

JUL - 2 2002

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A Wright Medical Group Company

## 510(K) SUMMARY OF SAFETY AND EFFECTIVENESS

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, this information serves as a Summary of Safety and Effectiveness for the use of the STEM Hip Replacement System.

Submitted By:	Wright Medical Technology, Inc.
Date:	April 26, 2002
Contact Person:	Roger D. Brown Director, Regulatory Affairs
Proprietary Name:	STEM Hip Replacement System
Common Name:	HIP REPLACEMENT SYSTEM
Classification Name and Reference:	21 CFR 888.3358 Prosthesis, Hip, Semi- Constrained, metal/polymer, Uncemented – Class II
Device Product Code and Panel Code:	Orthopedics/87/LPH

### DEVICE INFORMATION

#### A. INTENDED USE

Indicated for use in total hip arthroplasty for reduction or relief of pain and/or improved hip function in skeletally mature patients with the following conditions:

- 1) Non-inflammatory degenerative joint disease such as osteoarthritis, avascular necrosis, ankylosis, protrusio acetabuli, and painful hip dysplasia;
- 2) Inflammatory degenerative joint disease such as rheumatoid arthritis;
- 3) Correction of functional deformity;
- 4) Revision procedures where other treatments or devices have failed; and,
- 5) Treatment of fractures that are unmanageable using other techniques.”

The STEM Hip Replacement System are single use components, intended for use in conjunction with associated ceramic or metal femoral heads as part of an uncemented total hip arthroplasty.

## **B. DEVICE DESCRIPTION**

The STEM is a modular prosthesis comprising two principal parts:

- Zweymüller style rectangular distal stem and body
- Modular neck

The STEM is available in nine sizes. All distal stems and bodies are rectangular in profile with a heavy grit blast surface finish. The STEM has a specific oblong housing/taper for the insertion of the twelve modular necks, which are available in six versions and two lengths: Neutral, antiversion/ retroversion 8° or 15°, varus/ valgus 8°, or combination of anteverted/ retroverted - varus/ valgus (in both short and long lengths).

## **C. SUBSTANTIAL EQUIVALENCE INFORMATION**

The intended use, material, type of interface, and design features of the STEM Hip Replacement System are substantially equivalent to the predicate devices previously cleared for market. The safety and effectiveness of the STEM Hip Replacement System are adequately supported by the substantial equivalence information, materials data, and testing results provided within the Premarket Notification.



Food and Drug Administration  
9200 Corporate Boulevard  
Rockville MD 20850

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Mr. Roger D. Brown  
Director, Regulatory Affairs  
Wright Medical Technology  
5677 Airline Road  
Arlington, Tennessee 38002

Re: K021346  
Trade Name: STEM Hip Replacement System  
Regulation Number: 21 CFR 888.3358  
Regulation Name: Hip joint metal/polymer/metal semi-constrained porous-coated uncemented prosthesis  
Regulatory Class: II  
Product Code: LPH  
Dated: April 26, 2002  
Received: April 29, 2002

Dear Mr. Brown:

We have reviewed your Section 510(k) premarket notification of intent to market the device referenced above and we have determined the device is substantially equivalent (for the indications for use stated in the enclosure) to 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.

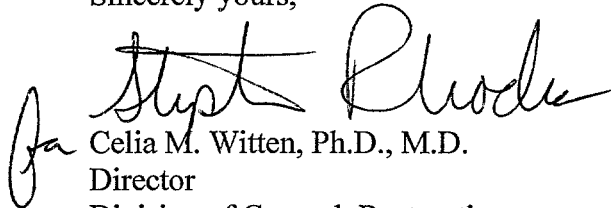
Please be advised that FDA's issuance of a substantial equivalence determination does not mean that FDA has made a determination that your device complies with other requirements of the Act or any Federal statutes and regulations administered by other Federal agencies. You must comply with all the Act's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

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 and additionally 21 CFR Part 809.10 for in vitro diagnostic devices), please contact the Office of Compliance at (301) 594-4659. Additionally, for questions on the promotion and advertising of your device, please contact the Office of Compliance at (301) 594-4639. Also, please note the regulation entitled, "Misbranding by reference to premarket notification" (21CFR Part 807.97). Other general information on your responsibilities under the Act may be obtained 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/dsma/dsmamain.html>.

Sincerely yours,

A handwritten signature in black ink, appearing to read "Celia M. Witten". The signature is written in a cursive style with a large initial "C" and "W".

Celia M. Witten, Ph.D., M.D.  
Director  
Division of General, Restorative  
and Neurological Devices  
Office of Device Evaluation  
Center for Devices and  
Radiological Health

Enclosure



A Wright Medical Group Company

**STEM  
HIP REPLACEMENT SYSTEM**

**INDICATIONS STATEMENT**

Indicated for use in total hip arthroplasty for reduction or relief of pain and/or improved hip function in skeletally mature patients with the following conditions:

- 1) Non-inflammatory degenerative joint disease such as osteoarthritis, avascular necrosis, ankylosis, protrusio acetabuli, and painful hip dysplasia;
- 2) Inflammatory degenerative joint disease such as rheumatoid arthritis;
- 3) Correction of functional deformity;
- 4) Revision procedures where other treatments or devices have failed; and,
- 5) Treatment of fractures that are unmanageable using other techniques.

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

Concurrence of CDRH, Office of Device Evaluation (ODE)

\_\_\_\_\_  
(Division Sign-Off)  
Division of General Restorative Devices  
510(k) Number \_\_\_\_\_

Prescription Use   
(Per 21 CFR 801.109)

OR

Over-The Counter Use \_\_\_\_\_  
(Optional Format 1-2-96)

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

510(k) Number     K021346