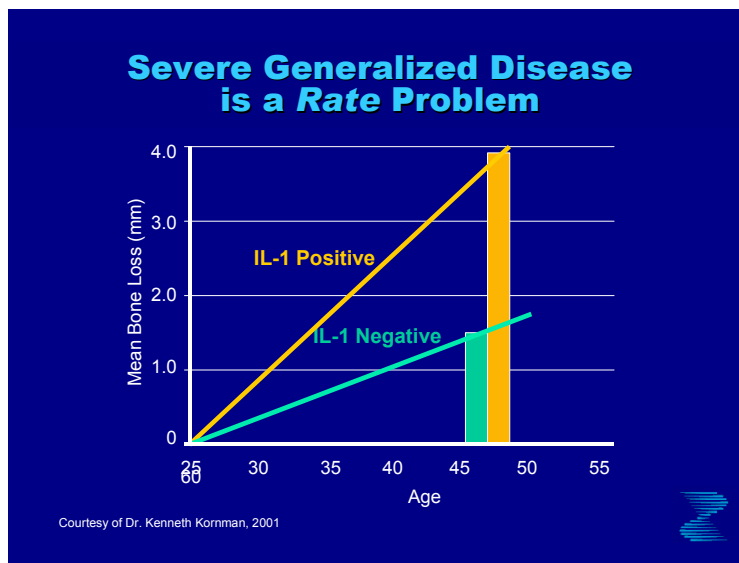


PST® GENETIC TEST

Susceptibility For Periodontal Disease

Like many common chronic disorders, periodontitis (gum disease) involves an inflammatory response that varies from one individual to another. Typically the progression and severity of the disease depends upon the interaction of genetic and behavioral risk factors. Previously there was no reliable way to identify individuals who had an increased genetic risk for these diseases; however, now it is possible to identify individuals who are at genetic risk for gum disease.

PST® Genetic Susceptibility Test is the first and only genetic test that analyzes two interleukin 1 (IL1) genes for variations that identify an individual's predisposition for over-expression of inflammation and risk for periodontal disease. IL1 genetic susceptibility may not initiate or cause the disease but rather may lead to earlier or more severe disease. This test is not intended to and does not diagnose a specific disease. The IL1 genetic test can be used to differentiate certain IL1 genotypes associated with varying inflammatory responses to identify individuals at risk for severe periodontal disease even before age 60.



The IL1 genetic test for periodontal disease is based on scientific data from genetic association studies obtained through research collaborations with scientific experts at leading dental institutions. This exclusive, patented test developed by Interleukin uses the latest medical research and technology to provide the best available genetic information to help make decisions aimed at preserving oral health. Since the test is proprietary, it is available internationally through licensed [PST representatives](#).

The IL1 composite genotypes are as important as many of the standard risk factors currently associated with periodontal disease. Individuals with a positive PST® genotype are approximately 3 times more likely to lose teeth than individuals who are genotype negative. When combined with smoking, susceptible individuals are almost 8 times more

likely to lose their teeth. The combination of a genetic predisposition and smoking behavior have explained greater than 80% of the severe disease present in study populations. It is estimated that approximately 30% of the population may have this genetic marker.

The good news is that a positive PST[®] result does not mean you will necessarily develop severe gum disease. Gum disease is both preventable and treatable. Knowledge of an individual's IL1 genotype identifies a life-long influence on inflammation, which can be modulated by preventive actions. Dentists, just like physicians, need to clinically diagnose the level of disease activity and assess risk for each individual patient. This provides the basis for an effective treatment plan, therapy and the supportive care necessary to maintain oral health.

Clinically, PST[®] is used in:

- New periodontal patients to assist in developing treatment plans.
- Patients requiring extensive periodontal and/or implant therapy to determine prognosis, improve patient acceptance and optimize treatment outcomes.
- Smoking patients as an additional incentive for smoking cessation.
- Maintenance patients to set recall intervals and improve compliance.
- Patients with early signs of disease to help determine the need for referral to a specialist.

Over 10,000 commercial PST[®] tests have been run since the service was made available to practitioners. Currently, PST[®] is one of the top ten genetic tests in terms of volume and one of the first of a new generation of predictive genetic tests for common diseases in medicine.