



FDA APPROVES FIRST-OF-ITS-KIND LASIK TECHNOLOGY New LASIK System Measures and Treats Optical Errors Never Detected Before

(NAPSA)—There's more to 20/20 vision than meets the eye. The FDA has approved groundbreaking laser refractive technology that allows eye surgeons, for the first time, to address visual problems that they could not even detect before. 20/20 vision, considered the standard for good eyesight, has been measured for over 100 years by letter eye charts, but these eye charts don't tell the whole story. As demonstrated by this new, FDA-approved LASIK technology—called CustomCornea[®]—there's more to good vision than meets the eye.

There are several types of imperfections in the eye's optical system that can affect vision. These imperfections are referred to as lower- and higher-order aberrations. To date, only lower-order aberrations, such as nearsightedness, farsightedness and astigmatism, could be measured and treated. However, lower-order aberrations do not account for all potential vision problems. Higher-order aberrations can also have a significant impact on a person's quality of vision, and cannot be corrected with glasses, contacts or conventional LASIK. According to experts in the field of ophthalmology, higher-order aberrations are linked to visual disturbances, such as glare and halos, that may cause night vision problems and are sometimes associated with conventional LASIK surgery side effects.

CustomCornea is the first-and-only FDA-approved eye surgery system that can measure both lower- and higher-order aberrations, and can actually be used to address each patient's unique pattern of lower- and higher-order optical aberrations.

"Our eyes focus in unique ways," explains Roger Steinert, MD, associate clinical professor of ophthalmology, Harvard Medical School. "Two people who both have 20/20 vision are not likely to have the same visual clarity, as the quality of their vision will



New technology improves upon laser vision correction.

usually vary a lot. This new technology addresses those individual variations, offering a truly customized LASIK procedure with remarkable accuracy and precision. Most people have higher-order aberrations, which makes nearly everyone a potential candidate for CustomCornea."

To create the customized map unique to each patient's eye, a safe ray of light is transmitted into the patient's eye. The light is then reflected back off the retina, out through the pupil, and into the device, where the reflected wave of light is received and analyzed to capture the patient's lower- and higher-order aberrations. All of these visual irregularities are then displayed as a three-dimensional map, referred to as a wavefront map. This information is then electronically transferred to the system's excimer laser, and computer-matched to the eye's position, enabling the surgeon to customize the procedure to each patient's unique visual requirements. This is the only FDA-approved system that actually uses wavefront data to guide the laser treatment.

CustomCornea, available only with the LADARVision[®] system, was developed by Alcon, Inc., the world's leading eye care company. To learn more about the technology and the LASIK procedure, visit www.ladarvision.com.