March 29, 2017

Launch of VISERA ELITE II Surgical Endoscope System with Infra-Red Imaging Capability

Olympus Corporation (President: Hiroyuki Sasa) today announced the launch from the end of March 2017 in Japan, Europe and parts of Asia of the VISERA ELITE II, a surgical endoscope system with an infra-red (IR) imaging capability.

It has become common practice to use endoscopic surgery for the excision of tumors and other lesions. This involves inserting a surgical endoscope, together with other special-purpose device like energy devices or hand instruments, via incisions. By eliminating the need for open surgery, this technique offers less post-operative pain and faster recuperation, making it popular as a minimally invasive surgical practice that reduces the burden on patients.

The new VISERA ELITE II surgical endoscope system features infra-red (IR) imaging, a subject of ongoing research in medical practice. Imaging can be switched between white and IR light at the push of a conveniently located button. Moreover, thanks to an integrated video system center with a built-in light source for white light, the VISERA ELITE II features a compact design¹ that is roughly 30% smaller and lighter than the previous model². Making the system smaller and lighter both saves space at the hospital and supports to reduce the healthcare providers’ workload.

Enhanced ease-of-use can also be expected thanks to the adoption of a touch panel and LED light source.

*1: The new OTV-S300 model has a volume of approximately 33,000 cm³ (370×188×474 mm) and weighs 15.5 kg. The combined volume of the previous OTV-S190 and CLV-S190 models is approximately 50,000 cm³ and the combined weight is 23.7 kg (respectively: 375×91×489 mm, 8.8 kg and 383×162×536 mm, 14.9 kg).

*2: VISERA ELITE (launched in October 2011 in Japan and April 2012 in Europe and America)

● Launch Overview

<table>
<thead>
<tr>
<th>Product Name</th>
<th>Launch Date</th>
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<tbody>
<tr>
<td>VISERA ELITE II VIDEO SYSTEM CENTER³</td>
<td>End March, 2017</td>
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<tr>
<td>OTV-S300/200</td>
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<tr>
<td>HD 3CMOS CAMERA HEAD CH-S200-XZ-EB</td>
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<tr>
<td>VISERA ELITE II XENON LIGHT SOURCE⁴</td>
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<td>CLV-S200-IR</td>
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<tr>
<td>TELESCOPE IR, 10 mm, 0°∕30°⁴</td>
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*3: Already on sale in Japan since December 2016
*4: For IR imaging

● Main Features

1. Infra-red (IR) imaging
2. Smaller and lighter instrument eases workload for surgeons and other medical staff
3. New touch panel and LED light source improve ease-of-use

VISERA ELITE II (example of complete system)  VIDEO SYSTEM CENTER  TELESCOPE IR
● Development Background
Since it is minimally invasive and enables rapid recuperation, use of endoscopic surgery has grown rapidly in Japan since the 1990s. It is now used in a wide variety of clinical applications, including not only gastrointestinal surgery but also thoracic surgery, urology and gynecology. Olympus has a track record of developing and supplying products for endoscopic surgery in its role as a vendor of all forms of endoscopy. In particular, this has included developing products to ensure beneficial outcomes for patients by meeting the needs of practitioners, and giving medical practitioners access to equipment that incorporates the latest technologies. Since launching the VISERA ELITE surgical endoscope system in 2011, Olympus has also added 3D and 4K models to its product range. Olympus has now developed this new system to add an IR imaging capability, a technique that is subject to ongoing research in medical practice. The intention is to provide even greater support for research by medical practitioners.

● Details of Main Features
1. Infra-red (IR) imaging
IR imaging is achieved by combining an IR light source and IR telescope with the video system center, camera head, and monitor used for white light imaging. Imaging can be switched between white and IR light at the push of a conveniently located button (on the camera head).

2. Smaller and lighter instrument eases workload for surgeons and other medical staff
The previous model was used by attaching a laparoscope or thoracoscope to the separately supplied video system center and light source. In contrast the new model has been made approximately 30% smaller and lighter by adopting an integrated design in which the white light source is incorporated into the video system center. This saves space at medical facilities that deal with a wide variety of medical devices and makes it easier to move the device around within the facility.

The camera head has also been made much smaller and lighter than the previous model. It weighs approximately 37%[^5] less, making it easier to operate one-handed.

[^5]: The new CH-S200-XZ-EB weighs 220 g compared to 350 g for the previous Olympus CH-S190-XZ-E/Q.
3. New touch panel and LED light source improve ease-of-use
The OTV-S300 video system center on the new model uses an LED light source in place of the xenon lamp used on the previous model. The longer life of the new light source should also result in lower running costs. Ease of use by healthcare providers has also been improved by adopting intuitive touch panel operation.

The VISERA ELITE II is manufactured by Olympus Medical Systems Corp.

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