

**510(K) Summary**

Submitter: Cynosure, Inc.  
5 Carlisle Road  
Westford, MA 01886

Contact: George Cho  
Senior Vice President of Medical Technology

Date Summary Prepared: December 7, 2005

Device Trade Name: Cynosure YAG MIR Family Laser

Common Name: Medical Laser System

Classification Name: Instrument, surgical, powered, laser  
79-GEX  
21 CFR 878.4810

Equivalent Device: The Cynosure YAG Family laser

Device Description: The Cynosure YAG MIR Family laser is a Nd:YAG laser, having a ND:YAG crystal rod as a lasing medium.  
  
Laser activation is by footswitch or finger switch. Overall weight of the laser is 285lbs, and the size is 41"x18"x32" (HxWxD).  
  
Electrical requirement is 220 VAC, 30A, 50-60 Hz, single phase.

Intended Use: The Cynosure YAG MIR Family Laser is indicated for permanent hair reduction and the treatment of vascular and pigmented lesions and wrinkles.

Comparison: The Cynosure YAG MIR Family Laser has the same indications for use, the same principle of operation, and similar wavelengths and pulse energy range as the predicate device(s).

Nonclinical Performance Data: none

Clinical Performance Data: none

Conclusion: The Cynosure YAG MIR Family Laser is a safe and effective device for the indications specified.

Additional Information: none



FEB 1 2006

Food and Drug Administration  
9200 Corporate Boulevard  
Rockville MD 20850

Mr. George Cho  
Senior Vice President  
Medical Technology  
Cynosure, Inc.  
5 Carlisle Road  
Westford, Massachusetts 01886

Re: K053421  
Trade/Device Name: Cynosure YAG MIR Family Laser  
Regulation Number: 21 CFR 878.4810  
Regulation Name: Laser surgical instrument for use in general and plastic surgery and in dermatology  
Regulatory Class: II  
Product Code: GEX  
Dated: December 7, 2005  
Received: December 9, 2005

Dear Mr. Cho:

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.

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.

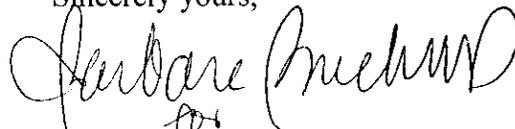
Please be advised that FDA's issuance of a substantial equivalence determination does not mean that FDA has made a determination that your device complies with other requirements of the Act or any Federal statutes and regulations administered by other Federal agencies. You must comply with all the Act's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

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), please contact the Office of Compliance at (240) 276-0115. Also, please note the regulation entitled, "Misbranding by reference to premarket notification" (21 CFR Part 807.97). 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) 443-6597 or at its Internet address <http://www.fda.gov/cdrh/industry/support/index.html>.

Sincerely yours,

A handwritten signature in black ink, appearing to read "Mark N. Melkerson". The signature is written in a cursive style with a large initial "M".

Mark N. Melkerson  
Acting Director  
Division of General, Restorative  
and Neurological Devices  
Office of Device Evaluation  
Center for Devices and  
Radiological Health

Enclosure

510(k) Number (if known): K 053421

Device Name: Cynosure YAG MIR Family Laser

Indications For Use:

1064nm: The Cynosure YAG MIR Family laser is intended for the coagulation and hemostasis of benign vascular lesions, such as , but not limited to, port wine stains, hemangiomas, warts, telangiectasia, rosacea, venus lake, leg veins, spider veins and poikiloderma of civatte; and treatment of benign cutaneous lesions such as warts, scars, stiae and psoriasis. The laser is also intended for the treatment of benign pigmented lesions such as, but not limited to, lentigos (age spots), solar lentigos (sun spots), Café au lait macules, seborrheic keratoses, nevi, chloasma, verrucea, skin tags, keratoses, tattoos (significant reduction in the intensity of black and/or blue/black tattoos) and plaques.

The laser is also indicated for the treatment of wrinkles such as, but not limited to, periocular and perioral wrinkles.

Additionally, the laser is indicated for the removal of unwanted hair, for the stable long term, or permanent, hair reduction through selective targeting of melanin in the hair follicles, and for the treatment of pseudofolliculitis barbae (PFB).

1440nm: The Cynosure YAG MIR Family laser is indicated for use in general surgery and dermatology for the incision, excision, ablation, vaporization, coagulation and hemostasis of soft tissue. It is also indicated for the treatment of periorbital and perioral wrinkles and pigmented lesions.

Prescriptive Use X OR Over-The-Counter Use \_\_\_\_\_  
(Part 21 CFR 801 Subpart D) (Part 21 CFR 801 Subpart C)

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

\_\_\_\_\_  
Concurrence of CDRII, Office of Device Evaluation (ODE)

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

510(k) Number K053421