

When it comes to  
periodontal disease...

**Test, Don't Guess**

# MyPerioPath<sup>®</sup>

Salivary DNA test that determines the cause of periodontal infections

## The test report will tell you:

- The type and concentration of disease-causing bacteria
- The bacterial information necessary to help classify high-risk versus low-risk cases
- Targeted treatment considerations designed to help you provide personalized therapy

## Treat the cause, not the symptoms:

- Create a highly personalized treatment approach
- Enable better risk assessment for more predictable outcomes
- Establish a systematic way to track patient oral health progress
- Increase patient acceptance of recommended treatment plans

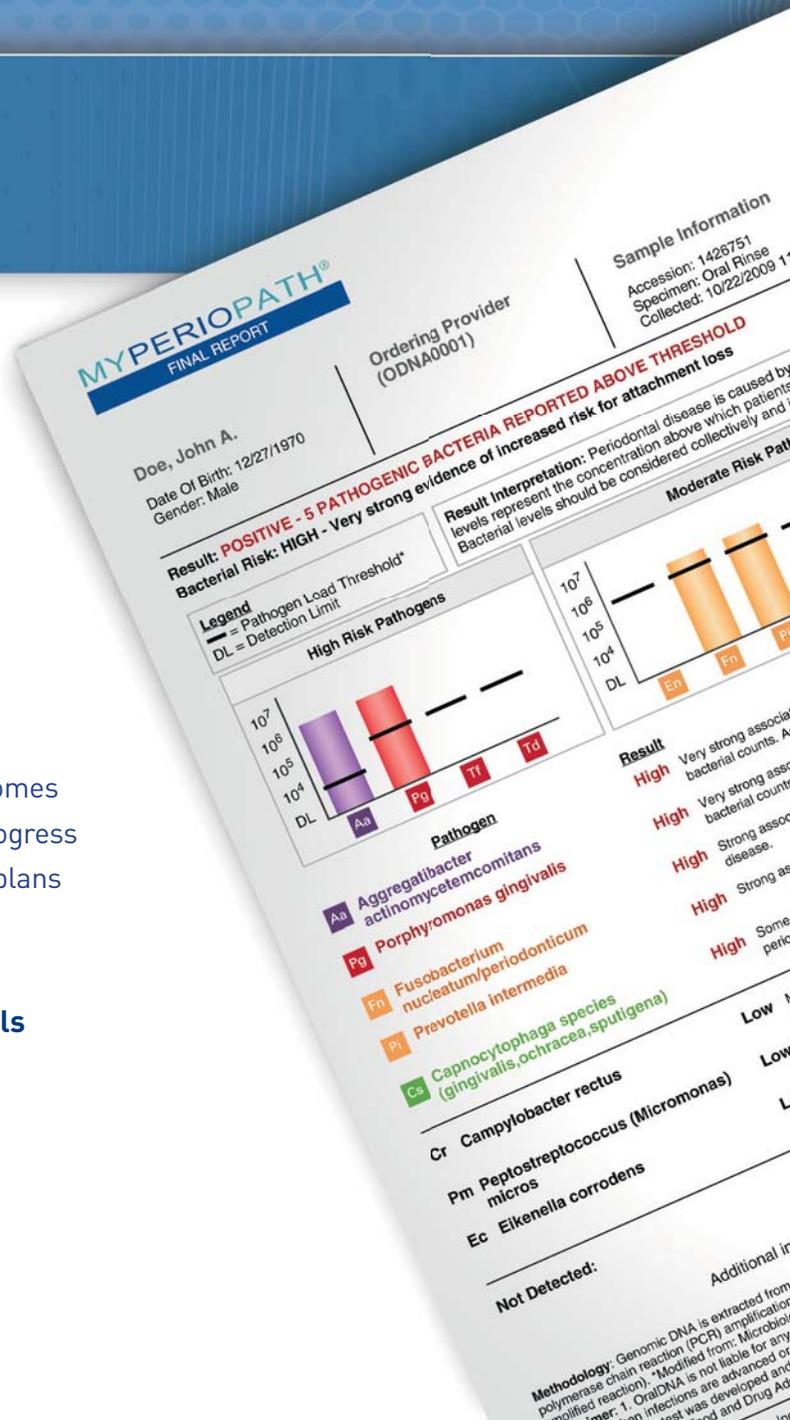
For more information, contact:

