PadoBiom®

Why PadoBiom®?

+

Detect dysbiosis early on, **introduce prophylaxis measures.**

+

Stop periodontitis, **by starting the therapy phase on time.**

+

Identify patients at risk of progression, **decide about the adjuvant (antibiotic) treatment.**

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PadoBiom®

The new method for assessing the gingival sulcus

Order your **PadoBiom® sampling set** now:

Free hotline

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Web

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Sales

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PadoBiom®

Microbiome analysis

For assessing the gingival sulcus prior to and during periodontitis

Knowledge
for dentists

PadoBiom® analyses and evaluates the oral microbiome and its balance by means of next-generation sequencing. In contrast to the examination of individual pathogenic bacteria, this method enables the comprehensive and **early assessment** of developing periodontitis.

The dysbiosis index, the **identification of risk patients**, the evaluation of relevant bacteria and the examination of antibiotic resistance genes lead to outcome recommendations that optimise the treatment timing and treatment planning of every dental practice.

Gain the crucial advantage

- Examination of over 550 bacterial species
- Analysis of periodontopathogens and *Aa* serotypes
- Detection of antibiotic resistance genes

- Early detection prior to symptom onset
- Tailored therapy
- Patient binding in prophylaxis
- Practice-oriented recommendations
- Risk of progression as a decision-making aid for adjuvant (antibiotic) therapy
- Increasing adherence
- Tool for assessing PDC frequency
- Long-term monitoring
- Decision in borderline cases
- Differential diagnostics
- Determining treatment timing

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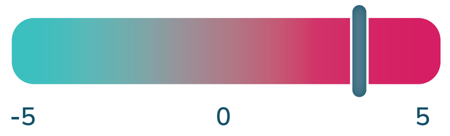
Examination
for the health of the gingival sulcus

Dysbiosis index and risk of progression

Early detection prior to periodontitis and identification of risk patients

The **ratio of health- and disease-related bacteria** results in the **dysbiosis index** of the oral microbiome. Identifying the **probable progression of dysbiosis (= risk of progression)** enables targeted treatment of high-risk patients.

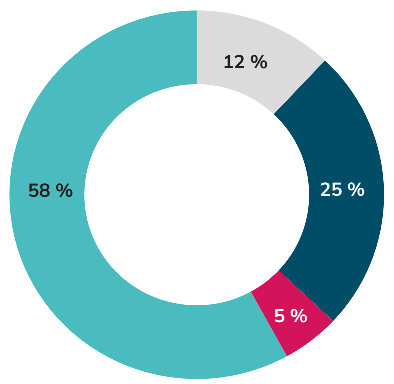
Dysbiosis index: 3,5

Healthy  Sick

Risk of progression: increased

Detailed evaluation

For an extended assessment



Illustrative diagram: Classification of bacteria into 4 categories
● Health-associated ● Disease-associated ● Core species ● Other species

Indication of the number of bacterial species detected
Analysis of over **550** bacterial species

List of the most frequent bacteria from dysbiosis index
Main contributing bacteria with a proportion > 0.1%

Periodontitis marker bacteria & *Aa* serotyping
Detection of pathogenic & highly pathogenic marker bacteria + *Aa* serotypes

Antibiotic resistance genes

Bacterially induced therapy failure

Beta-Lactams e.g. Amoxicillin	Nitroimidazoles e.g. Metronidazole	Tetracyclines e.g. Doxycycline	Fluoroquinolones e.g. Ciprofloxacin	Macrolides e.g. Azithromycin	Lincosamides e.g. Clindamycin
✓	-	-	-	-	✓

Antibiotic resistance genes from six antibiotic classes relevant to dental care as **indicators of treatment failure**.

Decision
for practice-oriented outcome recommendations

Therapy recommendations for the categories:

With summary assessment, measures, and, if necessary, recommendation of antibiotics/adjuvants. In addition, classification into SPT frequency & alternative care and treatment options.

Excerpt from a result report for „Therapy plus*“

Result	Dysbiosis + increased risk of progression	**Therapy plus***
Therapy recommendation	**Anti-infective therapy (AIT) measures and/or surgical periodontal therapy with adjuvants/antibiotics are recommended.**	
Measures	• Clarification and modification of risk factors (smoking, diet, sources of infection, etc.) • Use of probiotics/mouth rinsing solutions • Performing aromatherapy • Performing a **PadoGen** test to assess the genetic susceptibility to inflammation	
SPT / Recall	Grade C = 6 appointments	
Resistance genes	Resistance genes detected, consider alternative medication in case of therapy failure	
Adjuvants/ antibiotics	**Metronidazole** 3 × 400-500 mg daily, 7 days	+ **Amoxicillin** 3 × 500 mg daily, 7 days

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