

It is intended for immediate loading when good primary stability is achieved and with appropriate occlusal loading.

Type of Use (Select one or both, as applicable)

☒ Prescription Use (Part 21 CFR 801 Subpart D)

☐ Over-The-Counter Use (21 CFR 801 Subpart C)

**PLEASE DO NOT WRITE BELOW THIS LINE – CONTINUE ON A SEPARATE PAGE IF NEEDED.**

**FOR FDA USE ONLY**

Concurrence of Center for Devices and Radiological Health (CDRH) (Signature)

**510k Summary**  
**January 29, 2018**  
**SPI Dental Implant System**  
**K172240**

**Name and address:** MSI Implants

5 Rue des Halles

Paris 75001 France

**Contact Person:** Gerard Bouana

**Phone Number:** +6-52129536

**Name of device:** SPI Dental Implant System

**Classification Name:** Endosseous dental implants

**CFR:** 21 CFR 872.3640

**Product Code:** DZE, NHA

**Device Description:** SPI Dental Implant System is an internal hex implant system which comes in 3.3, 3.7, 4.2, 5.0, and 6.0 diameter. The implants come in lengths of 8, 10, 11.5, 13 and 16. Both straight and angled abutments are available.

The implant is a conical shape one with a grit blasted and acid etched surface. Standard abutments, standard narrow abutments, standard shoulder abutments, standard wide shoulder abutments, multi-unit abutments, ball attachments, healing caps and standard 15° and 25° abutments are included in the system.

**Indications for Use:** The SPI Dental Implant System is indicated for use in surgical and restorative applications for placement in the bone of the upper or lower jaw to provide support for prosthetic devices, such as artificial teeth, in order to restore the patient's chewing function.

It is intended for immediate loading when good primary stability is achieved and with appropriate occlusal loading.

**Testing Summary:** Dynamic fatigue testing according to ISO 14801 was conducted to determine the abutments are strong enough for their intended use. Surface analysis according to the FDA guidance document was done including SEM and EDS. Sterilization validation according to ISO 11137-1 and 11137-2 was conducted on the implants. Abutment steam sterilization validation was done according to ISO 17665-1 and ISO 17665-2. Package integrity testing according to ASTM F1929-12 and accelerated aging according to ASTM F1980-07 was conducted. Materials used in the product meet ASTM F136 and the biocompatibility was demonstrated by testing the cytotoxicity according to ISO 10993-5. Endotoxin testing according to USP 161 was conducted.

**Predicate Device:** GP Implants Spiral Shape Dental Implant System K162299

**Reference Device:** PALTOP Dental Implant System K112795

**Substantial Equivalence:**

SPI Dental Implant System is substantially equivalent to Spiral Shape Dental Implant System in indications for use, materials, design, and fatigue performance.

| Company                                        | SPI Dental Implant System                                                                                                                                                                                                                                                                                                                                                                                           | Spiral Shape Dental Implant System                                                                                                                                                                                                                                                                                                                                                                                  |
|------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Indications for Use                            | <p>The Spiral Shape Dental implant System is indicated for use in surgical and restorative applications for placement in the bone of the upper or lower jaw to provide support for prosthetic devices, such as artificial teeth, in order to restore the patient's chewing function.</p> <p>It is intended for immediate loading when good primary stability is achieved and with appropriate occlusal loading.</p> | <p>The Spiral Shape Dental implant System is indicated for use in surgical and restorative applications for placement in the bone of the upper or lower jaw to provide support for prosthetic devices, such as artificial teeth, in order to restore the patient's chewing function.</p> <p>It is intended for immediate loading when good primary stability is achieved and with appropriate occlusal loading.</p> |
| Implant Diameters                              | 3.3, 3.7, 4.2, 5, 6                                                                                                                                                                                                                                                                                                                                                                                                 | 3.3, 3.7, 4.2, 5, 6                                                                                                                                                                                                                                                                                                                                                                                                 |
| Implant Lengths                                | 8,10,11.5,13,16 (no 6 x 16)                                                                                                                                                                                                                                                                                                                                                                                         | 8,10,11.5,13,16 (no 6 x 16)                                                                                                                                                                                                                                                                                                                                                                                         |
| Material of devices included in the submission | Ti-6AL-4V ELI                                                                                                                                                                                                                                                                                                                                                                                                       | Ti-6AL-4V ELI                                                                                                                                                                                                                                                                                                                                                                                                       |
| Type of abutment and maximum angulation        | Pre-manufactured of no more than 25°                                                                                                                                                                                                                                                                                                                                                                                | Pre-manufactured of no more than 25°                                                                                                                                                                                                                                                                                                                                                                                |
| Interface type/shape                           | Internal hex                                                                                                                                                                                                                                                                                                                                                                                                        | Internal hex                                                                                                                                                                                                                                                                                                                                                                                                        |

|                                           | <b>MSI Device</b>                      | <b>GP Implants Device</b>              |
|-------------------------------------------|----------------------------------------|----------------------------------------|
| <b>Spiral Shape Internal Hex Implants</b> | Diameters of 3.3, 3.7, 4.2, 5, and 6mm | Diameters of 3.3, 3.7, 4.2, 5, and 6mm |
| <b>Cover screw</b>                        | Cover screw                            | Cover screw                            |

|                                        |                                                               |                                                               |
|----------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|
| <b>Multi-Unit Abutments</b>            | Multi-unit abutments in heights of 1,2,3 and 4 mm             | Multi-unit abutments in heights of 1,2,3 and 4 mm             |
| <b>Ball attachments</b>                | Ball attachments in heights of 1,2,3,4,5, and 6mm             | Ball attachments in heights of 1,2,3,4,5, and 6mm             |
| <b>Healing Caps 4.5 diameter</b>       | Healing cap in 3,4,5,6 and 7mm height                         | Healing cap in 2 and 7mm height                               |
| <b>Healing Caps 5.5 diameter</b>       | Healing cap in 2,3,4,and 5mm height                           | Healing cap in 2,3,4,5,6,and 7mm height                       |
| <b>Standard Titanium Abutment</b>      | Standard Titanium Abutment with height of 7 and 9 mm          | Standard Titanium Abutment with height of 7mm                 |
| <b>Standard Narrow Abutment</b>        | Standard narrow abutment with heights of 7 and 9 mm           | Standard narrow abutment with heights of 7, 9, and 11mm       |
| <b>Standard Shoulder Abutment</b>      | Standard shoulder abutment in heights of 1,3 and 4mm          | Standard shoulder abutment in heights of 1,2,3 and 4mm        |
| <b>Standard Wide Shoulder Abutment</b> | Standard Wide Shoulder Abutment with heights of 1,2,3,and 4mm | Standard Wide Shoulder Abutment with heights of 1,2,3,and 4mm |
| <b>Standard 15° Abutment</b>           | Standard 15° Abutment with heights of 8, 12 and 13mm          | Standard 15° Abutment with heights of 8, 12, and 13mm         |
| <b>Standard 25° Abutment</b>           | Standard 25° Abutment with heights of 9 and 12mm              | Standard 25° Abutment with heights of 9 and 12mm              |

#### **Conclusion:**

SPI Dental Implant System is substantially equivalent to GP Implants Spiral Shape Dental Implant System. They both have the same indications for use, are of the same material, and have internal hex connections. The abutments, healing caps, and angled abutments are offered in similar designs and heights. Performance testing demonstrates substantial equivalence to the identified predicate devices.