

## Press Release

### **Less than two percent retreatment rate**

#### **International multicenter LASIK study – SCHWIND “aberration free” treatment**

Kleinostheim, Germany, April 2007

A very high predictability of treatment results, a significant increase in visual acuity and no induction of aberrations, that could reduce quality of vision or contrast sensitivity: These are the most important results of a recent international multicenter LASIK study with 183 eyes conducted by Maria Clara Arbelaez, M.D., Oman, Prof. Pavel Rozsival, M.D., and Dr. Alena Feuermannova, Czech Republic, as well as Dr. Rainer Wiltfang, Germany. The goal of the study was to evaluate aspheric-based treatments with the SCHWIND ESIRIS excimer laser and the ORK-CAM software module concerning safety, predictability and efficacy. In all eyes, the SCHWIND „aberration-free” treatment was employed, which leaves pre-operative higher-order aberrations unchanged in order to allow patients to retain a habitual sight impression. The flaps were created in all cases with the Carriazo-Pendular microkeratome (superior hinge).

The results in detail: In 71 percent of all treated eyes, the planned refractive result was achieved with a minimum deviation of  $\pm 0,25$  D. 91 percent were in the area of  $\pm 0,5$  D and 100 percent of eyes achieved  $\pm 1$  D (Figure 1). The post-operative vision without aids compared to the pre-operative vision with glasses or contact lenses also increased significantly. Six months after treatment, 86 percent of all eyes achieved a post-operative uncorrected visual acuity (UCVA) of 20/20 or better, while only 69 percent exhibited a best corrected visual acuity (BCVA) of 20/20 or better (Figure 2).

The study further showed that, with the help of the ORK-CAM, biomechanical changes of the cornea are effectively compensated: After six months, no growth of significant aberrations, such as coma or spherical aberration was observed, nor were on average any additional higher-order aberrations induced (Figure 3).

„The high precision of the results is also documented through the extremely small re-treatment rate, which was less than two percent“, comments Thomas Magnago, Director Customer Support and responsible for the SCHWIND studies.



