510(k) Summary

This 510(k) summary of safety and effectiveness information is submitted in accordance with the requirements of the Safe Medical Devices Act (SMDA) of 1990. The contents of the 510(k) summary have been provided in conformance with 21 CFR §807.92.

Submitter Information

Company Name: Candela Corporation
Company Address: 530 Boston Post Road
Wayland, MA 01778
Company Phone: 508-358-7400
Company Facsimile: 508-358-5602
Contact Person: Mr. Jeffrey Roberts
Manager, Regulatory Affairs
Date summary Prepared: 12/12/07

Device Identification

Device Trade/Proprietary Name: The Candela Family of Q-Switched Alexandrite Laser (AlexLAZR) systems
Common Name: Q-Switched Alexandrite Laser
Classification Name: Laser Surgical Instrument, for use in General and Plastic Surgery and Dermatology
Classification Regulation: 21 CFR §878.4810
Device Classification: II

Identification of Predicate Device

Predicate Device(s):
Candela Q-Switched Alexandrite Laser, (AlexLAZR), K063073
Candela 3630 Laser Systems, Alexandrite, K063074
Cynosure Apogee Elite Laser, Alexandrite, K034030

Device Description

The Candela Family of Q-Switched Alexandrite Laser (AlexLAZR) systems consist of an Alexandrite laser head, power supply and deionized water circulator. The Candela Family of Q-Switched Alexandrite Laser (AlexLAZR) systems also contains a Q-switching mechanism which when disabled allows the laser system the capability of producing a laser pulse duration of 0.050 - 0.120 millisecond. The laser head contains the cavity mirrors, pockels cell, solid state laser medium (the Alexandrite rod), and two high intensity xenon flashlamps which excite the laser medium. A calibration port with an internal meter is located on the control panel, which is used to verify the transmission of the optical fiber and handpiece, and to calibrate the output of the handpiece at selected fluence levels. The temperature of the laser head is regulated by the circulation of distilled water at a controlled temperature. The laser system is fully air cooled.
The Candela Family of Q-Switched Alexandrite Laser (AleXLAZR) systems delivers laser energy at a wavelength of 755 nm and pulse duration between 50 and 120 microseconds. The output of this laser is delivered to the area of treatment by means of a lens coupled user replaceable optical fiber with a treatment handpiece attached to its distal end. A trigger switch is used to control the delivery of pulses.

A microprocessor based system controller is used to monitor and direct all system functions. Users of the laser select parameters such as desired energy density (fluence) level and repetition rate and monitor operation via electronic controls and a display panel. The control panel is also used to enable or disable the triggering of the laser, to initiate the calibration feature and to obtain feedback from the system, such as the number of pulses delivered or spot size selected. The Candela Family of Q-Switched Alexandrite Laser (AlexLAZR) systems support 2mm, 3mm, and 4mm nominal spot sizes.

**Description of Intended Use**
The Candela Family of Q-Switched Alexandrite Laser (AleXLAZR) systems is indicated for treatment in the following uses:

Pigmented Lesions
Tattoos

**Rationale for Substantial Equivalence**
The Candela Family of Q-Switched Alexandrite Laser (AleXLAZR) systems, has the same intended use, utilizes similar functional features (including power output, spot size, repetition rate, energy, and fluence) and matches key design aspects (including wavelength, light generation medium, power supply, cooling and controls system) as the predicate devices.

The Candela Family of Q-Switched Alexandrite Laser (AleXLAZR) systems shares similar methods of assembly, method of operation, and intended uses, and therefore is substantially equivalent to the current legally marketed Candela Q-Switched Alexandrite Laser, (AleXLAZR), K063073, Candela 3630 Laser Systems, Alexandrite, K063074 and Cynosure Apogee Elite Laser, Alexandrite, K034030 predicate devices.

**Safety and Effectiveness Information**
The Candela Family of Q-Switched Alexandrite Laser (AleXLAZR) systems is substantially equivalent to the current legally marketed Candela Family of Q-Switched Alexandrite Laser (AleXLAZR) Systems, K063073, Candela 3630 Laser Systems, Alexandrite, K063074, and Cynosure Apogee Elite Laser, Alexandrite, K034030 predicate devices in intended use and technological features and therefore the risks and benefits are comparable to the predicate devices.

We therefore believe that there are no new questions of safety or effectiveness raised by the introduction of the Candela Family of Q-Switched Alexandrite Laser (AleXLAZR) systems.

**Conclusion**

Base on the similarities in indications for use, design features, and functional features the Candela Family of Q-Switched Alexandrite Laser (AleXLAZR) systems has been shown to be substantially equivalent to the current legally marketed predicate devices.
Candela Corporation
% Mr. Jeffrey Roberts
Manager, Regulatory Affairs
530 Boston Post Road
Wayland, Massachusetts 01778

Re: K073534
Trade/Device Name: Candela Family of Q-Switched Alexandrite (AlexLAZR) systems
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
Dated: December 14, 2007
Received: December 17, 2007

Dear Mr. Roberts:

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.
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 Center for Devices and Radiological Health's (CDRH's) Office of Compliance at (240) 276-0115. Also, please note the regulation entitled, "Misbranding by reference to premarket notification" (21 CFR Part 807.97). For questions regarding postmarket surveillance, please contact CDRH's Office of Surveillance and Biometric's (OSB's) Division of Postmarket Surveillance at (240) 276-3474. For questions regarding the reporting of device adverse events (Medical Device Reporting (MDR)), please contact the Division of Surveillance Systems at (240) 276-3464. 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/industry/support/index.html.

Sincerely yours,

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

Enclosure
Indications for Use

510(k) Number (if known): ____________________________

Device Name: Candela Family of Q-Switched Alexandrite Laser (AlexLAZR) systems

Indications for Use:

The Candela Family of Q-Switched Alexandrite Laser (AlexLAZR) systems is indicated for the following uses:

Pigmented Lesions
Tattoos

Prescription Use  X  AND/OR  Over-The-Counter Use  ____
(Part 21 CFR 801 Subpart D)  (21 CFR 801 Subpart C)

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

Concurrence of CDRH, Office of Device Evaluation (ODE)

[Signature]

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

510(k) Number: K073534