

*NeuroBlate™ System – Add Diffusing Tip Laser Delivery Probe  
Special Premarket Notification*

**Section 5: 510(k) Summary**

**JUL 1 1 2013**

**a. Device Information:**

Category	Comments
Sponsor:	Monteris Medical Corp. 16305 36 <sup>th</sup> Ave. North, Suite 200 Plymouth, MN 55446 763-253-4710 Fax: 763-746-0084 www.monteris.com
Correspondent Contact Information:	Craig Coombs Coombs Medical Device Consulting 1193 Sherman Street Alameda, CA 94501 Tel: 510-337-0140 Fax: 510-337-0416
Device Common Name:	Magnetic Resonance Image Guided Laser Thermal Therapy System
Device Classification Number:	21 CFR 878.4810 Laser surgical instrument for use in general and plastic surgery and in dermatology  21 CFR 882.4560 Stereotaxic instrument
Device Classification & Product Code:	Class II, GEX Class II, HAW
Device Proprietary Name:	Monteris Medical NeuroBlate™ System

**Predicate Device Information:**

Predicate Device:	NeuroBlate™ System
Predicate Device Manufacturer:	Monteris Medical
Predicate Device Common Name:	Monteris NeuroBlate™ System
Predicate Device Premarket Notification #	K120561
Predicate Device Regulation:	21 CFR 878.4810 Laser surgical instrument for use in general and plastic surgery and in dermatology  21 CFR 882.4560 Stereotaxic instrument
Predicate Device Classification & Product Code:	Class II, GEX Class II, HAW

**b. Date Summary Prepared**

1 May 2013

**c. Description of Device**

The Monteris NeuroBlate™ System is a unique collection of MRI-compatible laser devices and accessories that create an MRI guided delivery of precision thermal therapy. The NeuroBlate System components consist of:

- A gas-cooled Laser Delivery Probe (Probe) to deliver controlled energy to a target zone;
- A Probe Driver which allows the surgeon to precisely position, stabilize and manipulate a laser probe within the target zone;
- A System Electronics Rack and Components, which includes necessary umbilicals, cables, penetration panels, and small hardware for system mechanical, electrical, and electronic operation; and
- A Control Workstation including the M Vision™ Software, which includes a user interface for procedure planning, interactive monitoring of NeuroBlate™ procedures, and interfaces to the MRI and hardware subsystems.

This submission adds a line of Diffusing Tip Laser Delivery Probes (DTP) to the existing line of Side-Firing Laser Delivery Probes.

**d. Indications for Use**

The Monteris Medical NeuroBlate™ System is indicated for use to ablate, necrotize, or coagulate soft tissue through interstitial irradiation or thermal therapy in medicine and surgery in the discipline of neurosurgery with 1064 nm lasers.

The Monteris Medical NeuroBlate™ System is intended for planning and monitoring thermal therapies under MRI visualization. It provides MRI based trajectory planning assistance for the stereotaxic placement of MRI compatible (conditional) NeuroBlate™ Laser Delivery Probes. It also provides real-time thermographic analysis of selected MRI images.

When interpreted by a trained physician, this System provides information that may be useful in the determination or assessment of thermal therapy. Patient management decisions should not be made solely on the basis of the NeuroBlate™ System analysis.

**e. Comparison to Predicate Device**

The application Monteris Medical NeuroBlate™ System with the Side-Firing and Diffusing Tip Laser Delivery Probes is substantially equivalent to the predicate Monteris NeuroBlate™ System with only the Side-Firing Laser Delivery Probes in intended use, technology, design and physician use.

The Indications for Use for the modified NeuroBlate System are unchanged from the predicate NeuroBlate System. The fundamental technology is also unchanged.

All patient contacting materials are identical in composition, source, and use with respect to the predicate device.

The technical modes of action and technical principles are materially the same as the predicate devices.

The application System with the Diffusing-Tip Laser Delivery Probe can create larger ablation lesion volumes during laser firing than the predicate Side-Firing Probe. The Side-Firing Probe remains useful for fine-tuning the edges of an ablation target or for focal energy delivery if probe position within the target warrants such use.

Bench testing has demonstrated that the System is in compliance with the medical community's expectations and the product labeling. It demonstrates that NeuroBlate system works as well with the Diffusing-Tip Probe as it does with the Side-Firing Probe.

As the modifications presented in the current device do not change the intended use, operating principles, or raise any unaddressed safety concerns, with respect to the predicate device, it can be concluded the application NeuroBlate™ System with the added Diffusing Tip Laser Delivery Probe is substantially equivalent to the predicate NeuroBlate™ System.

**f. Summary of Supporting Data**

Bench and animal testing has demonstrated that the System in general, and the DTP in particular, are in compliance with the medical community's expectations and the product labeling.



Food and Drug Administration  
10903 New Hampshire Avenue  
Document Control Center - WO66-G609  
Silver Spring, MD 20993-002

Monteris Medical, Inc.  
% Coombs Medical Device Consulting, Inc.  
Mr. Craig Coombs  
1193 Sherman Street  
Alameda, California 94501

July 11, 2013

Re: K131278  
Trade/Device Name: NeuroBlate System  
Regulation Number: 21 CFR 878.4810  
Regulation Name: Laser surgical instrument for use in general and  
plastic surgery and in dermatology  
Regulatory Class: Class II  
Product Code: GEX, HAW  
Dated: May 03, 2013  
Received: May 06, 2013

Dear Mr. Coombs:

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,

**Mark N. Melkerson -S**

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

Enclosure

**Section 4: Indications for Use**

510(k) Number (if known): K131278

**Device Name:** Monteris Medical NeuroBlate™ 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)

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Concurrence of CDRH, Office of Device Evaluation (ODE)

Page 1 of   1  

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**(Division Sign-off)** for MXM  
Division of Surgical Devices  
510(k) Number K131278