Leica Microsystems has signed a definitive agreement to acquire Bioptigen, Inc. to strengthen its position in the ophthalmology market. Bioptigen is a technology leader in the field of optical coherence tomography (OCT). The integration of OCT imaging into Leica Microsystems’ surgical microscopes will assist ophthalmologists during eye surgery.

Using low-power, near-infrared light, Bioptigen OCTs generate high-resolution, volumetric images of the eye. Bioptigen currently markets the FDA-cleared and CE-marked Envisu C2300 OCT for handheld, pediatric, and perioperative applications, and sells advanced ophthalmic OCT imaging systems for preclinical research globally.

OCT utilizes interferometry to create cross-sectional views of different types of tissue. This non-invasive technique is used to detect and monitor morphological changes of ocular tissue, in particular retinal layer thickness, which can give insight into pathological conditions such as glaucoma, age-related macular degeneration (AMD) or diabetic retinopathy.

Heinrich Dreyer, Vice President of Leica Microsystems’ Medical Division, says: “Adding Bioptigen’s OCT capabilities to our surgical microscopes directly addresses our customers' requirement for better decision making tools. Bioptigen brings great products and expertise, and will be an important contributor to our growth in the ophthalmology market.”

Eric Buckland, CEO of Bioptigen, says: “We are delighted to join Leica Microsystems. Together, we believe we can jointly leverage our ophthalmic imaging technologies, address broader research and clinical markets, and more efficiently complete the next steps in integrating OCT imaging capabilities into the operating room.”