

## Supplementary Materials

**Table S1** Median and interquartile range data of salivary markers in healthy controls (n = 31) and patients suffering from BMS (n = 51).

| Marker                       | Controls |                   | BMS       |                    | <i>P</i>         |
|------------------------------|----------|-------------------|-----------|--------------------|------------------|
|                              | Median   | 25-75%            | Median    | 25-75%             |                  |
| <b>Absolute Values</b>       |          |                   |           |                    |                  |
| Salivary flow rate, mL/5min  | 1.27     | 0.85-2.22         | 1.81      | 1.25-2.99          | <b>0.038</b>     |
| Total proteins, mg/dL        | 122.09   | 94.9-211.23       | 157.10    | 85.89-275.91       | 0.238            |
| Uric Acid, mg/dL             | 3.73     | 2.83-5.27         | 3.24      | 1.88-5.88          | 0.576            |
| sAA, IU/L                    | 92680    | 37270-144180      | 141340    | 83815-231445       | <b>0.002</b>     |
| IgA, mg/dL                   | 28.65    | 11.89-51.21       | 51.12     | 24.95-105.87       | <b>0.012</b>     |
| FRAP, mmol/L                 | 0.61     | 0.48-0.87         | 0.55      | 0.33-0.89          | 0.549            |
| Hp, ng/mL                    | 1366.64  | 1023.6-2598       | 1593.12   | 1072.72-2605.6     | 0.518            |
| CRP, ng/mL                   | 25.01    | 10.93-54.07       | 17.93     | 8.52-66.46         | 0.534            |
| a1AT, ng/mL                  | 1.31     | 0.44-4.99         | 1.31      | 0.7-2.81           | 0.825            |
| PEDF, ng/mL                  | 5.25     | 1.95-13.70        | 8.57      | 3.29-16.04         | 0.156            |
| SAP, ng/mL                   | 28.68    | 15.12-34.85       | 20.05     | 9.7-38.4           | 0.432            |
| MIP4, ng/mL                  | 0.06     | 0.02-0.08         | 0.05      | 0.03-0.11          | 0.565            |
| CC4, ng/mL                   | 11.11    | 4.26-20.79        | 10.15     | 6.23-22.01         | 0.655            |
| <b>Corrected by the flow</b> |          |                   |           |                    |                  |
| Uric Acid, ng/min            | 10.23    | 1.26-17.95        | 14.03     | 8.05-19.51         | 0.264            |
| sAA, IU/min                  | 17.71    | 5.33-42.61        | 61.75     | 32.43-117.03       | <b>&lt;0.001</b> |
| IgA, ng/min                  | 56.08    | 30.76-141.39      | 176.00    | 97.79-364.26       | <b>&lt;0.001</b> |
| FRAP, mmol/min               | 0.17     | 0.09-0.28         | 0.22      | 0.14-0.31          | 0.185            |
| Hp, ng/min                   | 471.22   | 138.26-997.52     | 611.5     | 336.04-1271.51     | 0.139            |
| CRP, ng/min                  | 5.61     | 1.77-14.23        | 10.7      | 3.55-19.11         | 0.189            |
| a1AT, ng/min                 | 0.28     | 0.12-1.13         | 0.47      | 0.31-1.10          | 0.063            |
| PEDF, ng/min                 | 0.82     | 0.08 – 2.16       | 0.98      | 0.21-2.33          | 0.259            |
| SAP, ng/min                  | 6.71     | 2.49-14.41        | 7.06      | 4.05-16.52         | 0.236            |
| MIP4, pg/min                 | 11.56    | 5.88-20.51        | 24.59     | 12.71-42.95        | <b>&lt;0.001</b> |
| CC4, ng/min                  | 2.94     | 1.44-5.06         | 5.17      | 1.79-8.03          | 0.090            |
| <b>Corrected by the TP</b>   |          |                   |           |                    |                  |
| Uric acid, mg/g              | 32.69    | 17.37-41.49       | 21.24     | 13.84-30.81        | <b>0.043</b>     |
| sAA, IU/g                    | 65695.93 | 29123.64-92371.35 | 104220.58 | 67602.09-144772.25 | <b>0.002</b>     |
| IgA, mg/g                    | 229      | 90.07-352.6       | 296.09    | 179.36-481.09      | 0.094            |
| FRAP, mmol/g                 | 0.50     | 0.33-0.66         | 0.33      | 0.26-0.50          | <b>0.019</b>     |
| Hp, mg/g                     | 1231.16  | 586.04-1942.86    | 1034.73   | 688.04-1461.08     | 0.758            |
| CRP, mg/g                    | 20.56    | 8.19-32.98        | 13.86     | 7.59-22.6          | 0.169            |
| a1AT, mg/g                   | 1.17     | 0.36-2.79         | 0.91      | 0.38-1.82          | 0.383            |
| PEDF, mg/g                   | 4.78     | 1.55-8.57         | 6.01      | 3.39-9.08          | 0.234            |
| SAP, mg/g                    | 23.42    | 10.32-29.43       | 13.78     | 8.14-19.98         | 0.068            |
| MIP4, mg/g                   | 0.04     | 0.02-0.06         | 0.04      | 0.03-0.06          | 0.926            |
| CC4, mg/g                    | 7.73     | 2.75-17.42        | 7.66      | 3.53-13.58         | 0.845            |

