

**Table S1:** Overview of biomarkers and their function

<b>Biomarker (abbreviation)</b>	<b>Function</b>
<b>25-hydroxy-cholecalciferol (25(OH)D)</b>	25-Hydroxyvitamin D3 Modulation of periodontal inflammation
<b>8-hydroxy-2'-deoxyguanosine (8-OHdG)</b>	Biomarker for oxidative stress and DNA-damage
<b>A proliferation-inducing ligand (APRIL)</b>	Member of TNF-superfamily Immune system development and signaling
<b>Aldehyde dehydrogenase (ALDH)</b>	Enzymes for oxidation of aldehydes Protects oral cavity from aldehydes
<b>Annexin-1</b>	Inhibits innate immune cells and promotes T-cell activation
<b>B-cell activating factor (BAFF)</b>	Member of TNF-superfamily Proliferation and differentiation of B cells
<b>C-reactive protein (CRP)</b>	Acute phase protein Activation of complement system
<b>Cystatins</b>	Protease inhibitors Regulate tissue-destructive protease activities in the oral cavity Regulate complement activation Protective effect under inflammatory conditions
<b>Defensins (human beta defensins (hBD-1, -2, -3); human neutrophil peptides (HNP)-1)</b>	Antimicrobial peptides Form pores and trigger lysis in bacteria Immune signaling, chemotactic to T-cells
<b>Extracellular vesicle-CD63+</b>	Surface marker CD63+ containing extracellular vesicles Intercellular communication Proinflammatory
<b>Glutathion peroxidase (GPx)</b>	Antioxidant enzyme protecting tissues against oxidative damage
<b>Interleukin (IL)-1<math>\alpha</math></b>	Proinflammatory cytokine
<b>IL-1<math>\beta</math></b>	Proinflammatory cytokine Stimulator of prostaglandin synthesis Role in physiologic process of parturition
<b>IL-6</b>	Proinflammatory cytokine Stimulation of acute phase protein and PGE2 synthesis
<b>IL-6sR</b>	Proinflammatory cytokine
<b>IL-8</b>	Proinflammatory chemokine Angiogenesis Cleavage of MMPs Tissue damage
<b>IL-10</b>	Anti-inflammatory cytokine

	Inhibition of proinflammatory cytokines
<b>IL-17</b>	Proinflammatory cytokine Increases TNF- $\alpha$ activity Stimulator of prostaglandin synthesis
<b>IL-33</b>	Cytokine Induces helper T-cells, mast cells, eosinophils
<b>INF-<math>\gamma</math></b>	Proinflammatory cytokine Innate and adaptive immunity Activates macrophages
<b>Lactoferrin</b>	Antimicrobial protein
<b>Leptin</b>	Signaling molecule Modulates proliferation, protein synthesis
<b>Lysozyme</b>	Antimicrobial protein
<b>Malondialdehyde (MDA)</b>	Lipid peroxidation product, biomarker for oxidative stress
<b>Matrix-metalloproteinase 2 (MMP-2)</b>	Gelatinase Degradation of extracellular matrix, tissue remodeling
<b>MMP-8</b>	Collagenase Degradation of extracellular matrix, tissue remodeling
<b>MMP-9</b>	Gelatinase Degradation of extracellular matrix, tissue remodeling
<b>Monocyte chemoattractant protein-1 (MCP-1)</b>	Proinflammatory cytokine
<b>Myeloperoxidase (MPO)</b>	Lysosomal antimicrobial enzyme secreted by neutrophils in inflammation Formation of Neutrophil Extracellular Traps (NETs)
<b>N-acetyl-<math>\beta</math>-D-hexosaminidase (HEX)</b>	Salivary exoglycosidase Degradation of oligosaccharide chains in organogenesis, growth and normal tissue turnover
<b>Neutrophil elastase (NE)</b>	Antimicrobial protease secreted by neutrophils in inflammation Formation of Neutrophil Extracellular Traps (NETs)
<b>Osteoprotegerin (OPG)</b>	Member of TNF-superfamily Cytokine receptor Immune system development and signaling
<b>Placental alkaline phosphatase (PLAP)</b>	Allosteric enzyme Indicator for placenta-derived exosomes
<b>Superoxide dismutase</b>	Antioxidant enzyme protecting tissues against oxidative damage
<b>Placental growth factor (PIGF)</b>	Member of VEGF-family, angiogenic Biomarker for preeclampsia

<b>Polymorphonuclear neutrophil (PMN)-elastase</b>	Antimicrobial protease Degrades host extracellular matrix components and to causes Tissue breakdown
<b>Prostaglandin E2 (PGE2)</b>	Inflammatory mediator Role in physiologic process of parturition
<b>Soluble fms-like tyrosine kinase 1 (sFlt-1)</b>	Binds VEGF and PlGF, anti-angiogenic Biomarker for preeclampsia
<b>Soluble intercellular adhesion molecule-1 (sICAM)</b>	Proinflammatory marker Transmigration of leukocytes
<b>Soluble receptor activator of NFκB ligand (RANKL)</b>	Member of TNF-superfamily Immune mediator Cell proliferation and apoptosis
<b>Superoxide dismutase</b>	Antioxidant enzyme protecting tissues against oxidative damage
<b>Thiobarbituric acid-reactive substances (TBARS)</b>	Biomarker for lipid peroxidation Measure of reactive oxygen species damage during inflammation
<b>Tissue inhibitor of MMP-1 (TIMP-1)</b>	Inhibition of MMP-1 Transportation and stabilization of MMPs
<b>Tumor necrosis factor alpha (TNF-α)</b>	Proinflammatory cytokine Activation of immune cells
<b>TNF-R1</b>	TNF-Receptor
<b>TNF-R2</b>	TNF-Receptor
<b>Uric acid</b>	Antioxidant parameter
<b>Vascular endothelial cell growth factor (VEGF)</b>	Signaling protein Angiogenesis Integrity of oral mucosa
<b>β-galactosidase (GAL)</b>	Salivary exoglycosidase Degradation of oligosaccharide chains in organogenesis, growth and normal tissue turnover
<b>α-mannosidase (MAN)</b>	Salivary exoglycosidase Degradation of oligosaccharide chains in organogenesis, growth and normal tissue turnover
<b>α-frucosidase (FUC)</b>	Salivary exoglycosidase Degradation of oligosaccharide chains in organogenesis, growth and normal tissue turnover
<b>β-glucuronidase (GLU)</b>	Salivary exoglycosidase Degradation of oligosaccharide chains in organogenesis, growth and normal tissue turnover