



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

November 18, 2016

Capillus, LLC
Ms. Patricia Schnoor
Director, Quality, Safety, and Compliance
1715 NW 82nd Avenue
Miami, Florida 33126

Re: K162994
Trade/Device Name: Capillus302, Capillus312, Capillus352
Regulation Number: 21 CFR 890.5500
Regulation Name: Infrared Lamp
Regulatory Class: Class II
Product Code: OAP
Dated: October 24, 2016
Received: October 27, 2016

Dear Ms. Schnoor:

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 contact the Division of Industry and Consumer Education 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>. Also, please note the regulation entitled, "Misbranding by reference to premarket notification" (21 CFR 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 Industry and Consumer Education 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,

Jennifer R. Stevenson -A

For Binita S. Ashar, M.D., M.B.A., F.A.C.S.
Director
Division of Surgical Devices
Office of Device Evaluation
Center for Devices and
Radiological Health

Enclosure

Indications for Use

510(k) Number (if known)

K162994

Device Name

Capillus302, Capillus312, Capillus352

Indications for Use (Describe)

The Capillus302, Capillus312, and Capillus352, are intended to treat Androgenetic Alopecia and promote hair growth in males who have Norwood-Hamilton Classifications of IIa to V patterns of hair loss and to treat Androgenetic Alopecia and promote hair growth in females who have Ludwig (Savin) Scale I-1 to I-4, II-1, II-2, or frontal; both with Fitzpatrick Skin Types I to IV.

Type of Use (Select one or both, as applicable)

Prescription Use (Part 21 CFR 801 Subpart D)

Over-The-Counter Use (21 CFR 801 Subpart C)

CONTINUE ON A SEPARATE PAGE IF NEEDED.

This section applies only to requirements of the Paperwork Reduction Act of 1995.

DO NOT SEND YOUR COMPLETED FORM TO THE PRA STAFF EMAIL ADDRESS BELOW.

The burden time for this collection of information is estimated to average 79 hours per response, including the time to review instructions, search existing data sources, gather and maintain the data needed and complete and review the collection of information. Send comments regarding this burden estimate or any other aspect of this information collection, including suggestions for reducing this burden, to:

Department of Health and Human Services
Food and Drug Administration
Office of Chief Information Officer
Paperwork Reduction Act (PRA) Staff
PRASTaff@fda.hhs.gov

"An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB number."

510(k) Summary

Capillus, LLC

Date Prepared: **October 24, 2016**

Submitter's Contact Information:

Name: Patricia Schnoor
Address: Capillus LLC
 1715 NW 202nd Avenue
 Miami, FL 33126

Establishment
Registration# 3010123655
Telephone: (786) 888-1874
Facsimile: (305) 418-7581

Name of Device and Name / Address of Sponsor:

Trade Name: Capillus302, Capillus312, Capillus352
Common or Usual Name: Lamp, non-heating, for promotion of hair growth
Classification Name: Infrared lamp per 21 CFR 890.5500
Classification Code: OAP (Laser, Comb, Hair)
Sponsor Contact Information: Patricia Schnoor
 Capillus LLC
 1715 NW 82nd Avenue
 Miami, FL 33126
Telephone: (786) 888-1874

Predicate Devices:

Device Trade Name	Manufacturer	510(k)
Capillus family of devices	Capillus LLC	160285
LaserCap	Transdermal Cap	161875

Intended Use / Indications for Use:

The Capillus302, Capillus312, and Capillus352, are intended to treat Androgenetic Alopecia and promote hair growth in males who have Norwood-Hamilton Classifications of IIa to V patterns of hair loss and to treat Androgenetic Alopecia and promote hair growth in females who have Ludwig (Savin) Scale I-1 to I-4, II-1, II-2, or frontal; both with Fitzpatrick Skin Types I to IV.

Technological Characteristics

The Capillus302, Capillus312, and Capillus352 consist of 302, 312, or 352 (respectively) red, visible light, diode lasers operating at 650 nanometers, configured within an outer helmet and protective inner liner, and configured for portable use with rechargeable battery and adapter. These models are exactly the same as the (predicate) Capillus family of devices (Capillus272, Capillus202, Capillus82) with the exception of the number of diodes.

