

Supplementary table S1: Detailed overview of amount of experiments linking diseases to oral microbiome alterations.

| Disease | Amount of experiments |
|---------------------------------------|-----------------------|
| Oral health | 894 |
| <i>Periodontal disease</i> | 458 |
| <i>Aphthous stomatitis</i> | 6 |
| <i>Aphthous ulcer</i> | 24 |
| <i>Caries</i> | 238 |
| <i>Halitosis</i> | 42 |
| <i>Edentulism</i> | 59 |
| <i>Denture Stomatitis</i> | 5 |
| <i>Extrinsic black stain</i> | 9 |
| <i>Oral leukoplakia</i> | 14 |
| <i>Oral lichen planus</i> | 35 |
| <i>Recurrent aphthous stomatitis</i> | 4 |
| Neuropsychiatric | 113 |
| Alcoholism | 12 |
| Autism spectrum disorders | 39 |
| Schizophrenia | 8 |
| Parkinson's Disease | 54 |
| Gastro-intestinal | 135 |
| Appendicitis | 1 |
| Autoimmune hepatitis | 2 |
| Celiac Disease, Coeliac disease | 25 |
| Cirrhosis | 21 |
| Cirrhosis with pneumonia | 10 |
| Ulcerative Colitis | 13 |
| Refractory celiac disease | 10 |
| Hepatic encephalopathy | 8 |
| Eosinophilic esophagitis | 10 |
| Primary biliary cholangitis | 3 |
| Crohn's Disease | 28 |
| Primary sclerosing cholangitis | 4 |
| Others | 78 |
| <u>Airway disease</u> | |
| Asthma | 13 |
| Chronic Obstructive Pulmonary Disease | 16 |
| <u>Cardiovascular</u> | |
| Atherosclerosis | 2 |

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| Gynaecological | | |
| Polycystic Ovary Syndrome | | 1 |
| Kidney diseases | | |
| Chronic kidney disease | | 11 |
| Oftalmological | | |
| Macular degeneration | | 11 |
| Primary Open-Angle Glaucoma | | 1 |
| Hematological diseases | | |
| Iron-deficiency anaemia | | 10 |
| Dermatological | | |
| Palmoplantar pustulosis | | 4 |
| Psoriasis | | 9 |
| Congenital | | |
| Down syndrome | | 8 |
| Cleft palate | | 2 |
| Cystic Fibrosis | | 33 |
| Severe congenital neutropenia | | 4 |
| Hutchinson-Gilford progeria syndrome | | 2 |
| Cancer | | 164 |
| Tongue cancer | | 6 |
| Oral cancer | | 28 |
| Pancreatic cancer | | 12 |
| Pancreatic head cancer | | 20 |
| Kaposi's sarcoma | | 7 |
| Lung cancer | | 4 |
| Oropharyngeal cancer | | 22 |
| Hypopharyngeal cancer | | 23 |
| Head/Neck cancer | | 13 |
| Hepatocellular cancer | | 13 |
| Gastric carcinoma | | 2 |
| Colorectal cancer | | 11 |
| Esophageal cancer | | 3 |
| Endocrine disease | | 166 |
| Autoimmune polyendocrine syndrome type 1 | | 34 |
| Type 2 Diabetes | | 52 |
| Obesity | | 73 |
| Hyperglycemia | | 7 |
| Rheumatological-inflammatory | | 197 |
| Behcet's Disease | | 23 |
| Sjögren Syndrome | | 59 |

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|---------------------------------|-----------|
| Systemic lupus erythematosus | 25 |
| Rheumatoid Arthritis | 45 |
| Henoch-Schönlein Purpura | 6 |
| Sicca syndrome | 37 |
| Orofacial granulomatosis | 2 |
| Infectious diseases | 80 |
| Chagas' disease | 5 |
| Meningococcal disease | 7 |
| Neisseria gonorrhoeae infection | 11 |
| HIV infection | 12 |
| Hepatitis B | 9 |
| Helicobacter pylori infection | 15 |
| H7N9 | 10 |
| Influenza A | 11 |