

### IHI Call Days | Call 12

# Oral biomarkers for early detection and monitoring of systemic disease (OBioMar)

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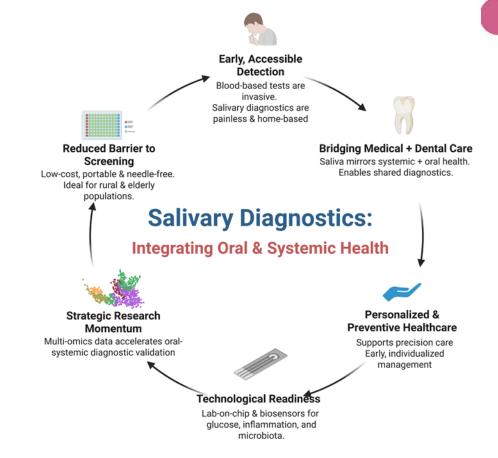
Link to the IHI brokerage platform: <a href="https://example.com/link-nc/link-



# Challenges and objectives

#### **Diabetes- The Hidden Crisis**

- 700 million people by 2045: a growing silent pandemic.
- Often undiagnosed until complications (heart, kidney, oral) appear.
- Strong two-way link with periodontitis, each disease worsens the other.
- Current tools rely on invasive, clinic-based blood tests, limiting early detection.





### OBioMar Approach

#### **Project Aim and Vision**

We aim to develop a **validated salivary diagnostic platform** for **early**, **non-invasive**, and **large-scale detection** of diabetes and periodontitis. This innovation unites oral and systemic health, advancing precision prevention and personalized care.

biomarker candidates

Input

Assesment and scoping of biomarkers

Analytical platform development

Prototype development

Clinical validation prototype

Output

validated, salivary diagnostic platform



# Outcomes and Impact



#### For patients

- Enables early, painless, and home-based detection of diabetes and periodontitis.
- Empowers individuals through continuous, noninvasive monitoring and personalized prevention



#### For clinicians

- Provides an easy-to-use, evidence-based diagnostic tool integrating oral and systemic biomarkers
- Enhances
  interdisciplinary
  collaboration between
  dental and medical
  professionals
- Supports precision treatment planning and follow-up using real-time salivary data.



#### For healthcare systems

- Promotes preventive and predictive care, reducing costly latestage complications of diabetes and periodontitis.
- Enables large-scale population screening with minimal infrastructure.
- Improves resource efficiency and supports a shift from reactive to proactive healthcare.



#### For EU

 Strengthens public health resilience through accessible, technology-driven diagnostics.



### Expertise and resources

### **Expertise**

- Clinical partners (Dentistry)
- Industrial Partners (Oral Healthcare and Assay Development)

### **Missing Competenties**

- Pharma partner
- Clinical partners (diabetes/hospitals)
- Point of Care Device Engineering
- Regulatory/HTA partner
- Patient organization
- Professional organizations