As stated in prior submissions, the devices emit an audible tone at the beginning and end of a therapy session, indicating that therapy has begun (2 short beeps) or ended (one long beep). The portable systems are powered by rechargeable Li-Ion battery cells assembled into a proprietary battery pack. Both the battery pack and charger are fully compliant to recognized, international standards.

Performance Data:

Performance testing was conducted to confirm compliance to design specifications; all functions have been verified to operate as designed. All acceptance criteria were met by the device. The Capillus302, Capillus312, and Capillus352 conform to the standard IEC-602825-2007-03. This IEC standard is a recognized and accepted standard by the FDA. The guidance document for this accepted standard is found in the Federal register, July 26, 2001 (volume 66, Number 144) [page 39049 39050]. This report validates for the Capillus302, Capillus312, and Capillus352 the laser class of 3R which establishes the AEL (accessible emission limits) as 5 milliWatts maximum. The charger conforms to IEC 61959.

Just as for Capillus family of devices (K160285), there are no reported adverse events for this technology.

Substantial Equivalence

The Capillus family of devices referenced in this application are the same technology used by the LLLT devices cleared under device code OAP. The Capillus302, Capillus312, and Capillus352 are as safe and effective as the predicate devices, as well as other reference devices in its class.

The sponsor believes that the difference in the physical appearance, number of diodes, or in the method of delivering the radiant energy of the systems is of no consequence and does not affect the therapeutic value or the safety profile. All compliant LLLT systems which use red light diode lasers are classified as class 3R laser systems according to the IEC standard for allowable emission levels, which is a recognized standard by the FDA as well, and the adverse event profile is the same.

Capillus Devices	LaserCap	Capillus 302, 312, 352
K160285	K161875	Candidate
LLLT Device Type	LLLT Device Type	LLLT Device Type
Prescription Use	Prescription Use	Prescription Use
Intended Use - Androgenic Alopecia	Intended Use - Androgenic Alopecia	Intended Use - Androgenic Alopecia
Contain Laser Diodes- Class 3R	Contain Laser Diodes- Class 3R	Contain Laser Diodes- Class 3R
Helmet/Cap Design	Helmet/Cap Design	Helmet/Cap Design
5mW max	5mW max	5mW max
650nm	650nm	650nm
Marketing clearance for Males and Females	Marketing clearance for Males and Females	Marketing clearance for Males and Females
Passive Use-Hands Free	Passive Use-Hands Free	Passive Use-Hands Free
82, 202, 272 Laser Diodes	80, 120, 224, 300 Laser Diodes	302, 312, 352 Laser Diodes
OAP Classification	OAP Classification	OAP Classification
Classification Name -Infrared Lamp	Classification Name -Infrared Lamp	Classification Name -Infrared Lamp
Common Usage Name -Lamp, Non-Heating General & Plastic Surgery Committee	Common Usage Name -Lamp, Non-Heating General & Plastic Surgery Committee	Common Usage Name -Lamp, Non-Heating General & Plastic Surgery Committee
Fitzpatrick Skin Phototypes - I- IV	Fitzpatrick Skin Phototypes - I- IV	Fitzpatrick Skin Phototypes - I- IV
Ludwig-Savin I-II (females) Norwood Hamilton IIA-V (males)	Ludwig-Savin I-II (females) Norwood Hamilton IIA-V (males)	Ludwig-Savin I-II (females) Norwood Hamilton IIA-V (males)
Efficacy Rates - High Compared to Placebo	UNK	Efficacy Rates – 51% (calculated)
Treatment- 17weeks, every other day (indefinite)	Treatment- 17weeks, every other day (indefinite)	Treatment- 17weeks, every other day (indefinite)
Device Class II	Device Class II	Device Class II

For these reasons, the Capillus302, Capillus312, and Capillus352 satisfy the FDA's substantial equivalence requirements with respect to intended use, technological and design characteristics. With reference to all devices cleared through the OAP device classification, the sponsor respectfully proposes that the FDA has acknowledged that Low-Level Laser/Light Therapy is a viable modality for treating androgenic alopecia in both genders and that the red light lasers in class 3R, used in the Capillus devices referenced in this application are substantially equivalent to the predicates. Additionally, no new safety or efficacy concerns are raised due to the minor differences present between devices.

Signed:

Patricia Schnoor
Director, QA/RA