**855-ORALDNA** or visit [www.OralDNA.com/professionals](http://www.OralDNA.com/professionals)



**ORALDNA<sup>®</sup> LABS**

*Innovations in Salivary Diagnostics*



**Sample, Report**

Date Of Birth: 09/20/1980(37 yrs)  
 Gender: Female  
 Patient Id:951750  
 Patient Location:Test Site A

**Ordering Provider**

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

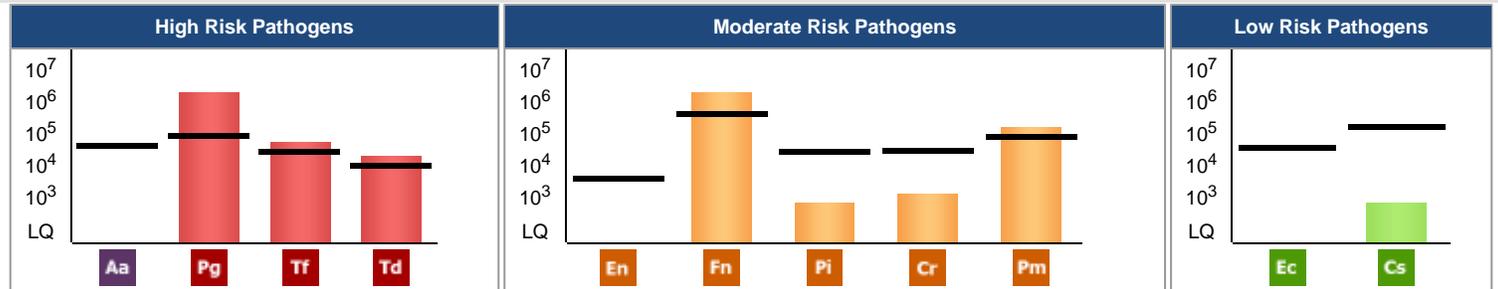
**Sample Information**

Specimen#: 5033050001  
 Accession#: 201807-12468  
 Specimen: Oral Rinse(P)

Collected: 07/08/2018  
 Received: 07/09/2018 09:57  
 Reported: 07/10/2018 11:12

**MYPERIOPATH MOLECULAR ANALYSIS OF PERIODONTAL AND SYSTEMIC PATHOGENS**

**Results**



**Legend:** The result graphic (above) 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 Therapeutic Threshold.

**Interpretation of Results**

- This result shows 3 high risk ( Pg , Tf , Td ) and 2 moderate risk ( Pm , Fn ) pathogens above the therapeutic threshold.
- The bacterial species Td and/or Tf are strongly associated with chronic periodontitis, are transmissible and tissue invasive even at low amounts of these organisms. Moreover, Pg is an anaerobic pathogen that often colonizes dental plaque, often along with other red complex bacteria. Note: the bacterial species Pm is commonly resistant to various treatments, and may be a reservoir of antibiotic resistance.
- The detected pathogens are also risk factors for various systemic diseases, including atherosclerosis, type 2 diabetes, arthritis, dementia and several types of cancer. The American Heart Association supports a causal relationship between periodontal disease and atherosclerosis. Specifically, Td has been shown to accelerate vascular disease of the aorta.

**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 ( Pg , Tf , Pi , Pm ) that may be refractory to this treatment.
- **Systemic Antibiotics:** This patient has indicated no allergies.

**1** Clindamycin 150 or 300 mg tid for 8-10 days  
 As always, use antibiotics with care



\*\*If your patient has a history of intolerance to the first choice consider:

- 2** Ciprofloxacin 500 mg bid for 8-10 days
- 3** Clarithromycin 500 mg bid for 8-10 days

- **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.
- **Pocket or Field Decontamination:** Laser decontamination as an adjunct therapy to SRP may be beneficial in reducing probing depth and bacterial loads. The consideration of using lasers as an adjunct to SRP is dependent on type of laser used and the particular protocol.
- **Chemical and Gaseous antiseptics:** Chlorhexidine or Povidine iodine 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. Ozone is a volatile antiseptic that can disrupt microbial membranes.
- **Probiotics and Prebiotics:** Probiotics are live, beneficial bacteria, typically administered as a food or dietary supplement. Prebiotics are non-digestible ingredients that promote growth of commensal bacteria. Research shows that prebiotics and probiotics control the growth of pathogens and reverse tissue destruction caused by periodontitis.
- **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 MyPerioPath is recommended. Persistence of bleeding on probing is often indicative of unresolved infection. Retesting will identify residual or refractory bacteria. Currently there is not a cure for periodontal disease, only periods of remission.
- Assessment of a patient's level of inflammation with Celsus One is valuable in deciding the frequency of patient recall and treatment.

