



Global Standard

Leaders in Cutting Edge Genetic Testing



Avellino DNA Test

For Avellino Corneal Dystrophy

Differentiating Your Clinic

Why are LASIK surgeons using AGDS ?

"When I was first approached regarding ACD genetic testing, I was skeptical because I had not knowingly encountered such cases. However, after 2 years, we have successfully identified and protected 35 patients from the risk of blindness.

I strongly encourage all LASIK surgeons to incorporate ACD testing into their standard of care."

-M. Tomita, MD, Executive Director
Shinagawa LASIK Center, Japan

"[Offering Avellino is] a business decision just as much as it is a patient safety issue. Being the leader in technology offerings that translate into safety of outcomes is always a good thing in the eyes of our patients and referring doctors.

...at the end of the day, no one wins if the patient does not. I sincerely believe [Avellino] is a winner."

-Tom Tooma, MD, Founder
NVISION Laser Eye Centers, So, Cal.

Avellino Lab USA is the first and only lab in the United States performing commercial genetic testing for Avellino Corneal Dystrophy.

Our cutting edge genetic diagnostic systems provide fast, safe, and affordable evaluations of an individual's genetic pre-disposition for specific medical conditions.

Such predictive and preventative capabilities now provide personalized medical information with powerful options for improving the quality of an individual's health and life decisions.

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What is AGDS™?

Avellino Lab USA (ALU) provides a proprietary diagnostic genetic testing service, Avellino - GENE Detection System (AGDS™) used to detect a genetic mutation that causes Avellino Corneal Dystrophy (also referred to as ACD or Granular Corneal Dystrophy Type II).

During the last four years ALU has tested over 330,000 refractive surgery candidates with over 300 ACD positive individuals identified. The Avellino AGDS test for ACD has become the standard of care in Korea (160 LASIK clinics using this test) and Japan (more than 80% of LASIK patients tested).

What is ACD?

ACD was originally discovered in the US and described in families from Avellino, Italy, but it has now been found in people from all over the world. ACD is caused by a genetic mutation. The disorder is inherited in an autosomal dominant manner. It is characterized by the presence of gray-white discrete granular protein deposits in the center of the corneas. The protein deposits are a normal part of the healing process when the cornea is damaged. The ACD genetic mutation causes opacity formation deposits resulting in diminished visual acuity and eventual loss of vision. The disease usually develops slowly. However, it varies according to the individual patient's age, lifestyle, and environmental exposures. According to published research, the ACD genetic mutation prevalence rate is approximately 1:870 (Ophthalmic Epidemiology 2010;17:160-165). The prevalence rate of individuals tested by Avellino Labs (Global) using AGDS is approximately 1:1090. Currently, there is no treatment for ACD.

ACD testing should be of particular concern to refractive surgeons because refractive surgery (LASIK, LASEK, PRK) triggers the healing process mentioned above and will exacerbate ACD in genetically predisposed patients. Refractive surgeons should pre-test to detect the genetic mutation in refractive surgery candidates to avoid the post-operative onset of ACD conditions.

ACD Phenotypes



Normal



27-year-old,
7 years after LASIK



Homozygous

How does it work?

The testing process is very simple. The clinic uses a buccal swab on the inside of both cheeks, sends the swab to our lab (in the SF bay area), and receives the test results online within 24 to 48 hours.



01

Requisition Form



02

Sampling



03

DNA Extraction



04

Screening and Result

What are the benefits for your clinic?

There are five primary benefits to the LASIK clinic.



1. Patient Safety

2. Competitive differentiation

3. Increased volume and conversion

4. Additional revenue

5. Reduced potential for liability

FAQs

Common questions about ACD and AGDS



1. Is the approximate prevalence rate of 1:1000 accurate?

Published research and our test results prove the stated prevalence rate to be accurate.

2. Is ACD an Asian Condition?

Much of the research originates from Korea and Japan because the original research was funded in those countries. Therefore, most of the confirmed cases are of Asian descent. However, extensive research demonstrates the ACD genetic mutation is prevalent among a diverse representation of ethnicities (Hispanic, African, Eastern and Western European, Asian, etc.)

3. Can I diagnose ACD patients in a slit-lamp exam?

Only if the patient's cornea exhibits symptoms. It is a common occurrence for patients with the genetic mutation to present no symptoms (protein deposits) when they are prescreened for LASIK. The only way to obtain 100% certainty is with the AGDS genetic test.

4. Does this encourage fear of LASIK?

Some clinicians may be concerned that this will increase the fear patients feel about the dangers of refractive surgery. However, in clinics using the AGDS test, our experience demonstrates that the test helps patients feel safer and increases patient interest in LASIK.

5. Will the cost deter patients?

Although the test is very affordable and a fraction of the total cost of LASIK, there still may be some concern that it will deter patients. However, clinics currently using the test have proven the opposite. In fact, many have experienced an average selling price increase that exceeds the cost of the test. Most patients will pay a little extra for increased safety.

How can I get more information?

Schedule a brief meeting with an Avellino Lab representative to discover how simple it can be to incorporate the AGDS test into your LASIK patient prescreen process and how beneficial it can be to your LASIK practice.

Visit our website at www.avellinolab.com/us for additional research studies, technical information and contact information.