



October 29, 2020

Olympus Medical Systems Corp.
% Anne-Marie Keefe
Program Manager, Regulatory Affairs
Olympus Surgical Technologies of America
118 Turnpike Road, Suite 120
Southborough, MA 01772

Re: K202646
Trade/Device Name: Visera Elite II Video System Center (Olympus OTV-S300)
Regulation Number: 21 CFR 876.1500
Regulation Name: Endoscope and Accessories
Regulatory Class: II
Product Code: FET
Dated: September 10, 2020
Received: September 11, 2020

Dear Anne-Marie Keefe:

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. Although this letter refers to your product as a device, please be aware that some cleared products may instead be combination products. The 510(k) Premarket Notification Database located at <https://www.accessdata.fda.gov/scripts/cdrh/cfdocs/cfpmn/pmn.cfm> identifies combination product submissions. 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) for devices or postmarketing safety reporting (21 CFR 4, Subpart B) for combination products (see <https://www.fda.gov/combination-products/guidance-regulatory-information/postmarketing-safety-reporting-combination-products>); good manufacturing practice requirements as set forth in the quality systems (QS) regulation (21 CFR Part 820) for devices or current good manufacturing practices (21 CFR 4, Subpart A) for combination products; and, if applicable, the electronic product radiation control provisions (Sections 531-542 of the Act); 21 CFR 1000-1050.

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 <https://www.fda.gov/medical-devices/medical-device-safety/medical-device-reporting-mdr-how-report-medical-device-problems>.

For comprehensive regulatory information about medical devices and radiation-emitting products, including information about labeling regulations, please see Device Advice (<https://www.fda.gov/medical-devices/device-advice-comprehensive-regulatory-assistance>) and CDRH Learn (<https://www.fda.gov/training-and-continuing-education/cdrh-learn>). Additionally, you may contact the Division of Industry and Consumer Education (DICE) to ask a question about a specific regulatory topic. See the DICE website (<https://www.fda.gov/medical-devices/device-advice-comprehensive-regulatory-assistance/contact-us-division-industry-and-consumer-education-dice>) for more information or contact DICE by email (DICE@fda.hhs.gov) or phone (1-800-638-2041 or 301-796-7100).

Sincerely,

Jason R. Roberts, Ph.D.
Assistant Director
DHT3B: Division of Reproductive,
Gynecology and Urology Devices
OHT3: Office of GastroRenal, ObGyn,
General Hospital and Urology Devices
Office of Product Evaluation and Quality
Center for Devices and Radiological Health

Enclosure

Indications for Use

510(k) Number (if known)

K202646

Device Name

Visera Elite II Video System Center (Olympus OTV-S300)

Indications for Use (Describe)

The Visera Elite II Video System Center (OLYMPUS OTV-S300) is intended to be used with OLYMPUS camera heads, endoscopes, monitors, EndoTherapy accessories, and other ancillary equipment for endoscopic diagnosis, treatment, and video observation.

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.

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Date Prepared: October 29, 2020

510(k) Summary

1. GENERAL INFORMATION

- 510(k) Submitter: OLYMPUS MEDICAL SYSTEMS CORP.
2951 Ishikawa-cho, Hachioji-shi, Tokyo, Japan 192-8507

- Contact Person: Anne-Marie Keefe
Olympus Surgical Technologies of America
118 Turnpike Road, Suite 120
Southborough, MA 01772
Mobile: (508) 244-1921
Email: Anne-Marie.Keefe@olympus.com

- Manufacturing site: Shirakawa Olympus Co., Ltd.
3-1 Okamiyama, Odakura, Nishigo-mura,
Nishishirakawa-gun, Fukushima 961-8061, Japan

2. DEVICE IDENTIFICATION

Trade Name	Visera Elite II Video System Center (Olympus OTV-S300)
Model	OTV-S300
Regulation Name	Endoscope and accessories
Regulation Number	21 CFR 876.1500
Product Code	FET (endoscopic video imaging system/component, gastroenterology-urology)
Regulatory Class	II
Review Panel	Gastroenterology/Urology



3. PREDICATE DEVICE/REFERENCE DEVICE

Predicate device

Predicate Device		
Device name	510(k) Submitter	510(k) No.
OLYMPUS OTV-S300 (VISERA ELITE II VIDEO SYSTEM CENTER)	OLYMPUS MEDICAL SYSTEMS CORP.	K201200

The predicate device has not been subject to a design-related recall.

