

NEW PRODUCT APPLICATIONS

A Single-use Wide-angle Viewing System

As a disposable lens, Oculus' BIOM ready saves on time and expense.

BY KAREN APPOLD, CONTRIBUTING WRITER

Oculus, the inventor of non-contact wide-angle viewing, has also created the world's first single-use wide-angle viewing system — the BIOM ready.

“The BIOM ready provides retinal surgeons with the same unparalleled view that they have come to rely on from Oculus for more than 25 years,” says Steffen Adamowicz, director, Surgical Division of Oculus Optikgeräte GmbH (Wetzlar, Germany).

The system offers the simplicity and comfort of the traditional Oculus BIOM in a disposable format. Furthermore, it maximizes operating room efficiency because time isn't spent on sterilizing equipment, Adamowicz says.

Because it's a single-use device, there aren't any issues related to wear and tear — such as scratches on the lens surface or changes in the coating — which may occur as part of the sterilization process, says Thorsten Boeker, MD, director, Ophthalmology Department, Klinikum Dortmund, Germany.

HOW IT WORKS

The system is attachable to most microscopes used for vitreous surgery. It comes ready for immediate use — just take it out of the box and attach it to the microscope. “The convenience of a single-use system allows



surgeons to perform emergency cases or treat high-risk patients with ease,” Adamowicz says.

High-definition clarity under

high magnification eliminates the need for a contact lens. The device is optimized for the objective length, which allows the surgeon to

seamlessly switch between posterior and anterior segments without the need to refocus the microscope.

“The single-use technology and the reliability of the mechanics make it affordable, while the simplicity of its design allows for easy use,” Dr. Boeker says. The Oculus BIOM ready comes preassembled with the BIOM HD disposable lens in a sterile blister pack.

Patients have the safety and security of disposable equipment, so there’s a very low risk of cross-contamination. The patient also benefits from better surgical outcomes, based on alignment precision.

SCOPE OF USE

The BIOM ready can be used for all types of vitreo-retinal surgeries, such as a detached retina, internal limiting membrane peeling, or shaving of the vitreous base. “Regardless of whether surgery is performed in the periphery or midvitreous, image quality is not compromised,” Adamowicz says.

Additionally, “the system provides surgeons with a 130° wide-angle field of view of the retina, even in tough situations, such as trauma cases or retina implants,” Adamowicz adds. “In those instances, image clarity is a key to success.”

According to Dr. Boeker, who has used the system for a host of conditions, “There are various settings in which the BIOM ready is a fully adequate or even an advantageous alternative to the BIOM for vitreoretinal surgery.” Some applications include procedures for vitreous hemorrhage, macular pucker, macular holes, retinal detachments in phakic and pseudophakic patients, proliferative vitreoretinopathy detachments, tractional detachments, and even endophthalmitis. “It has excellent reliable optics and mechanics in case after case,” he says.

“Because the BIOM ready is simple to set up and use, it is an option for surgeons who less frequently use the posterior-segment approach — such as complicated cataract surgery cases, which involve loss of lens material into the vitreous cavity, or endophthalmitis,” Dr. Boeker adds.

OPTIONS FOR USE

The BIOM ready can be used with current adaptations on most ophthalmic microscopes that already feature an Oculus BIOM system. Oculus provides an adaptation that allows the system to be used on the same adapter as the Carl Zeiss Meditec (Dublin, CA) Resight. An image inverter, such as the Oculus SDI, is still required to use the BIOM ready. **RP**

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