

Sample, Report

Date Of Birth: 07/02/1981 (34 yrs)
 Gender: Female
 Patient Id: 4547
 Patient Location: Sample Clinic

Ordering Provider

Ronald McGlennen MD
 7400 Flying Cloud Drive
 Eden Prairie, MN 55344
 855-672-5362

Sample Information

Specimen#: 7339649012
 Accession#: 201603-05468
 Specimen: Oral Rinse(P)
 Collected: 03/24/2016 10:16
 Received: 03/26/2016 10:02
 Reported: 03/28/2016 10:53

Reason for Testing: Active periodontal disease

Related info: Not Provided

Patient History: Not Provided

MOLECULAR DETECTION OF IL-1 PERIODONTAL RISK FACTORS

Analyte	Genotype	Risk
IL-1A	C/T	HIGH
IL-1B	T/T	

Interpretation:

The IL1 genotype indicates that this patient is at elevated or high risk for periodontal disease due to the genetic variations examined in this test.

Comments:

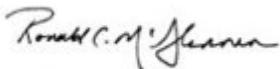
- **Significance:** This individual has the specific genotype viewed as high risk and therefore is at a 3-7 fold increased risk for progressive and severe periodontal disease due to the overproduction of interleukin 1 in the presence of oral bacteria. The composite genotype is based on the combination of the results for the IL1A and IL1B genes. Any combination that includes the presence of a "T" at both IL1A (+4845) and IL1B (+3954) is defined as the risk alleles and consequently, is a person at risk of more severe periodontal disease and may require more aggressive and frequent treatment.

- **Risk:** The prevalence of the high risk IL1 genotypes ranges from 30 to 40% in Caucasian populations. These genotype frequencies differ in other ethnic groups. The number of high risk alleles a person carries combines as a composite risk. Risk of periodontal disease is in part a consequence of the long term effect of an elevated level of inflammation that can, in the presence of high levels of pathogenic bacteria, result in the destruction of soft tissue, the demineralization of bone and may lead to tooth loss. In the case of this high risk result is the added concern of potential systemic disease.

- **Consider:** MyPerioID IL-1 test is an assessment of one of the genetic markers known to contribute to the inflammatory response to other cofactors causing periodontitis. The comprehensive evaluation of patients for this condition includes a more complete assessment of social habits and other coincident diseases, the quantitative measure of known bacterial pathogens through the MyPerioPath tests, as well as other gene markers that comprise a persons inflammatory gene profile such as the Celsus One test. Additionally, the testing for these additional genetic markers of inflammation can provide guidance as to a person's risk for other systemic diseases including atherosclerotic heart disease, diabetes, rheumatologic disorders and various neurologic conditions.

Methodology: Next Generation Sequencing (NGS) via MiSeq. The analytical and performance characteristics of these laboratory-developed tests (LDT) were determined pursuant to Clinical Laboratory Improvement Amendments (CLIA 88) requirements. It has not been cleared or approved by the U.S. Food and Drug Administration (FDA). The FDA has determined that such clearance or approval is not a requirement prior to use for clinical purposes. Technical assay performed by Kailos Genetics, Huntsville, AL 855-323-0680

Disclaimer: The reported genotypes are a subset of the group of genes that comprise the complete immune system. This genetic analysis may not detect specific immunologic diseases or predict the health and effectiveness of a person's immunity for specific diseases. Such an evaluation may require genetic counseling and testing directed to characterize those genetic conditions.



Ronald McGlennen MD, FCAP, FACMG, ABMG
Medical Director