

Additional File 1. Clinical findings and anamnesis data of the discovery sample.

| Parameters | Healthy (n=93) | Diseased (n=52) | Chronic Periodontiti s Only (n=36) | Peri- Implantitis Only (n=34) | <i>p</i> -value | | | | | |
|----------------------------------|-------------------|--------------------|---|--|--------------------------|--|--|---|--|----------------------------------|
| | n (%) | n (%) | n (%) | n (%) | Healthy X Diseased | Healthy X Chronic Periodontitis Only | Healthy X Peri- Implantitis Only | Diseased X Peri- Implantitis Only | Diseased X Chronic Periodontitis Only | Chronic Periodontitis Only |
| | | | | | | | | | X Peri- Implantitis Only | |
| General Medical Condition | | | | | | | | | | |
| Systemic disease | 24 (25.8) | 15 (28.8) | 18 (50) | 6 (17.6) | 0.69 | 0.008 | 0.33 | 0.23 | 0.04* | 0.004 |
| Diabetes | 1 (1) | 4 (7.7) | 1 (2.8) | 1 (2.9) | 0.03* | 0.48 | 0.44 | 0.35 | 0.32 | 0.96 |
| Rheumatoid diseases | 3 (3.2) | 2 (3.8) | 4 (11) | 1 (2.9) | 0.84 | 0.07 | 0.93 | 0.82 | 0.18 | 0.18 |
| Osteoporosis | 1 (1) | 0 | 1 (2.8) | 0 | 0.45 | 0.48 | 0.54 | ---- | 0.22 | 0.32 |
| High blood pressure | 12 (12.9) | 7 (3.4) | 8 (22) | 3 (8.8) | 0.92 | 0.18 | 0.52 | 0.51 | 0.28 | 0.12 |
| Cardiovascular diseases | 2 (2.1) | 1 (1.9) | 1 (2.8) | 0 | 0.92 | 0.92 | 0.38 | 0.41 | 0.79 | 0.32 |
| Hypotireoidism | 4 (4.3) | 1 (1.9) | 2 (5.5) | 1 (2.9) | 0.45 | 0.76 | 0.72 | 0.75 | 0.35 | 0.58 |
| Asthma | 1 (1) | 0 | 1 (2.8) | 0 | 0.45 | 0.48 | 0.54 | ---- | 0.22 | 0.32 |
| Current medication | | | | | | | | | | |
| Any medication | 5 (5.4) | 4 (7.7) | 4 (11) | 1 (2.9) | 0.57 | 0.25 | 0.56 | 0.35 | 0.58 | 0.18 |
| Antihypertension | 11 (11.8) | 7 (13.4) | 8 (22) | 2 (5.9) | 0.77 | 0.13 | 0.32 | 0.26 | 0.28 | 0.05 |
| Antimicrobials | 0 | 0 | 0 | 0 | ---- | ---- | ---- | ---- | ---- | --- |
| NSAIDs† | 3 (3.2) | 2 (3.8) | 2 (5.5) | 1 (2.9) | 0.84 | 0.53 | 0.93 | 0.82 | 0.70 | 0.58 |
| SAIDs‡ | 2 (2.1) | 1 (1.9) | 2 (5.5) | 0 | 0.93 | 0.31 | 0.38 | 0.41 | 0.35 | 0.16 |
| Hormone reposition | 4 (4.3) | 2 (3.8) | 2 (5.5) | 1 (2.9) | 0.89 | 0.76 | 0.72 | 0.82 | 0.70 | 0.58 |
| Antidepressant | 4 (4.3) | 3 (5.7) | 1 (2.8) | 1 (2.9) | 0.69 | 0.68 | 0.72 | 0.54 | 0.50 | 0.96 |
| Clinical measurements | | | | | | | | | | |
| Edentulism | 12 (12.9) | 13 (25) | 12 (33.3) | 4 (11.8) | 0.06 | 0.007 | 0.86 | 0.13 | 0.39 | 0.03 |
| Caries Experience (DMFT*) | 17.72±8.11 | 24.8±6.38 | 24.16±7.97 | 20.58±8.03 | 0.0001 | 0.0001 | 0.4 | 0.07 | 1.0 | 0.3 |
| Dental anomalies | 3 (3.2) | 0 | 0 | 0 | 0.3 | 0.27 | 0.218 | ---- | --- | --- |
| Dental agenesis | 3 (3.2) | 0 | 0 | 2 (5.9) | 0.3 | 0.27 | 0.28 | 0.08 | ---- | 0.13 |
| Periodontal phenotype | | | | | | | | | | |
| Thin# | 12 (12.9) | 29 (55.7) | 17 (47.2) | 14 (41.2) | 0.000001 | 0.00002 | 0.0004 | 0.18 | 0.42 | 0.61 |
| Thick | 81 (87.1) | 23 (44.3) | 19 (52.8) | 20 (58.8) | | | | | | |

Diseased= chronic periodontitis + peri-implantitis; # Chi-squared test; † Non-steroidal anti-inflammatory drugs; ‡ Steroidal anti-inflammatory drugs; *DMFT= Decayed, Missing due to caries, Filled Teeth; #presence of apertures in the subjacent bone and friable gingiva.