

K101592

Cheng Medical Corporation

510(k) Notification

Erase Pen and Erase Tip System for Nerve Ablation  
(Models HC-0001 and CS-0001)

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**APPENDIX A: 510(k) SUMMARY**

**510(k) SUMMARY**

OCT - 6 2011

This summary of 510(k) safety and effectiveness information is submitted in accordance with the requirements of SMDA 1990 and 21 CFR §807.92.

**A. Name, Address, Phone and Fax number of the Applicant**

Cheng Medical Corporation.  
12945 Saratoga Avenue  
Saratoga, CA 95070  
Telephone: (408) 255-3223  
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**B. Contact Person**

Mary P. Gallup  
Regulatory Affairs Consultant  
Hantel Technologies, Inc.  
Telephone: (510) 441-4017

**C. Date Prepared**

06/04/2010

**D. Device Name**

Trade Name:  
Model **HC-0001** Erase Pen  
Model **CS-0001** Erase Tip  
Regulation Number: 21 CFR 882.4400 and 21 CFR 882.4725  
Regulation Number: Radiofrequency Lesion Generator and Lesion Probe  
Regulation Class: II  
Product Code: GXD, GXI

**E. Device Description**

The Erase Pen (hand-held Bi-Polar Radiofrequency battery operated controller) and the Erase Tip (single use, sterile detachable electrode cartridge system) is a hand-held Electrosurgical Device to locate and ablate nerves. The depth of the electrodes, the amount of RF energy delivered, and the duration of energy applied control the size of the ablation.

**F. Intended Use**

The Erase Pen and Erase Tip (Single use Sterile Detachable Electrode Cartridge system) is intended to create radiofrequency (RF) heat lesion in nerve tissue. It is intended for use only by trained clinicians in hospital or clinical setting.

Erase Pen and Erase Tip System for Nerve Ablation  
(Models HC-0001 and CS-0001)

**G. Substantial Equivalence**

The Erase Pen Model **HC-0001** and Erase Tip Model **CS-0001** is substantially equivalent in the following technological ways to the identified predicate device: Radionic's RFG-3C (K982489) system.

- Indication For Use
- RF Energy Type – Bi Polar
- Functional (stimulation and ablation)
- Probe Type (single use)

**Erase Pen Operating Characteristics compared with predicate device**

Parameter	Erase Pen	Radionics RFG-3C
a. Maximum voltage deliverable, Vp-p	56 into 2000 $\Omega$ and 3000 $\Omega$ load	200 into 2000 $\Omega$ load*
b. Maximum current deliverable, amps	0.18 into 100 $\Omega$ load	0.70 into 100 $\Omega$ load
c. Maximum power deliverable, watts	3.5 into 100 $\Omega$ load	50 into 100 $\Omega$ load
d. Maximum voltage accessible, Vp-p	71	161
e. Maximum current accessible, amps	0.20	1.17
f. Maximum power accessible, watts	5	68
g. Frequency of RF energy, kHz	460+/-5%	500+/-10%
h. Shape of the waveform during RF ablation	sinusoidal	sinusoidal
i. Shape of the waveform during Tissue Stimulation	200 $\mu$ s one-shot pulse (monophasic square wave)	200 $\mu$ s one-shot pulse (monophasic square wave)
j. Impedance cutoffs, ohms	20 to 220	50 to 5000
k. Maximum current limit, amps	0.18	0.70

Note: The set output level Erase Pen and adjustable output level Radionics RF generators would have an output power equivalence when the Radionics RFG-3C is at a setting of 3 to 5, depending on the tissue impedance.

\* Information not available for the maximum voltage deliverable of the Radionics RFG-3C into a 3000 $\Omega$  impedance.

**H. Device Testing Results and Conclusion**

All necessary testing was performed on the Erase Pen Model HC-0001 and Erase Tip (Single use Sterile Detachable Electrode Cartridge system) Model CS-0001 to ensure that the product is substantially equivalent to the predicate devices and to ensure that the new device does not raise new issues regarding safety and effectiveness.



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

Cheng Medical Corporation  
c/o Mary Pascual Gallup  
Vice President of Regulatory Affairs, Consultant  
Hantel Technologies, Inc.  
12945 Saratoga Avenue  
Saratoga, California 95070

OCT - 6 2011

Re: K101592

Trade/Device Name: Erase Hand-held Controller and Erase Single Use Electrode Cartridge System

Regulation Number: 21 CFR 882.4400

Regulation Name: Radiofrequency lesion generator

Regulatory Class: Class II

Product Code: GXD

Dated: September 28, 2011

Received: September 30, 2011

Dear Ms. Pascual Gallup:

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.

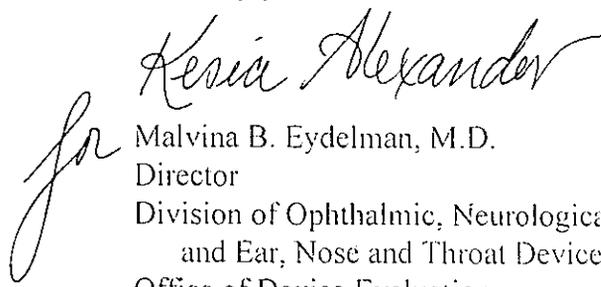
If your device is classified (see above) into either class II (Special Controls) or class III (PMA), it may be subject to additional controls. Existing major regulations affecting your device can be found in the Code of Federal Regulations, Title 21, Parts 800 to 898. In addition, FDA may publish further 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,

  
Malvina B. Eydelman, M.D.  
Director  
Division of Ophthalmic, Neurological,  
and Ear, Nose and Throat Devices  
Office of Device Evaluation  
Center for Devices and  
Radiological Health

Enclosure

**SECTION 4: INDICATION FOR USE STATEMENT**

**Indications for Use**

510(k) Number (if known): K101592

Device Name:

Model **HC-0001** The Erase Pen

Model **CS-0001** The Erase Tip

Indications for Use:

The Erase Pen (RF Controller) is only used with the Erase Tip (Single Use Sterile Detachable Electrode Cartridge system) for thermal coagulation of soft tissue and peripheral nerves by creating radiofrequency (RF) lesions in nerve tissue. It is intended for use only by trained clinicians in hospital or clinical setting.

Prescription Use Yes and/or Over-The-Counter Use No

(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 Ophthalmic, Neurological and Ear,  
Nose and Throat Devices

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