sAA, salivary alpha-amylase; IgA, immunoglobulin A; Hp, haptoglobin; CRP, C-reactive protein; a1AT,  $\alpha$ 1-Antitrypsin; PEDF, Pigment epithelium-derived factor; SAP, serum amyloid P; MIP4, Macrophage Inflammatory Protein-4; CC4, Complement C4; TP, total proteins. Data in bold highlight statistical significance.

**Table S2.** Partial correlation adjusted for age and sex.

|                              | VAS<br>r (P)         | OHIP14<br>r (P)       | HAD-A<br>r (P)        | HAD-D<br>r (P)       | Caries<br>r (P) | Missing teeth<br>r (P) |
|------------------------------|----------------------|-----------------------|-----------------------|----------------------|-----------------|------------------------|
| <b>Absolute Values</b>       |                      |                       |                       |                      |                 |                        |
| Salivary flow rate, mL/5min  | 0.233 (0.054)        | 0.21 (0.083)          | 0.035 (0.774)         | -0.100 (0.415)       | -0.039 (0.749)  | 0.019 (0.878)          |
| TP, mg/dL                    | <b>0.241 (0.046)</b> | 0.15 (0.218)          | <b>0.251 (0.037)</b>  | 0.189 (0.119)        | -0.007 (0.952)  | -0.086 (0.485)         |
| Uric Acid, mg/dL             | 0.068 (0.581)        | -0.103 (0.398)        | -0.014 (0.912)        | 0.078 (0.523)        | 0.028 (0.819)   | 0.006 (0.960)          |
| sAA, IU/L                    | <b>0.260 (0.031)</b> | 0.111 (0.363)         | 0.125 (0.305)         | -0.059 (0.632)       | -0.064 (0.602)  | -0.049 (0.687)         |
| IgA, mg/dL                   | <b>0.334 (0.005)</b> | <b>0.273 (0.023)</b>  | <b>0.302 (0.012)</b>  | <b>0.261 (0.030)</b> | -0.03 (0.805)   | -0.012 (0.923)         |
| FRAP, mmol/L                 | 0.088 (0.472)        | -0.085 (0.487)        | -0.035 (0.775)        | 0.082 (0.501)        | 0.03 (0.808)    | 0.002 (0.989)          |
| Hp, ng/mL                    | 0.079 (0.518)        | -0.001 (0.993)        | 0.057 (0.639)         | 0.044 (0.717)        | 0.02 (0.872)    | 0.007 (0.955)          |
| CRP, ng/mL                   | 0.04 (0.746)         | -0.062 (0.613)        | -0.075 (0.541)        | -0.009 (0.943)       | 0.044 (0.72)    | 0.018 (0.883)          |
| a1AT, ng/mL                  | -0.073 (0.55)        | -0.045 (0.716)        | -0.11 (0.37)          | -0.146 (0.231)       | 0.071 (0.56)    | -0.281 (0.019)         |
| PEDF, ng/mL                  | 0.127 (0.297)        | 0.222 (0.067)         | <b>0.351 (0.003)</b>  | <b>0.363 (0.002)</b> | 0.006 (0.961)   | -0.081 (0.506)         |
| SAP, ng/mL                   | 0.073 (0.553)        | 0.011 (0.931)         | -0.025 (0.841)        | -0.11 (0.370)        | -0.028 (0.82)   | -0.034 (0.783)         |
| MIP4, ng/mL                  | 0.11 (0.368)         | 0.205 (0.091)         | <b>0.267 (0.026)</b>  | <b>0.271 (0.024)</b> | -0.024 (0.842)  | -0.124 (0.311)         |
| CC4, ng/mL                   | -0.009 (0.941)       | -0.023 (0.851)        | -0.034 (0.782)        | 0.099 (0.420)        | 0.138 (0.257)   | 0.083 (0.495)          |
| <b>Corrected by the flow</b> |                      |                       |                       |                      |                 |                        |
| Uric Acid, mg/min            | 0.113 (0.357)        | -0.157 (0.199)        | -0.099 (0.419)        | -0.106 (0.384)       | -0.046 (0.71)   | -0.032 (0.797)         |
| sAA, IU/min                  | <b>0.269 (0.025)</b> | 0.14 (0.251)          | 0.102 (0.402)         | -0.047 (0.701)       | -0.099 (0.418)  | -0.011 (0.926)         |
| IgA, mg/min                  | <b>0.367 (0.002)</b> | <b>0.313 (0.009)</b>  | <b>0.338 (0.004)</b>  | 0.195 (0.108)        | -0.055 (0.653)  | -0.023 (0.851)         |
