

## 510(k) Summary of Safety and Effectiveness

### Manufacturer and Submitter

Company Name: Heidelberg Engineering GmbH  
Company Address: Tiergartenstrasse 15  
69121 Heidelberg, Germany  
phone: +49 / 6221 / 64 643 0  
fax: +49 / 6221 / 64 63 62  
Contact Person: Dr. Gerhard Zinser  
Date Summary Prepared: September 13, 2011

### Device

Trade/Device Name: Spectralis Anterior Segment Module  
Common/Usual Name: Optical Coherence Tomograph  
Classification Name: Ophthalmoscope, AC-powered  
Regulation Number: 21 CFR 886.1570  
Product Code: OBO, MYC  
Classification Panel: Ophthalmic  
Classification: Class II

### Substantial Equivalence

The Heidelberg Spectralis with Anterior Segment Module is substantially equivalent to the Optovue RTVue 100/CA (K071250), which is technologically similar devices for anterior segment imaging. A second predicate device is chosen, the Heidelberg Spectralis HRA+OCT (K101223) because it is the "parent" device to the Spectralis ASM.

### Device Description

The Spectralis Anterior Segment Module (Spectralis ASM) is an accessory to the Spectralis HRA+OCT device cleared under K101223. The Spectralis HRA+OCT is a diagnostic device for imaging the human eye and for aiding in the assessment and management of various diseases of the posterior segment of the eye. Addition of the Spectralis ASM provides the user the additional ability to image and examine the anterior segment of the eye using simultaneous OCT and infra-red reflectance imaging with OCT B-scan lengths of 8 mm, 11 mm, and 16 mm. Available OCT scan patterns are single line scans and volume scans.

### Intended Use/Indications for Use

The Spectralis Anterior Segment Module is an accessory to the Spectralis HRA+OCT, and is indicated for imaging the anterior segment of the eye.

### Substantial Equivalence Analysis

Analysis of the intended use of the predicate devices and the Spectralis ASM has led to the conclusion of substantial equivalence. The new device is similar to the predicate device in the use and ability to image and view the anterior segment of the eye. The Intended Use of the new device does not include the measurement of ocular structures of the eye, and this difference does not affect the use of the Spectralis ASM for viewing the same ocular structures as the predicate.

Spectralis ASM has been demonstrated to perform as intended and has been shown to be substantially equivalent to the RTVue predicate device for viewing ocular structures of the eye. The technology characteristics of the new device when used with the Spectralis HRA+OCT (parent product) are similar to the RTVue predicate in design, materials and energy source, as both the new device and the RTVue auxiliary lens adapter are anterior lens accessories that are used together with the parent product to view the anterior segment of the eye.

**Performance – Nonclinical**

Bench Testing

The Spectralis HRA+OCT has been tested according to IEC 60601-1, IEC 60601-1-2, and IEC 60601-1-4 and was found to meet all requirements. The Spectralis with Anterior Segment Module is a laser product of Class 1 according to 21 CFR §1040.10 and complies with IEC 60825-1.

Studies to Demonstrate Equivalence in Viewing the Anterior Segment

Side-by-side images of the anterior segment of the eye were compared between the Spectralis ASM and the predicate. Images from both eyes of 29 subjects (healthy eyes and eyes with pathology) were compared by an ophthalmologist using Spectralis ASM and RTVue, and equivalence between the images was concluded.

**Conclusions**

This study confirmed the ability of the Spectralis ASM to image and view the anterior segment, and the substantial equivalence of Spectralis ASM to the predicate device.



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

Heidelberg Engineering GmbH  
c/o Mr. William Sammons  
Intertek Testing Services  
2307 East Aurora Road, Unit B7  
Twinsburg, Ohio 44087

NOV - 8 2011

Re: K113129

Trade/Device Name: Spectralis Anterior Segment Module (Spectralis ASM)  
Regulation Number: 21 CFR 886.1570  
Regulation Name: Ophthalmoscope  
Regulatory Class: Class II  
Product Code: OBO, MYC  
Dated: October 21, 2011  
Received: October 24, 2011

Dear Mr. Sammons:

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

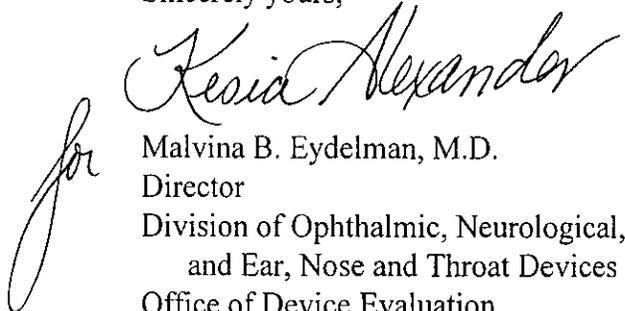
Page 2 - Mr. William Sammons

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

K113129

### Indications for Use

510(k) Number (if known): K113129

Device Name: Spectralis Anterior Segment Module

Indications For Use:

The Spectralis Anterior Segment Module is an accessory to the Spectralis HRA+OCT, and is indicated for imaging the anterior segment of the eye.

Prescription Use  X   
(Part 21 CFR 801 Subpart D)

AND/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)



(Division Sign-Off)

Division of Ophthalmic, Neurological and Ear,  
Nose and Throat Devices

510(k) Number  K113129