

Answers From Your Genes. Confidence for Eyecare Decisions.



AvaGen[™] is the genetic eye test that provides answers on your risk for keratoconus and other corneal diseases—helping you and your doctor make confident eye care decisions now.

About Keratoconus and Corneal Dystrophy



Keratoconus

Keratoconus is a genetic eye condition that occurs when the cornea—the clear, rounded front part of the eye—thins and bulges into a cone-like shape. It can cause symptoms such as blurred vision, seeing glare and halos around light, eye pain, and sensitivity to light.

If left untreated, the cornea will continue to change shape, and vision will progressively worsen over time. In advanced cases, keratoconus may result in a corneal transplant.



Questions to ask your doctor

- What causes keratoconus?
- How will keratoconus affect my vision?
- Am I at risk for keratoconus?



Corneal Dystrophy

There are many types of corneal dystrophies, but one group of sight threatening corneal dystrophies are called TGFBI corneal dystrophies. TGFBI corneal dystrophies are a group of rare but harmful genetic eye disorders that run in families and cause changes in the cornea ranging from swelling to a buildup of abnormal material.

Common symptoms include vision loss, eye pain, dry eye, sensitivity to light and glare, or the feeling that something is in your eye.



Questions to ask your doctor

- What causes corneal dystrophies?
- How can a corneal dystrophy affect my vision?
- Am I at risk for corneal dystrophy?

Why Early Testing is Important

In the past, keratoconus and corneal dystrophy could only be diagnosed by a doctor physically examining the shape and appearance of the cornea.

This meant the disease may be undiagnosed, and continued to progressively worsen and permanently affect vision over time.

That's why the early and accurate diagnosis with AvaGen[™] genetic eye test makes it such a key step for maintaining your eye health today and into the future.

With AvaGen $^{\text{TM}}$, you will have the peace of mind of knowing you are doing the utmost to protect your vision, and the confidence of being able to take immediate action if needed.

Why your doctor may recommend a genetic eye test:

- You have a family history of corneal spots, corneal dystrophy, vision changes, or a family member who had a corneal transplant for unknown reasons.
- Your doctor sees irregular or suspicious signs on your cornea such as corneal thinning or gray or white spots (protein deposits) on your corneas.
- You have high or progressive nearsightedness of astigmatism.
- You are considering refractive surgery, such as LASIK and what to expect next.

The AvaGen[™] Genetic Eye Test

AvaGen[™] delivers precise, genetic data for personalized eyecare decisions.

- **Personalized:** AvaGen[™] uses DNA to accurately assess your individual genetic risk or likelihood of keratoconus, and determine if you have a corneal dystrophy.
- **Preemptive:** As a genetic test, AvaGen[™] relies on your DNA and not physical changes in your eye, allowing for earlier detection and proactive management.
- **Painless:** A DNA sample is simply taken from the inside of your cheek with a cotton swab.

AvaGen[™] helps your doctor understand:

- If you're at risk for keratoconus.
- If you have a corneal dystrophy.
- Whether or not you can undergo corneal procedures, including vision-correction procedures like LASIK.



Quick, Easy, Non-Invasive Testing

The AvaGen[™] genetic eye test provides information to help your doctor best protect and preserve your vision. The test only requires a few simple steps, and is performed guickly in the doctor's office.



Request: If your doctor recommends and orders the AvaGen[™] genetic eye test for you, it will most likely happen on the same day of your office visit.



Collect: Your doctor will swab the inside of both your cheeks to collect DNA.



Lab: The office sends your sample to the lab.



Results: Your doctor will inform you of the results, answer any questions you may have, and discuss potential next steps with you.



Counseling: Comprehensive genetic counseling sessions are available for patients who have undergone testing with the AvaGen™ genetic eye test.

Genetic counselors are available to help you understand your genetic eye test results and implications for your family members.

Questions to Ask Your Doctor About AvaGen™

- Should I be tested with the AvaGen™ genetic eye test?
- How will getting the AvaGen[™] genetic eye test benefit me?
- What will the AvaGen[™] genetic eye test tell me?
- How will I get my genetic eye test result?

For more information about the AvaGen[™] genetic eye test, please visit:

avellino.com/patients

