

FINAL REPORT

Sample, Report

Date Of Birth: 09/20/1980 (38 yrs)  
 Gender: Female  
 Patient Id: 920-C  
 Patient Location: Test Clinic A

Maximum Pocket Depth: 5 mm  
 Tooth/Teeth: 1 | 2 | 10 | 11 | 17

Ordering Provider

John Doe DDS  
 7400 Flying Cloud Drive  
 Eden Prairie, MN 55344  
 855-123-1234

Sample Information

Specimen#: 6001110005  
 Accession#: 201810-12667  
 Specimen: Paper Points

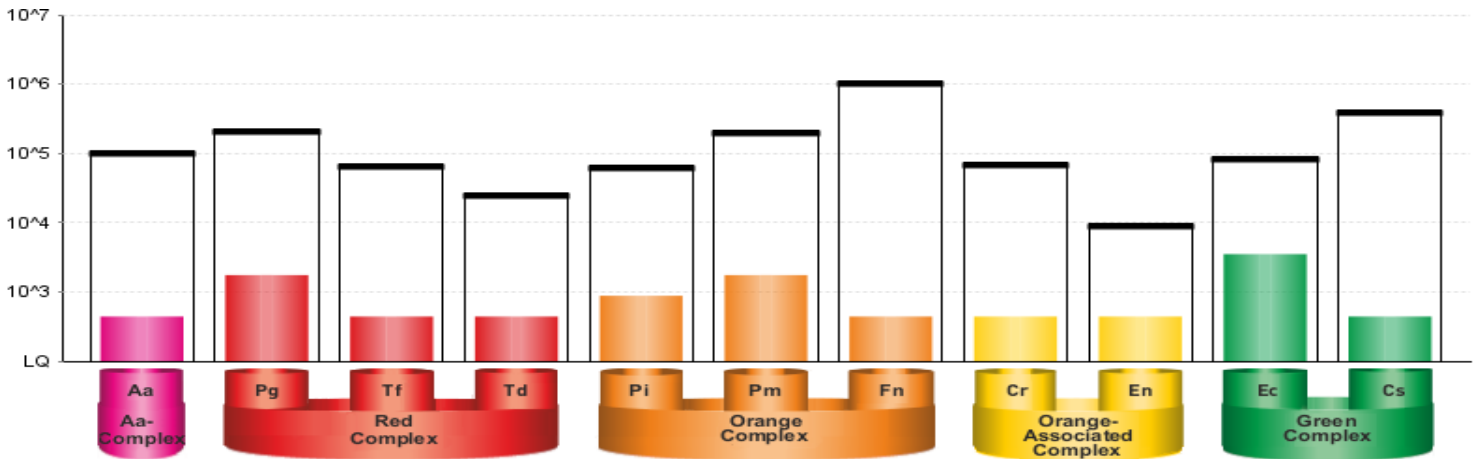
Collected: 10/10/2018  
 Received: 10/11/2018 11:49  
 Reported: 10/12/2018 09:26

Clinical Comments: None Reported

DNA TEST FOR PERIODONTAL BACTERIA

Results: **PATHOGENIC BACTERIA DETECTED**

The result graphic (below) shows the bacterial level for each of the assayed species. The vertical axis displays bacterial genome copies/milliliter in log10. The limit of quantification (LQ) is the lowest bacteria level that can be repeatedly measured. The black lines across each colored bar are the threshold.



Treatment Considerations: to be determined by the healthcare professional

- **Mechanical/Debridement:** Scaling and root planing (SRP) is a mainstay of therapy to disrupt biofilm, remove plaque and debride compromised tissue. This patient harbors a series of pathogens that may be refractory to this treatment.
- **Systemic Antibiotics:** A recommendation of systemic antibiotics is not provided for this bacterial profile.
- **Local Antibiotics and Chemical Hygiene:** As an adjunct to SRP, sub-antimicrobial doses of doxycycline hyclate lower collagenase activity and reduce periodontal pocket depth. Alternatively, locally delivered antimicrobial agents (LDA) including minocycline microspheres, doxycycline hyclate in an absorbable polymer, or chlorhexidine in a gelatin matrix have been shown to decrease pocket depth modestly.
- **Chemical Antiseptics:** Therapeutic rinses can reduce periodontal pocket depth. Prescription tray application of peroxide gel, as an adjunct to frequent periodontal maintenance appointments for refractory patients, demonstrated significant reductions in bleeding on probing.
- **Periodontal Surgery:** For severe and/or refractory periodontitis - surgical approaches such as gum flap repairs, procedures to reduce pocket depth, or other restorative procedures may be indicated.

Follow up Recommendations

- Good periodontal health depends on compliance of a home care regimen as detailed by your healthcare provider. Daily brushing, flossing, as well as attention to nutrition, proper rest and cessation of smoking are essential.
- Follow-up testing between 6-12 weeks with 11-microbes is recommended. Persistence of bleeding on probing is often indicative of unresolved infection. Retesting will identify residual or refractory bacteria.

**Methodology:** Genomic DNA is extracted from the submitted sample and tested for 10 species-specific bacteria [Aa: *Aggregatibacter actinomycetemcomitans*, Pg: *Porphyromonas gingivalis*, Tf: *Tannerella forsythia*, Td: *Treponema denticola*, En: *Eubacterium nodatum*, Fn: *Fusobacterium nucleatum/periodontium*, Pi: *Prevotella intermedia*, Cr: *Campylobacter rectus*, Pm: *Peptostreptococcus (Micromonas) micros*, Ec: *Eikenella corrodens*] and 1 genus of bacteria [Cs: *Capnocytophaga* species (*gingivalis*, *ochracea*, *sputigena*)] known to cause periodontal disease. The bacteria are assayed by real-time quantitative polymerase chain reaction (qPCR). Bacterial levels are reported in log10 copies per mL (e.g. 1x10<sup>3</sup> =1000 bacteria copies per mL). Cross-reactivity is possible with *Leptotrichia buccalis*, *Fusobacterium hwasooki* and *Capnocytophaga granulosa*. This test was performed by Access Genetics LLC, Eden Prairie, MN 55344 855-323-0680, who developed and determined its performance characteristics pursuant to CLIA requirements. This test has not been cleared or approved by the U.S. Food and Drug Administration. The FDA has determined that such clearance or approval is not necessary.

Medical Director: Ronald McGlennen MD, FCAP, FACMG, ABMG