



Food and Drug Administration  
10903 New Hampshire Avenue  
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Silver Spring, MD 20993-0002

Wright Medical Technology, Inc.  
Mr. Michael Mullins  
Regulatory Affairs Specialist  
1023 Cherry Road  
Memphis, Tennessee 38117

August 22, 2017

Re: K170642

Trade/Device Name: GRAVITY™ Soft Tissue Repair System  
Regulation Number: 21 CFR 878.5000  
Regulation Name: Nonabsorbable poly(ethylene terephthalate) surgical suture  
Regulatory Class: Class II  
Product Code: GAT, HWC  
Dated: July 18, 2017  
Received: July 20, 2017

Dear Mr. Mullins:

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.

If you desire specific advice for your device on our labeling regulation (21 CFR Part 801), please contact the Division of Industry and Consumer Education (DICE) at its toll-free number (800) 638-2041 or (301) 796-7100 or at its Internet address <http://www.fda.gov/MedicalDevices/ResourcesforYou/Industry/default.htm>. 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.

You may obtain other general information on your responsibilities under the Act from the Division of Industry and Consumer Education (DICE) at its toll-free number (800) 638-2041 or (301) 796-7100 or at its Internet address <http://www.fda.gov/MedicalDevices/ResourcesforYou/Industry/default.htm>.

Sincerely,

**Mark N. Melkerson -S**

Mark N. Melkerson  
Director  
Division of Orthopedic Devices  
Office of Device Evaluation  
Center for Devices and  
Radiological Health

Enclosure

DEPARTMENT OF HEALTH AND HUMAN SERVICES  
Food and Drug Administration

Form Approved: OMB No. 0910-0120  
Expiration Date: January 31, 2017  
See PRA Statement on last page.

### Indications for Use

510(k) Number (if known)  
K170642

Device Name  
GRAVITY™ Soft Tissue Repair System

Indications for Use (Describe)  
The GRAVITY™ Soft Tissue Repair Systems are indicated for the following:

GRAVITY™ Plantar Plate Repair System:

- Distal metatarsal osteotomy (screw)
- Plantar plate repair (suture)

GRAVITY™ Needle Driver:

- Approximation of soft tissues, including the use of allograft tissue for orthopedic surgeries

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)

This section applies only to requirements of the Paperwork Reduction Act of 1995.

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### 510(K) SUMMARY

In accordance with the Food and Drug Administration Rule to implement provisions of the Safe Medical Devices Act of 1990 and in conformance with 21 CFR 807.92, this information serves as a Summary of Safety and Effectiveness for the use of the GRAVITY™ Soft Tissue Repair System.

- (a)(1). Submitted By:** Wright Medical Technology, Inc.  
1023 Cherry Road  
Memphis, TN 38117
- Date:** August 17, 2017
- Contact Person:** Michael Mullins  
Regulatory Affairs Specialist  
Office - (901) 867-4142  
Fax – (901) 867-4190
- (a)(2). Proprietary Name:** GRAVITY™ Soft Tissue Repair System
- Common Name:** -Suture, Nonabsorbable, Synthetic, Polyethylene  
-Screw, Fixation, Bone
- Classification Name and Reference:** -21 CFR 878.5000 – Class II  
-21 CFR 888.3030 – Class II
- Device Product Code, Device Panel:** -GAT – General  
-HWC – Orthopedic
- (a)(3). Predicate Device:** **Primary-** K063778: FORCE FIBER POLYETHYLENE NONABSORBABLE  
**Primary-** K092533: FORCE FIBER POLYETHYLENE NONABSORBABLE  
**Secondary-** K133713: CHARLOTTE Snap-Off Screws  
**Reference-** K141011: G-FORCE Ti Anchor System

**(a)(4). Device Description**

The GRAVITY™ Soft Tissue Repair System is available in two offerings: the plantar plate repair system (suture, screws, and accessories) and the Needle Driver Device (free strand suture). The subject device is composed UHMWPE suture and ASTM F136 Titanium alloy screws. The system is conveniently sterile packed with disposable instruments.

**(a)(5). INTENDED USE**

GRAVITY™ Soft Tissue Repair Systems are indicated for the following:

GRAVITY™ Plantar Plate Repair System

- Distal metatarsal osteotomy (screw)
- Plantar plate repair (suture)

GRAVITY™ Needle Driver:

- Approximation of soft tissues, including the use of allograft tissue for orthopedic surgeries

**(a)(6). Technological Characteristics Comparison**

The subject GRAVITY™ Soft Tissue Repair System is technologically equivalent to the primary predicates in material and design with differences being that the subject is preloaded on a needle driver device and has a different needle design. The snap-off screws are identical in material and design to their respective predicate. There are no technological characteristic differences between the subject and predicate snap-off screws.

**(b)(1). Substantial Equivalence – Non-Clinical Evidence**

Performance testing and analysis demonstrated substantial equivalence in construct tensile strength to the reference predicate.

**(b)(2). Substantial Equivalence – Clinical Evidence**

A comprehensive clinical literature review was completed and used to support the subject free strand suture indications for use.

**(b)(3). Substantial Equivalence – Conclusions**

The design characteristics of the subject system do not raise any new types of questions of safety or effectiveness. From the evidence submitted in this 510(k), the subject devices can be expected to perform at least as well as the predicate device.