

Summary of Safety and Effectiveness
VERILAST® Wear Claims for the LEGION® Primary Knee System
Smith & Nephew, Inc.

Contact Person and Address

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Name of Device: LEGION® Primary Knee System

Common Name: Total Knee Prosthesis

Device Classification Name and Reference: 21 CFR 888.3560 Knee joint patellofemorotibial polymer/metal/polymer semi-constrained cemented prosthesis

Device Class: Class II

Panel Code: Orthopaedics/87 JWH

Predicate Devices: Genesis II & Profix Zirconium Femoral Knee Components (K962557); and Crosslinked Polyethylene Articular Inserts (K071071)

Device Description

Subject of this Traditional 510(k) Premarket Notification is a request for long-term *in vitro* wear claims for the Smith & Nephew, Inc. Legion Primary Knee System. The wear claims will be made for the use of a Legion Primary Oxinium femoral component coupled with a 7.5 Mrad cross-linked polyethylene (XLPE) articular insert. The Legion Primary Knee System consists of existing total knee implant devices, and it is important to note that there are no new total knee components being introduced as a result of this Traditional 510(k) premarket notification.

Intended Use

Total knee components are indicated for rheumatoid arthritis; post-traumatic arthritis, osteoarthritis, or degenerative arthritis in older patients whose age, weight, and activity level are compatible with an adequate long-term result; failed osteotomies, unicompartmental replacement, or total knee replacement. Posterior stabilized knee systems are designed for use in patients in primary and revision surgery, where the anterior and posterior cruciate ligaments are absent or incompetent and the collateral ligaments remain intact. Smith & Nephew, Inc. Legion Primary Knee components are indicated for use only with cement and are single use devices.

Performance Data

In vitro knee simulator wear testing provided in the submission demonstrated that the OXINIUM®/XLPE bearing couple exhibited low wear characteristics in long-term laboratory testing as compared to a control total knee system. The results of in-vitro wear simulation testing have not been proven to quantitatively predict clinical wear performance.

Clinical data was not needed to support the safety and effectiveness of the subject device.

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Substantial Equivalence Information

The Legion Primary Knee System consists of existing total knee implants currently marketed by Smith & Nephew. The femoral implant components are substantially equivalent to the Genesis II Oxinium femoral components cleared via K962557. The following, minor modifications were made to the Genesis II Oxinium femoral components in order to develop the subject devices:

- Increased the thickness of the medial posterior condyle to match that of the lateral posterior condyle
- Addition of threaded screw holes for wedge attachment (posterior stabilized design only)
- Addition of anterior wall to femoral box geometry (posterior stabilized design only)
- Increased in height of femoral box geometry (posterior stabilized design only)

The subject femoral components are used with existing Legion articular inserts¹ cleared via K071071.

Conclusion

As previously noted, this Traditional 510(k) Premarket Notification is being submitted to request clearance for long-term wear claims for the Smith & Nephew, Inc. Legion Primary Knee System. As no new total knee components are being introduced as a result of this premarket notification, the devices are substantially equivalent to knee components currently marketed under K962557 and K071071.

¹ The Genesis II cross-linked polyethylene (XLPE) articular inserts cleared via K071071 are marketed by Smith & Nephew under the Legion brand name.

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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,



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): K093746

Device Name: LEGION® Primary Knee System


Indications for Use:

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Prescription Use X AND/OR Over-The-Counter Use _____
(Part 21 CFR 801 Subpart D) (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)


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

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