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Date Of Birth:  
09/20/1980  
Gender: Female

**Sample Information**

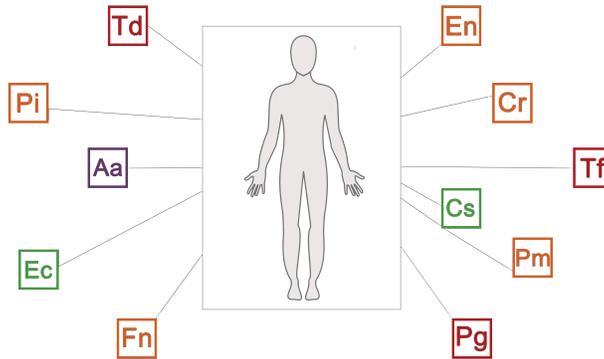
Specimen#: 5033050001  
Accession#: 201807-12468  
Specimen: Oral Rinse(P)  
Collected: 07/08/2018



**Clinical Considerations**

Reason for Testing	Clinical	Diagnostic	Medical History													
<input checked="" type="checkbox"/> Active Periodontal Disease	<input checked="" type="checkbox"/> Redness/Discoloration <input checked="" type="checkbox"/> Inflammation/Redness <input checked="" type="checkbox"/> Bleeding on Probing	<input checked="" type="checkbox"/> Type III Moderate Periodontitis <input checked="" type="checkbox"/> Tooth Numbers <table border="1"> <tr> <td>3</td> <td>9</td> <td>14</td> <td>19</td> <td>24</td> <td>30</td> </tr> <tr> <td>Pocket Depths(mm)</td> <td>4</td> <td>4</td> <td>5</td> <td>4</td> <td>4</td> <td>3</td> </tr> </table>	3	9	14	19	24	30	Pocket Depths(mm)	4	4	5	4	4	3	<input checked="" type="checkbox"/> Past History of Smoking <input checked="" type="checkbox"/> Arthritis/Auto Immune Disease
3	9	14	19	24	30											
Pocket Depths(mm)	4	4	5	4	4	3										

**Systemic Effects of Oral Pathogens**



**Cancer      Cardiovascular Health      Joint and Musculoskeletal Health      Dementia and Brain Health      Metabolic Health      Healthy Pregnancy**

**Cancer**  
Chronic gum disease, involving **Aa**, **Pg**, **Td**, **Tf**, & **Fn** is a risk factor for the development of certain cancers including ones involving the pancreas, esophagus, colon, lungs, and the head and neck. Additionally, untreated gum disease is a cause of ongoing inflammation, which may promote the advancing growth of tumors.

**Cardiovascular Health**  
Select bacteria such as **Aa**, **Td**, **Tf**, **Pg**, **Pi**, & **Fn** can leak from blood vessels in the gums and travel to the heart, where cholesterol and other lipids deposit. These bacteria can incite inflammation in arteries, and if occluded, cause a heart attack. A goal of treatment is to minimize the levels of these bacteria as much and as long as possible.

**Joint and Musculoskeletal Health**  
The periodontal bacteria **Pg**, **Fn** & **Ec** are a cause of arthritis. The oral inflammation caused by these bacteria also leads to total body inflammation which, combined with changes in a person's immunity, may result in chronic joint diseases like rheumatoid arthritis.

**Dementia and Brain Health**  
Recent medical studies point to poor oral health, and high levels of the bacteria **Pg**, **Cr**, **Cs** in our gums, increasing the risk of developing dementias such as Alzheimer's.

**Metabolic Health**  
Obesity, lack of exercise and chronic gum disease involving the bacteria **Aa**, **Td**, **Tf**, **Pg**, & **Fn** cause chronic inflammation. Inflammation can damage the pancreas where insulin is produced, possibly leading to diabetes. Also, diabetes worsens oral health by increasing the level of harmful bacteria in the gums.

