



# Making Sense of Genetic Testing and AMD

How personalized medicine plays an important role in the efficacy of nutritional supplements in the treatment of Age-related Macular Degeneration











AMD is considered one of the most powerfully genetic-dominant diseases discovered to date. Your genetic profile can account for over 60% of the risk of developing AMD. Having a first-degree relative (mother, father, brother, sister) with AMD significantly increases risk. In addition to genetics, lifestyle factors such as age, smoking history, Body Mass Index (BMI), and AMD status also play a role in progression to advanced AMD.

### The Genetic Testing Difference

Effective management and treatment of AMD is dependent on genetic testing in two ways: **pharmacogenetic**, to support the selection of personalized supplement therapy to optimize therapeutic outcomes; and **prognostic**, to determine which patients are at the highest risk of vision loss from AMD.



## Enhancing The Way We View Eye Supplements

The Age-Related Eye Disease Study (AREDS/AREDS2) demonstrated that eye supplements can protect a significant percentage of patients from developing advanced AMD. Recent data suggest, however, that ingredients within the commonly prescribed AREDS/AREDS2 formulations, specifically antioxidants (vitamins C and E) and zinc, may be either helpful or harmful to some patients based on their genetics.

**Vita Risk** is the pharmacogenetic DNA test that supports the selection of personalized supplement therapy to optimize therapeutic outcomes for early to AMD patients.

Based on a patient's combined *CFH* and *ARMS2* genotype, the supplement treatment shown to afford the greatest reduction in the 7 to 12-year rate of progression to advanced AMD for an individual's genotype cohort is recommended.





# Determining Risk And Personalized Treatment

Macula Risk is a combined prognostic and pharmacogenetic DNA test intended for patients who have a diagnosis of early to intermediate AMD. The test is a simple buccal swab performed in the doctor's office. Combined with a routine clinical eye examination, results of the Macula Risk test determine which patients are at the highest risk of vision loss from AMD.

The Macula Risk patient report contains valuable information, including the patient's 2-year, 5-year and 10-year risk of progression to advanced AMD, a supplement recommendation specific to their genetic makeup, and important details in regard to their genetics that will help to establish personalized treatment.

### At a Glance

A comparison between Macula Risk and Vita Risk Patient Reports:

PATIENT REPORT SHOWS:	Macula Risk Report	Vita Risk Report
10-Year Macula Risk Score For Progression to CNV or GA - Progression risk %	Yes	-
Patient's Genetic Features - Patient's genotype for each AMD-associated gene	Yes	Yes
Non Genetic Features - age, smoking history, Body Mass Index (BMI), AMD status	Yes	-
Genetic Risk Percentile - Percentage of individuals in the Caucasian population who are at a lower genetic risk than the individual tested	Yes	Yes
2-year, 5-year and 10-year Progression Risk to CNV or GA	Yes	-
Supplement Recommendation based on CFH and ARMS2 genotyping	Yes	Yes
AMD Supplement Selection Using Genetics (Rate of progression to advanced AMD)	-	Yes