

**SECTION 5**  
**510(k) SUMMARY (CONT.)**

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510(k) Notification K 102329**GENERAL INFORMATION****Applicant:**

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Oncology  
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Fremont, CA 94538  
U.S.A.  
Phone: -510-771-0400  
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**Contact Person:****Michael Sharp****Vice President, Regulatory and Medical Affairs**

AngioDynamics, Inc.  
14 Plaza Drive  
Latham, NY 12110  
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Phone 518-795-1123  
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**Date Prepared:** August 16, 2010**DEVICE INFORMATION**

The NanoKnife System transmits low energy direct current (LEDC) energy from the Generator to Electrode Probes placed in a target area for the surgical ablation of soft tissue.

**Classification:**

21CFR§878.4400, Electrosurgical Cutting and Coagulation Device and Accessories

**Product Code:**

OAB

**Trade Name:**

NanoKnife<sup>®</sup> System

**Generic/Common Name:**

Low energy direct current non-thermal ablation device

**SECTION 5**  
**510(k) SUMMARY (CONT.)**

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**PREDICATE DEVICE**

The NanoKnife System is substantially equivalent to its predecessors, the Oncobionic System with 6 Probe Output (K080202) and the Oncobionic System (K080376). The NanoKnife System is a modified version of these predicate devices that has the same device configuration as the Oncobionic System with 6 Probe Output (K080202). The NanoKnife System includes single-use, disposable Electrode Probes that are substantially equivalent to those utilized by the predicate devices.

**INTENDED USE**

The NanoKnife System with six outputs is indicated for the surgical ablation of soft tissue.

**PRODUCT DESCRIPTION**

The NanoKnife System includes multiple components. The first component of the system is the Generator. The Generator operates outside of the sterile field and consists of an LCD Display, Console, Power Unit and Power Cord situated on a wheeled trolley and a Double Footswitch/Foot Pedal. The last component of the NanoKnife System is the sterile, single-use, disposable Electrode Probe. The NanoKnife System has the same device configuration as the Oncobionic System with 6 Probe Output (K080202) with minor design modifications to the hardware componentry and software. The range of parameters, pulse amplitude and pulse length, have been narrowed, a third option to the unsynchronized pulse per minute has been added, and touch screen capability in the GUI have been provided to the end user. The fundamental operating principle and design of the NanoKnife System is identical to the Oncobionics predicate devices.

**SUBSTANTIAL EQUIVALENCE**

The indications for use for the NanoKnife System are identical to the indications for use for the predicate devices. The design modifications included in this 510(k) premarket notification do not affect the currently cleared intended use or indications for use or alter the fundamental scientific technology of the predicate devices. Therefore, the NanoKnife System is substantially equivalent to the predicate devices.

**TESTING IN SUPPORT OF SUBSTANTIAL EQUIVALENCE DETERMINATION**

All necessary bench testing was conducted on the NanoKnife System to support a determination of substantial equivalence to the predicate device. The bench testing verifies that the NanoKnife System meets all the specified performance specifications and thus, is substantially equivalent to the predicate devices.

**SUMMARY**

The NanoKnife System is substantially equivalent to the predicate devices.



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

OCT 24 2011

AngioDynamics, Inc.  
% Experien Group, LLC  
Kit Cariquitan  
155-A Moffett Park Drive, Suite 210  
Sunnyvale, California 94089

Re: K102329

Trade/Device Name: NanoKnife® System  
Regulation Number: 21 CFR 878.4400  
Regulation Name: Electrosurgical cutting and coagulation device and accessories  
Regulatory Class: Class II  
Product Code: OAB, GEI  
Dated: October 19, 2011  
Received: October 24, 2011

Dear Kit Cariquitan:

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.

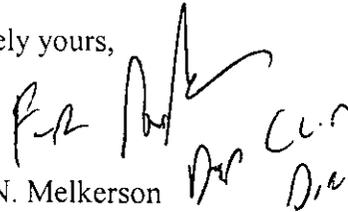
Please be advised that FDA's issuance of a substantial equivalence determination does not mean that FDA has made a determination that your device complies with other requirements of the Act

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 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,

Handwritten signature of Mark N. Melkerson in black ink, appearing as 'Mark N. Melkerson' with a stylized flourish.

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

Enclosure

SECTION 4  
INDICATIONS FOR USE STATEMENT

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510(k) Number (if known): K102329

Device Name: NanoKnife® System

**Indications For Use:**

The NanoKnife System with six outputs is indicated for the surgical ablation of soft tissue.

Prescription Use X  
(21 CFR Part 801 Subpart D)

And/Or

Over the Counter Use \_\_\_\_\_  
(21 CFR Part 801 Subpart C)

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

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Concurrence of CDRH, Office of Device Evaluation (ODE)

Neil R. Ogden for me  
(Division Sign-Off)  
Division of Surgical, Orthopedic,  
and Restorative Devices

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