**Healthy Pregnancy**  
Bacteria associated with gum disease, especially **Aa**, **Tf**, **Pg**, **Fn**, and **Ec**, are known to put a pregnancy at risk for pre-term birth, decreased birth weight and even blood infection in the placenta or newborn. Every pregnant woman should be tested for these harmful 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 log 10 copies per mL of sample (e.g. 1x10^3 = 1000 bacteria copies per mL of collection). Cross-reactivity is possible with Leptotrichia buccalis, Fusobacterium hwasooki, Capnocytophaga granulosa and Capnocytophaga leadbetteri. This test was developed, and its performance characteristics determined by OralDNA Labs 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.

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

**Sample, Report**

Date Of Birth: 09/20/1980 (37 yrs)  
 Gender: Female  
 Patient Id: 789  
 Patient Location: Test Location A

**Previous Test**

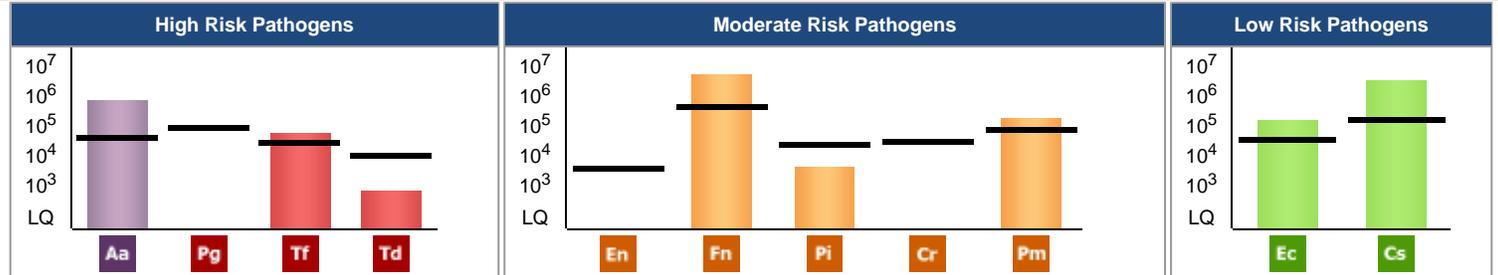
Specimen#: 5033032170  
 Accession#: 201807-12481  
 Specimen: Oral Rinse(P)  
 Collected: 05/17/2018

**Current Test**

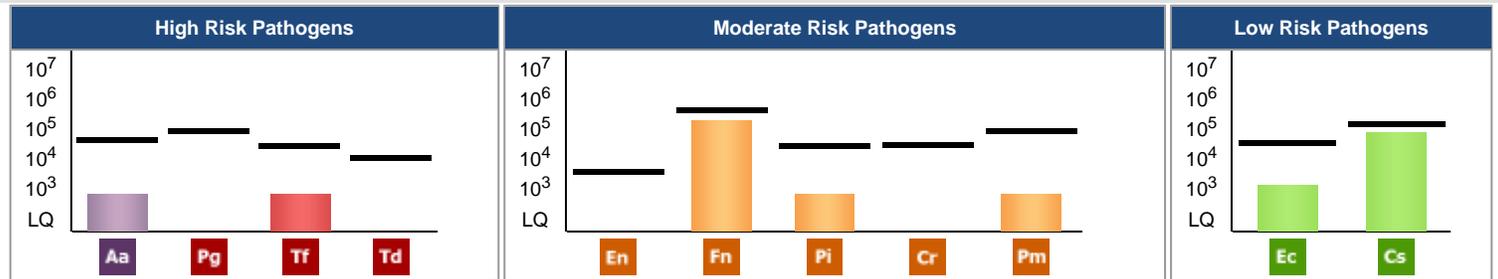
Specimen#: 5110000014  
 Accession#: 201807-12514  
 Specimen: Oral Rinse(P)  
 Collected: 07/23/2018

**COMPARISON OF TEST RESULTS**

**MyPerioPath - Previous Result**



**MyPerioPath - Current Result**



**Summary of Results**

**Total Bacterial Load**

Since patient's last test on 05/17/2018:

**46%  
Reduction**

- Congratulations, since the last test submitted 2 months 6 days ago, the clinical management of this patient has achieved a 46% reduction in periodontal pathogen (burden) load.
- The results show a reduction of the red (Aa, Tf, Td), orange (Fn, Pi, Pm) and green (Ec, Cs) complex pathogens.

