Cross-linking technology for keratoconus yields positive early results

WALTHAM, Mass. — Avedro is initiating clinical trials for Keraflex KXL, a thermo-biomechanical technology designed to treat keratoconus, the company announced in a press release.

The device showed positive early refractive and biomechanical outcomes in a group of seven patients, according to Peter S. Hersh, MD, and John Marshall, PhD, FRCPath, FRCOphth, who presented results earlier this month at the International Congress of Corneal Cross Linking for Keratoconus in Leipzig, Germany.

"Our early experience shows improvements in the keratoconic cornea that we have not seen with past technologies," Dr. Hersh said in the release. "This should help improve vision in patients with keratoconus, a cornea problem that is difficult to correct, as well as improve contact lens wear and vision with glasses. We hope that Keraflex can help avoid cornea transplants in many patients who otherwise might have no other alternative."

Early results showed a mean change in manifest refraction spherical equivalent of 4.39 D and a mean 6 D reduction in corneal steepening.

The Keraflex KXL procedure reshapes the cornea without an incision or tissue removal.

Focal patterned collagen cross-linking with riboflavin 0.1% is applied to enhance corneal biomechanical stability.

Keraflex KXL is the first therapeutic application of Avedro's thermo-biomechanical technology, the release said.