

K093405 (1 of 2)

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**510(K) SUMMARY  
OF SAFETY AND EFFECTIVENESS**

**MAY 25 2010**

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 PROPHECY® Pre-Operative Navigation Alignment Guides.

Submitted By: Wright Medical Technology, Inc.  
5677 Airline Rd.  
Arlington, TN 38002

Date: May 21, 2010

Contact Person: Sarah Holtgrewe  
Manager, Regulatory Affairs

Proprietary Name: **PROPHECY® Pre-Operative Navigation  
Alignment Guides**

Common Name: Alignment and Resection Guides

Classification Name and Reference: 21 CFR 888.3565 --Knee joint patellofemorotibial  
metal/polymer porous-coated uncemented  
prosthesis--Class II  
21 CFR 888.3560 --Knee joint patellofemorotibial  
polymer/metal/polymer/semi-constrained cemented  
prosthesis--Class II

Device Product Code and Panel Code: Orthopedics/87/ MBH, JWH, OOG

Predicate Device ADVANCE® Total Knee System  
(K061223, K972626)

**headquarters**

Wright Medical Technology, Inc. 5677 Airline Road Arlington, TN 38002 901.867.9971 phone

[www.wmt.com](http://www.wmt.com)

*international subsidiaries*

011.32.3.378.39.05 Belgium  
011.39.0250.678.227 Italy

905.826.1600 Canada  
011.81.3.3538.0474 Japan

011.33.1.45.13.24.40 France  
011.44.1483.721.404 UK

011.49.211.862.9990 Germany



**DEVICE INFORMATION****A. DEVICE DESCRIPTION**

PROPHECY® Pre-Operative Navigation Alignment Guides are patient-specific guides created to fit the contours of the patient's distal femoral and tibial plateau anatomy. The guides are designed and manufactured from patient imaging data (MRI, CT), and are available in two versions: alignment and alignment and resection. The guides are made from biocompatible nylon, and the resection slots are biocompatible stainless steel. The PROPHECY® Guides serve as an alternative to traditional alignment instrumentation used with Wright's ADVANCE® Total Knee System, and thereby reduce the overall number of surgical steps required during total knee arthroplasty. The guides serve to position and align the ADVANCE® implants in a comparable position to traditional ADVANCE® instruments.

**B. INTENDED USE**

Wright's PROPHECY® Pre-Operative Navigation Alignment Guides are intended to be used as patient-specific surgical instrumentation to assist in the positioning of total knee replacement components intra-operatively and in guiding the marking of bone before cutting. The PROPHECY® Pre-Operative Navigation Alignment Guides are intended for use with Wright's ADVANCE® Total Knee System and its cleared indications for use, provided that anatomic landmarks necessary for alignment and positioning of the implant are identifiable on patient imaging scans. The PROPHECY® Pre-Operative Navigation Alignment Guides are intended for single use only.

**C. PERFORMANCE DATA**

The following performance data was used to support the safety and efficacy of the PROPHECY® Pre-Operative Navigation Alignment Guides:

- Cadaver testing by end users analyzing placement location and orientation
- Repeatability testing across design engineers
- Detailed software descriptions and documentation
- Biocompatibility testing

**D. SUBSTANTIAL EQUIVALENCE INFORMATION**

The main differences between the subject and predicate devices are in the patient-specific design and materials. The safety and efficacy of the PROPHECY® Pre-Operative Navigation Alignment Guides are adequately supported by the substantial equivalence information, materials information, and analysis data provided within this 510(k), including the following: a device design algorithm to illustrate the PROPHECY® design goal, a comparison with traditional surgical technique, user repeatability testing and cadaver testing to ensure repeatability of design algorithm execution, a battery of biocompatibility tests to address material safety, and evidence that the material is sterilizable and its performance is unchanged by the sterilization process.

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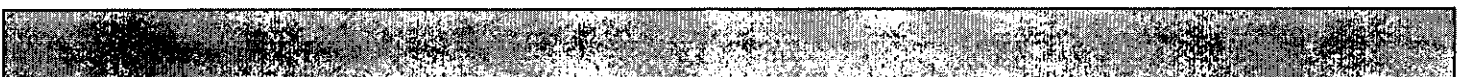
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011.44.1483.721.404 UK





DEPARTMENT OF HEALTH & HUMAN SERVICES

Public Health Service

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

Wright Medical Technology, Inc.  
% Ms. Sarah Holtgrewe  
Manager, Regulatory Affairs  
5677 Airline Road  
Arlington, Tennessee 38002

MAY 25 2010

Re: K093405  
Trade/Device Name: PROPHECY<sup>®</sup> Pre-Operative Navigation Alignment Guides  
Regulation Number: 21 CFR 888.3565  
Regulation Name: Knee joint patellofemorotibial metal/polymer porous-coated uncemented prosthesis  
Regulatory Class: II  
Product Code: MBH, JWH, OOG  
Dated: May 14, 2010  
Received: May 17, 2010

Dear Ms. Holtgrewe:

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.

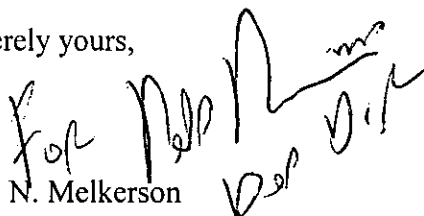
Please be advised that FDA's issuance of a substantial equivalence determination does not mean that FDA has made a determination that your device complies with other requirements of the Act or any Federal statutes and regulations administered by other Federal agencies. You must comply with all the Act's 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

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/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 Small Manufacturers, International and Consumer Assistance 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 yours,

A handwritten signature in black ink, appearing to read 'for Mark N. Melkerson' with a stylized flourish at the end.

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

Enclosure

## Indications for Use

510(k) Number (if known):

Device Name: PROPHECY® Pre-Operative Navigation Alignment Guides

### Indications For Use:

Wright's PROPHECY® Pre-Operative Navigation Alignment Guides are intended to be used as patient-specific surgical instrumentation to assist in the positioning of total knee replacement components intra-operatively and in guiding the marking of bone before cutting. The PROPHECY® Pre-Operative Navigation Alignment Guides are intended for use with Wright's ADVANCE® Total Knee System and its cleared indications for use, provided that anatomic landmarks necessary for alignment and positioning of the implant are identifiable on patient imaging scans. The PROPHECY® Pre-Operative Navigation Alignment Guides are intended for single use only.

Prescription Use. xxx  
(Part 21 CFR 801 Subpart D)

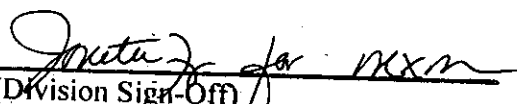
AND/OR

Over-The-Counter Use \_\_\_\_\_  
(21 CFR 807 Subpart C)

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

Concurrence of CDRH, Office of Device Evaluation (ODE)

1 of 1

  
(Division Sign-Off)  
Division of Surgical, Orthopedic,  
and Restorative Devices

510(k) Number K093405