- These current results are likely associated with a decrease in both oral and systemic inflammation. Consequences of high pathogenic bacteria present for years and decades add significantly to the risk of life threatening diseases beyond the mouth.
- For most treatment protocols, the maximal reduction in pathogen (burden) load is observed when follow-up testing is performed between 6-12 weeks. This sample was collected at 9 weeks 4 days from the previous test.

Clinical Comparison	Previous 05/17/2018	Current 07/23/2018
Total # Bacteria Present	8	7
Total # Bacteria Above Threshold	6	0
Deepest Pocket	5	5
Localized Infection	<input type="checkbox"/>	<input type="checkbox"/>
Generalized Infection	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Inflammation/Redness	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Bleeding on Probing	<input type="checkbox"/>	<input type="checkbox"/>
Bone Loss	<input type="checkbox"/>	<input type="checkbox"/>
Discharge	<input type="checkbox"/>	<input type="checkbox"/>
Halitosis/Malodor	<input type="checkbox"/>	<input type="checkbox"/>

A follow-up test is recommended to monitor the effectiveness of current treatments and to determine the type and frequency of future care.

**Discover the Facts...**

what you may not know about oral bacteria and how it relates to overall health



The major virulence factor carried by Pi is Interpain A, a cysteine protease that aids in the invasion of epithelial cells.

**Sample, Report**

Date Of Birth: 09/20/1980(37 yrs)  
 Gender: Female  
 Patient Id:987a  
 Patient Location:Test Location A

**Ordering Provider**

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

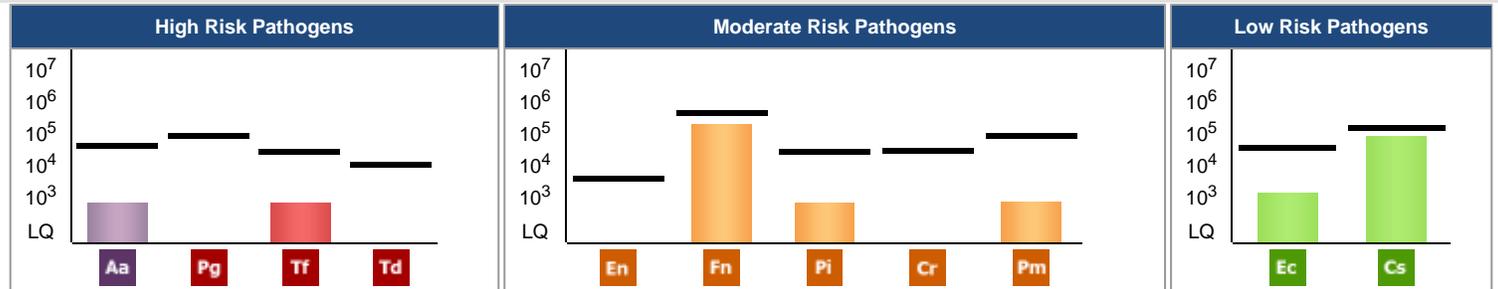
**Sample Information**

Specimen#: 511000014  
 Accession#: 201807-12514  
 Specimen: Oral Rinse(P)

Collected: 07/23/2018  
 Received: 07/24/2018 13:07  
 Reported: 07/27/2018 14:48

**MYPERIOPATH MOLECULAR ANALYSIS OF PERIODONTAL AND SYSTEMIC PATHOGENS**

**Results**



**Legend:** The result graphic (above) 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 Therapeutic Threshold.

**Interpretation of Results**

- This result shows a combination of 2 high risk (Aa, Tf) and 3 moderate risk (Fn, Pi, Pm) pathogens and low risk (Ec, Cs) each below the therapeutic threshold.
- The bacterial species Aa and/or Tf are strongly associated with chronic periodontitis, are transmissible and tissue invasive even at low amounts of these organisms. Moreover, Aa is pathogenic due to virulence factors that the organism expresses, resulting in inflammation that leads to tissue destruction.
- The detected pathogens are also risk factors for various systemic diseases, including atherosclerosis, type 2 diabetes, arthritis, dementia and several types of cancer. Difficulty in controlling infections involving Pi has been attributed to resistance to many antibiotics, including penicillins, cephalosporins, and tetracyclines. P.intermedia cells form a biofilm in which the bacterial cells become more resistant to antibiotics.