Reference device

Reference Device		
Device name	510(k) Submitter	510(k) No.
OLYMPUS OTV-S200 (VISERA ELITE II VIDEO SYSTEM CENTER)	OLYMPUS MEDICAL SYSTEMS CORP.	K200542

4. DEVICE DESCRIPTION

VISERA ELITE II VIDEO SYSTEM CENTER (OLYMPUS OTV-S300)

■ Principle of operation and mechanism of action

The subject device is a video system center (OTV-S300) to be used with OLYMPUS camera heads, endoscopes, monitors, EndoTherapy accessories, and other ancillary equipment used with endoscopes. The subject device is an update to the Visera Elite II Video System Center cleared under K201200 to add an infrared (IR) function. The IR light source (CLV-S200-IR) uses the existing software in the subject device to enable the connection and ensure IR compatibility.

The subject device has both a processor function and light source function. By switching on the illumination lamp in the subject device, the device provides light through the endoscopes directly for endoscopic observation. There are two modes: WLI (White light imaging) mode for normal observation and NBI (Narrow-band imaging) mode.

By driving the CCD equipped in the endoscope, the subject device displays an endoscopic image on a monitor.



5. INDICATIONS FOR USE

This Visera Elite II Video System Center (OLYMPUS OTV-S300) is intended to be used with OLYMPUS camera heads, endoscopes, monitors, EndoTherapy accessories, and other ancillary equipment for endoscopic diagnosis, treatment, and video observation.

6. COMPARISON OF TECHNOLOGY CHARACTERISTICS WITH THE PREDICATE DEIVCE

The table below provides a comparison of the intended use and technological characteristics of the subject and predicate device.

Table: Comparison Table of the Subject and Predicate Device

	<Subject device> OTV-S300	< Predicate device> OTV-S300
Manufacturer	Olympus Medical Systems Corp	Olympus Medical Systems Corp
Indications for use	The Visera Elite II Video System Center (OLYMPUS OTV-S300) is intended to be used with OLYMPUS camera heads, endoscopes, monitors, EndoTherapy accessories, and other ancillary equipment for endoscopic diagnosis, treatment, and video observation.	This video system center is intended to be used with OLYMPUS camera heads, endoscopes, monitors, EndoTherapy accessories, and other ancillary equipment for endoscopic diagnosis, treatment, and video observation.
Rated voltage	100-120 V AC 50/60 Hz	100-120 V AC 50/60 Hz
Rated input	400 VA	400 VA
Dimension (maximum)	W383×H199×D506 (mm)	W383×H199×D506 (mm)
Weight	19.3kg	19.3kg
AGC (Auto gain control)	Provided	Provided
2D	Provided	Provided



	<Subject device> OTV-S300	< Predicate device> OTV-S300
Observation		
3D observation	Provided	Provided
IR observation	Provided	Not provided
Front panel (Operation)	Touch panel	Touch panel
Examination Lamp	LED	LED
Average lamp life	10,000 h	10,000 h
Emergency lamp	LED	LED
Average Emergency lamp life	10,000 h	10,000 h
Narrow band imaging (NBI)	Provided	Provided

The subject and predicate devices have identical Indications for Use statements and have the same intended use – for visualization during endoscopic surgical procedures. The subject and the predicate device have different technological characteristics. The subject device has infrared functionality while the predicate device does not. The differences between the subject and predicate device do not raise different questions of safety and effectiveness.

7. PERFORMANCE DATA

To support the modification to the subject device to include the IR functionality, the following design verification and validation activities were performed and summarized:

7.1 Electrical safety and electromagnetic compatibility (EMC)

Electrical safety and EMC testing were conducted in accordance with the ANSI/AAMI ES 60601-1:2005/(R)2012 and A1:2012 and IEC 60601-2-18:2009 standards for safety and the IEC 60601-1-2:2014 standards for EMC.

7.2 Software verification and validation testing

Software verification and validation testing for the subject device was conducted as recommended by FDA's Guidance for Industry and FDA Staff, "Guidance for the Content of Premarket Submissions for Software Contained in Medical Devices" (2005) and "Content of Premarket Submissions for Management of Cybersecurity in Medical Devices" (2014).

7.3 Performance testing - Bench

Bench testing for the subject device incorporating the IR functionality was conducted to ensure that the subject device performs as intended and meets design specifications, as follows:

- Image Quality
 - Brightness
 - Image Intensity Uniformity
 - Color Performance
 - Signal-to-Noise ratio

8. CONCLUSIONS

The results of the performance testing described above demonstrate that the VISERA ELITE II VIDEO SYSTEM CENTER is as safe and effective as the predicate device and supports a determination of substantial equivalence.