

AUG - 5 2004

K041721

## 9. 510(k) Summary

Company: HOYA ConBio (formerly Continuum Electro-Optics, Inc.)  
47733 Fremont Blvd  
Fremont, CA 94538  
(800) 532-1064 phone  
(510) 445-4550 fax

Contact: Jim Green  
Vice President of Engineering

Device Trade Name: LVI lase

Common Name: Dental diode laser

Classification Name: Instrument, surgical, powered, laser  
Classification Code: 79-GEX

Equivalent Device(s): DioDent Dental Laser System by HOYA ConBio,  
Aurora by Premier Laser System,  
Twilite or Dentek LD-15 Diode Laser System by BioLase  
Technologies,  
DioLase ST by American Medical Technology (formerly ADT)

Intended Use: The LVI lase is intended for incision,  
excision, ablation, vaporization, and/or coagulation of oral soft  
tissue (including marginal and interdental gingival and epithelial  
lining of free gingiva). It is also intended for light activation for  
bleaching materials for teeth whitening, and laser-assisted  
bleaching/whitening for teeth whitening.

Comparison: The LVI lase, the DioDent Dental Laser  
System, the Aurora Diode Laser System, the  
Twilite/Dentek LD-15, the Dental Diode Laser, and the DioLase  
ST are equivalent in operating parameters, physical characteristics,  
and intended uses. (NOTE: Of the equivalent devices mentioned  
here, only the DioDent and the Twilite are cleared for teeth  
whitening intended uses. The LVI lase is seeking clearance for  
this in this submission).

Nonclinical Performance  
Data: None

Clinical Performance Data: None

Additional Information: None



JUN 11 2007

Food and Drug Administration  
9200 Corporate Boulevard  
Rockville MD 20850

HOYA ConBio, Inc.  
% Liza Burns and Associates  
Ms. Liza Burns  
Regulatory Consultant  
19722 Westview Drive  
Twain Harte, California 95383

Re: K041721

Trade/Device Name: LVI lase Dental Diode Laser  
Regulation Number: 21 CFR 878.4800  
Regulation Name: Laser surgical instrument for use in general and plastic surgery and  
in dermatology  
Regulatory Class: II  
Product Code: GEX  
Dated: June 21, 2004  
Received: June 29, 2004

Dear Ms. Burns

This letter corrects our substantially equivalent letter of August 5, 2004.

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 (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 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

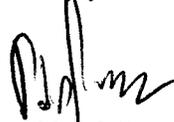
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forth in the quality systems (QS) regulation (21 CFR Part 820); and if applicable, the electronic product radiation control provisions (sections 531-542 of the Act); 21 CFR 1000-1050.

This letter will allow you to continue 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" (21CFR 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 (240) 276-3150 or at its Internet address <http://www.fda.gov/cdrh/dsma/dsmamain.html>

Sincerely yours,



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

**1. Indications for Use Statement**

510(k) Number: K041721

Device Name: LVI lase

Indications for Use: For the incision, excision, ablation, vaporization, and hemostasis of oral soft tissue.

Examples:

Excisional and incisional biopsies

Exposure of unerupted teeth

Fibroma removal

Frenectomy and frenotomy

Gingival troughing for crown impressions

Gingivectomy

Gingivoplasty

Gingival incision and excision

Hemostasis

Implant recovery

Incision and drainage of abscess

Leukoplakia

Operculectomy

Oral papillectomies

Pulpotomy

Pulpotomy as an adjunct to root canal therapy

Reduction of gingival hypertrophy

Soft tissue crown lengthening

Sulcular debridement (removal of diseased or inflamed soft tissue in the periodontal pocket to improve clinical indices including gingival index, gingival bleeding index, probe depth, attachment loss and tooth mobility)

Treatment of aphthous ulcers

Vestibuloplasty

Biopsy incision and excision

Lesion (tumor) removal

For light activation for bleaching materials for teeth whitening

For laser-assisted bleaching/whitening for teeth.



**(Division Sign-Off)**

**Division of General, Restorative,  
and Neurological Devices**

510(k) Number K041721

Prescription Use   X    
(21 CFR 801 Subpart D)

OR

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

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

Concurrence of CDRH, Office of Device Evaluation (ODE)