**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.
- **Systemic Antibiotics:** A recommendation of systemic antibiotics is not provided for this bacterial profile. For an antibiotic treatment guide, reference - [MyPerioPath Antibiotic Options](#).
- **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.
- **Pocket or Field Decontamination:** Laser decontamination as an adjunct therapy to SRP may be beneficial in reducing probing depth and bacterial loads. The consideration of using lasers as an adjunct to SRP is dependent on type of laser used and the particular protocol.
- **Chemical and Gaseous antiseptics:** Chlorhexidine or Povidine iodine 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. Ozone is a volatile antiseptic that can disrupt microbial membranes.
- **Probiotics and Prebiotics:** Probiotics are live, beneficial bacteria, typically administered as a food or dietary supplement. Prebiotics are non-digestible ingredients that promote growth of commensal bacteria. Research shows that prebiotics and probiotics control the growth of pathogens and reverse tissue destruction caused by periodontitis.
- **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 MyPerioPath is recommended. Persistence of bleeding on probing is often indicative of unresolved infection. Retesting will identify residual or refractory bacteria. Currently there is not a cure for periodontal disease, only periods of remission.
- ✓ Assessment of a patient's level of inflammation with Celsus One is valuable in deciding the frequency of patient recall and treatment.

**Sample, Report**

(ID: 987a)  
Date Of Birth:  
09/20/1980  
Gender: Female

**Sample Information**

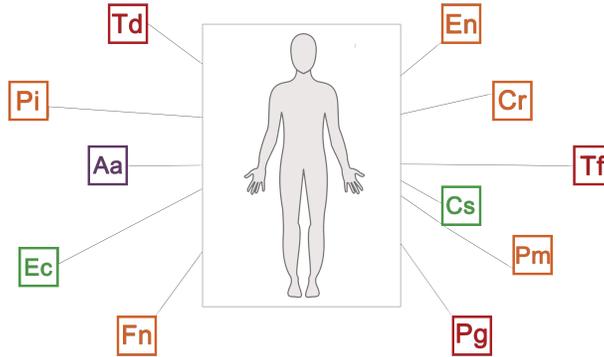
Specimen#: 5110000014  
Accession#: 201807-12514  
Specimen: Oral Rinse(P)  
Collected: 07/23/2018



**Clinical Considerations**

Reason for Testing	Clinical	Diagnostic	Medical History
<input checked="" type="checkbox"/> Treatment Follow-up	<input checked="" type="checkbox"/> Generalized Infection	<input checked="" type="checkbox"/> Type III Moderate Periodontitis	<input checked="" type="checkbox"/> Neurologic/Memory Loss
		<input checked="" type="checkbox"/> Tooth Numbers	<input checked="" type="checkbox"/> Arthritis/Auto Immune Disease
		Pocket Depths(mm)	
		3   9   14   19   24   30	
		4   4   5   4   4   3	