| FRAP, mol/min                | 0.204 (0.092)        | -0.017 (0.89)         | -0.112 (0.36)         | -0.119 (0.331)       | -0.042 (0.733)  | -0.05 (0.682)          |
| Hp, ng/min                   | 0.179 (0.14)         | 0.173 (0.156)         | 0.02 (0.871)          | -0.043 (0.723)       | -0.044 (0.718)  | 0.013 (0.917)          |
| CRP, ng/min                  | -0.044 (0.72)        | -0.081 (0.508)        | -0.152 (0.213)        | -0.161 (0.185)       | -0.006 (0.961)  | 0.001 (0.992)          |
| a1AT, ng/min                 | 0.111 (0.364)        | 0.135 (0.269)         | -0.106 (0.386)        | -0.154 (0.207)       | 0.043 (0.725)   | -0.16 (0.188)          |
| PEDF, ng/min                 | 0.122 (0.318)        | 0.198 (0.104)         | <b>0.297 (0.013)</b>  | <b>0.386 (0.001)</b> | 0.01 (0.937)    | -0.05 (0.682)          |
| SAP, ng/min                  | 0.072 (0.555)        | 0.01 (0.937)          | -0.026 (0.834)        | -0.109 (0.371)       | -0.028 (0.819)  | -0.032 (0.792)         |
| MIP4, ng/min                 | 0.116 (0.342)        | 0.22 (0.069)          | <b>0.264 (0.028)</b>  | <b>0.269 (0.026)</b> | -0.009 (0.938)  | -0.127 (0.299)         |
| CC4, ng/min                  | 0.167 (0.171)        | 0.044 (0.718)         | -0.025 (0.841)        | -0.068 (0.58)        | 0.059 (0.633)   | -0.052 (0.669)         |
| <b>Corrected by the TP</b>   |                      |                       |                       |                      |                 |                        |
| Uric acid, mg/g              | 0.161 (0.171)        | 0.136 (0.249)         | 0.153 (0.193)         | 0.123 (0.297)        | -0.021 (0.859)  | 0.086 (0.468)          |
| sAA, IU/g                    | -0.183 (0.119)       | <b>-0.242 (0.038)</b> | -0.204 (0.082)        | -0.109 (0.356)       | 0.013 (0.910)   | 0.022 (0.850)          |
| IgA, mg/g                    | 0.183 (0.118)        | 0.117 (0.321)         | 0.171 (0.145)         | 0.038 (0.750)        | -0.018 (0.879)  | -0.006 (0.961)         |
| FRAP, mmol/g                 | -0.188 (0.109)       | -0.222 (0.058)        | <b>-0.250 (0.032)</b> | -0.122 (0.299)       | 0.025 (0.832)   | 0.005 (0.963)          |
| Hp, mg/g                     | -0.063 (0.593)       | -0.049 (0.676)        | -0.098 (0.408)        | -0.09 (0.446)        | -0.109 (0.356)  | -0.001 (0.992)         |
| CRP, mg/g                    | -0.15 (0.201)        | -0.157 (0.182)        | <b>-0.243 (0.037)</b> | -0.17 (0.147)        | 0.092 (0.437)   | 0.007 (0.950)          |
| a1AT, mg/g                   | -0.203 (0.083)       | -0.165 (0.161)        | -0.208 (0.075)        | -0.187 (0.111)       | 0.074 (0.531)   | -0.155 (0.187)         |
| PEDF, mg/g                   | -0.05 (0.675)        | 0.043 (0.719)         | 0.153 (0.194)         | 0.159 (0.177)        | 0.064 (0.588)   | 0.032 (0.787)          |
| SAP, mg/g                    | 0.069 (0.558)        | 0.006 (0.961)         | -0.026 (0.823)        | -0.099 (0.401)       | -0.025 (0.831)  | -0.022 (0.853)         |
| MIP4, mg/g                   | -0.021 (0.857)       | 0.086 (0.464)         | 0.154 (0.189)         | 0.165 (0.160)        | -0.012 (0.917)  | -0.035 (0.768)         |
| CC4, mg/g                    | -0.129 (0.272)       | -0.115 (0.330)        | -0.093 (0.433)        | -0.042 (0.721)       | 0.164 (0.162)   | 0.002 (0.987)          |

sAA, salivary alpha-amylase; IgA, immunoglobulin A; Hp, haptoglobin; CRP, C-reactive protein; a1AT,  $\alpha$ 1-Antitrypsin; PEDF, Pigment epithelium-derived factor; SAP, serum amyloid P; MIP4, Macrophage Inflammatory Protein-4; CC4, Complement C4. Data in bold highlight statistical significance.