

Recent Developments in the Vision Care Industry

An unprecedented number of exhibitors showed their products and services at this year's XXIII Congress of the ESCRS in Lisbon. Many used the occasion to unveil new products and approvals.

New products from Alcon

Alcon Laboratories introduced several new products during the conference proceedings. Attendees heard several presentations on the Ladar 6000, the latest iteration of the company's refractive laser surgery platform. The Ladar 6000 offers several hardware and software upgrades from the Ladar 4000 platform. The principal enhancements include a new excimer laser component that provides a repetition rate of 100 Hz, a 40% increase in ablation speed. The LadarWave component has also been improved. New autoregistration software provides automatic alignment of the pupil and limbus reticules during wavefront capture, said to provide faster and more accurate treatments. The tracker

system has also changed, and now uses scleral vessel registration. The Ladar system now also provides a display of the LadarWave image during the surgery. Presentations during the Congress also highlighted many other new Alcon products including the ReStor Natural IOL, the Acrysof IQ IOL, Discovisc viscoelastic, and a new energy module for the Infiniti system.

HRT 3 debuts

Heidelberg Engineering introduced the Heidelberg Retina Tomograph 3 (HRT3) for assessing, diagnosing and managing glaucoma. The product's features include the Fast Check Glaucoma Probability Score, which is generated using an advanced form of artificial intelligence called a relevance vector machine. The analysis provides a statistical probability of glaucoma using ethnic-specific databases. The software eliminates the need to draw contour lines or use reference planes, and it provides real-time

feedback to the operator for acquiring a quality image. The HRT3 is a portable, laptop-based system that can be stored in a compact carrying case. The company expects to begin shipping the HRT3 by the end of this year.

New CustomVue FDA Approval

AMO received approval from the US FDA to treat high myopia and myopic astigmatism using the CustomVue procedure with the STAR S4 IR excimer laser system. The newly approved indications include the reduction or elimination of myopia and myopic astigmatism ranging from -6.00 D to -11.00 D with up to -3.00 D of cylinder. With this approval the CustomVue procedure can offer the highest range of myopia and wavefront-guided treatment in the US. In the associated clinical studies, 98.3% of those receiving the CustomVue high myopia treatment achieved 20/40 uncorrected vision at six months,

while 84.3% achieved 20/20 or better uncorrected vision. AMO also showed several new products at the Congress, including the Veriflex foldable phakic IOL, the multifocal Tecnis IOL, the Array 2 IOL, and the ReZoom multifocal IOL.

New from Nidek

NIDEK launched three major products at the Congress. One of these was the EC-5000CXIII, its new and advanced refractive surgery laser system. The system, which has received the CE Mark, is part of the Navex Quest System, and includes 200 Hz eye tracking, torsion error detection and compensation, multi-point laser delivery, as well as proprietary software algorithms such as OATz, CATz and OPDCAT for customised refractive surgery. The new laser system is designed to work with Nidek's advanced diagnostic platform the NIDEK OPD-Scan and NIDEK's Final-Fit Software for performing

customised and personalised refractive surgery procedures.

New from Medtronic

Medtronic Ophthalmics introduced Congress delegates to its new Endo Optiks system for endoscopic photocoagulation. The system produces photocoagulation of the ciliary body epithelium under direct endoscopic visualisation. The procedure is performed in combination with phacoemulsification and intraocular lens implantation. It can also be done in pseudophakic patients with uncontrolled intraocular pressure. The 20-gauge instrument includes a 10,000 pixel fibre bundle, and a two-watt 810nm diode laser delivery system with a 640 nm diode laser aiming beam. Recent clinical experience suggests the instrument may also prove useful for endoscopic visualisation alone.