**Systemic Effects of Oral Pathogens**



Cancer	Cardiovascular Health	Joint and Musculoskeletal Health	Dementia and Brain Health	Metabolic Health	Healthy Pregnancy
Chronic gum disease, involving <b>Aa</b> , <b>Pg</b> , <b>Td</b> , <b>Tf</b> , & <b>Fn</b> is a risk factor for the development of certain cancers including ones involving the pancreas, esophagus, colon, lungs, and the head and neck. Additionally, untreated gum disease is a cause of ongoing inflammation, which may promote the advancing growth of tumors.	Select bacteria such as <b>Aa</b> , <b>Td</b> , <b>Tf</b> , <b>Pg</b> , <b>Pi</b> , & <b>Fn</b> can leak from blood vessels in the gums and travel to the heart, where cholesterol and other lipids deposit. These bacteria can incite inflammation in arteries, and if occluded, cause a heart attack. A goal of treatment is to minimize the levels of these bacteria as much and as long as possible.	The periodontal bacteria <b>Pg</b> , <b>Fn</b> & <b>Ec</b> are a cause of arthritis. The oral inflammation caused by these bacteria also leads to total body inflammation which, combined with changes in a person's immunity, may result in chronic joint diseases like rheumatoid arthritis.	Recent medical studies point to poor oral health, and high levels of the bacteria <b>Pg</b> , <b>Cr</b> , <b>Cs</b> in our gums, increasing the risk of developing dementias such as Alzheimer's.	Obesity, lack of exercise and chronic gum disease involving the bacteria <b>Aa</b> , <b>Td</b> , <b>Tf</b> , <b>Pg</b> , & <b>Fn</b> cause chronic inflammation. Inflammation can damage the pancreas where insulin is produced, possibly leading to diabetes. Also, diabetes worsens oral health by increasing the level of harmful bacteria in the gums.	Bacteria associated with gum disease, especially <b>Aa</b> , <b>Tf</b> , <b>Pg</b> , <b>Fn</b> , and <b>Ec</b> , are known to put a pregnancy at risk for pre-term birth, decreased birth weight and even blood infection in the placenta or newborn. Every pregnant woman should be tested for these harmful bacteria.

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Ronald McGlennen MD, FCAP, FACMG, ABMG  
Medical Director

**MYPERIOPATH®**  
FINAL REPORT



**Sample, Report**

Date Of Birth: 09/20/1980(37 yrs)  
Gender: Female  
Patient Id:951750  
Patient Location:Test Site A

**Ordering Provider**

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

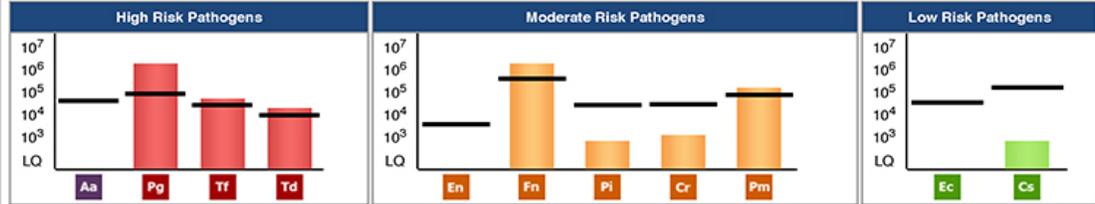
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- This result shows 3 high risk ( **Aa**, **Tf**, **Td** ) and 2 moderate risk ( **Fn**, **Pm** ) pathogens above the therapeutic threshold.
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- **Mechanical/Debridement:** Scaling and root planing (SRP) is a mainstay of therapy to disrupt biofilm, remove plaque and debride compromised tissue. This patient harbors a series of pathogens ( **Aa**, **Tf**, **Pg**, **Fn** ) that may be refractory to this treatment.
- **Systemic Antibiotics:** This patient has indicated no allergies.

1 **Clindamycin 150 or 300 mg tid for 8-10 days**  
As always, use antibiotics with care



\*\*If your patient has a history of intolerance to the first choice consider:

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OralDNA Labs, A Service of Access Genetics, LLC, 7400 Flying Cloud Drive, Eden Prairie, MN 55344 Phone: 855-672-5362; Fax: 952-942-0703 www.oraldna.com  
CLIA#: 24D1033809 CAP#: 7190878

PL-000388-F 1 of 2

Web enabled system provided by:  access genetics

1

2

3

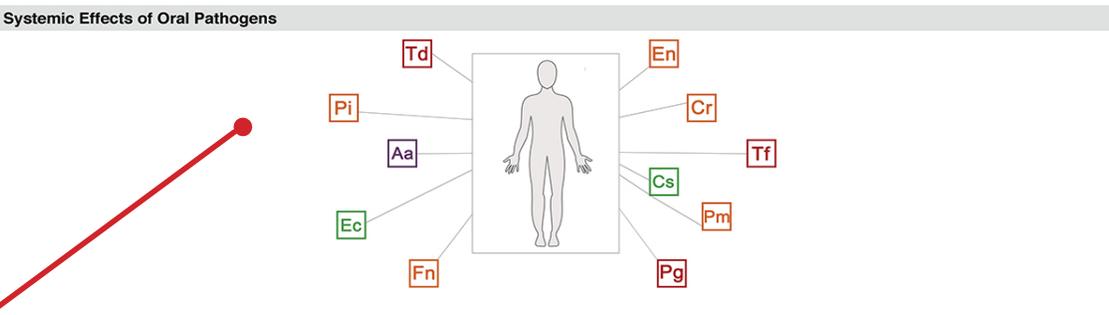
1 Result - type and concentration of disease-causing bacteria

