

## **Smart CL predicts glaucoma disease progression**

A contact lens (CL) with a built-in sensor could help determine which glaucoma patients have a higher risk of disease progression, according to the American Academy of Ophthalmology, which published the results. Researchers from Columbia University Medical Center found certain patterns of electrical signals emitted from the "smart" CLs correlate with a faster rate of glaucoma progression.

Researchers at Columbia tested the lenses on 40 patients between ages 40 and 89 undergoing treatment for open-angle glaucoma. Over 2 years, scientists performed at least 8 standard visual field tests on these patients. Half were classified as having slow disease progression while the other 20 had fast disease progression.

The patients then wore a smart CL for 24 hours. The lens' sensor detects changes in lens curvature. Investigators found that patients with steeper spikes recorded overnight and a greater number of peaks in their signal profile overall tended to have faster glaucoma progression.