2 Interpretation of Results - risk of disease progression based on specific bacteria

3 Treatment Considerations & Follow Up Recommendations - reduce bacterial load & evaluate effectiveness of treatment and/or monitor pathogenic risk

<b>MYPERIOPATH®</b> FINAL REPORT	<b>Sample, Report</b> (ID: 951750) Date Of Birth: 09/20/1980 Gender: Female	<b>Sample Information</b> Specimen#: 5033050001 Accession#: 201807-12468 Specimen: Oral Rinse(P) Collected: 07/08/2018	
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<input checked="" type="checkbox"/> Active Periodontal Disease	<input checked="" type="checkbox"/> Redness/Discoloration <input checked="" type="checkbox"/> Inflammation/Redness <input checked="" type="checkbox"/> Bleeding on Probing	<input checked="" type="checkbox"/> Type III Moderate Periodontitis <input checked="" type="checkbox"/> Tooth Numbers: 3   9   14   19   24   30 Pocket Depths(mm): 4   4   5   4   4   3	<input checked="" type="checkbox"/> Past History of Smoking <input checked="" type="checkbox"/> Arthritis/Auto Immune Disease



Cancer	Cardiovascular Health	Joint and Musculoskeletal Health	Dementia and Brain Health	Metabolic Health	Healthy Pregnancy
Chronic gum disease, involving <b>Aa</b> , <b>Pg</b> , <b>Td</b> , <b>Tf</b> , & <b>Fn</b> is a risk factor for the development of certain cancers including ones involving the pancreas, esophagus, colon, lungs, and the head and neck. Additionally, untreated gum disease is a cause of ongoing inflammation, which may promote the advancing growth of tumors.	Select bacteria such as <b>Aa</b> , <b>Td</b> , <b>Tf</b> , <b>Pg</b> , <b>Pi</b> , & <b>Fn</b> can leak from blood vessels in the gums and travel to the heart, where cholesterol and other lipids deposit. These bacteria can incite inflammation in arteries, and if occluded, cause a heart attack. A goal of treatment is to minimize the levels of these bacteria as much and as long as possible.	The periodontal bacteria <b>Pg</b> , <b>Fn</b> , & <b>Ec</b> are a cause of arthritis. The oral inflammation caused by these bacteria also leads to total body inflammation which, combined with changes in a person's immunity, may result in chronic joint diseases like rheumatoid arthritis.	Recent medical studies point to poor oral health, and high levels of the bacteria <b>Pg</b> , <b>Cr</b> , <b>Ec</b> in our gums, increasing the risk of developing dementias such as Alzheimer's.	Obesity, lack of exercise and chronic gum disease involving the bacteria <b>Aa</b> , <b>Td</b> , <b>Tf</b> , <b>Pg</b> , & <b>Fn</b> cause chronic inflammation. Inflammation can damage the pancreas where insulin is produced, possibly leading to diabetes. Also, diabetes worsens oral health by increasing the level of harmful bacteria in the gums.	Bacteria associated with gum disease, especially <b>Aa</b> , <b>Tf</b> , <b>Pg</b> , <b>Fn</b> , and <b>Ec</b> , are known to put a pregnancy at risk for pre-term birth, decreased birth weight and even blood infection in the placenta or newborn. Every pregnant woman should be tested for these harmful 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, Fm: 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 log 10 copies per mL of sample (e.g. 1x10<sup>3</sup> = 1000 bacteria copies per mL of collection). Cross-reactivity is possible with Leptotrichia buccalis, Fusobacterium hwasoeki, Capnocytophaga granulosa and Capnocytophaga leadbetteri. This test was developed, and its performance characteristics determined by OralDNA Labs 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.

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**Medical Director**

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- 4 Clinical Considerations - as indicated on the test order form by ordering provider
- 5 Systemic Effects of Oral Pathogens - summary of how oral bacteria can impact overall health
- 6 Methodology - method by which test is performed and complete list of bacteria tested