

**Uric acid provides protective role in red blood cells by antioxidant defense: a hypothetical analysis**

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Supplementary Table 1. Pearson correlation between UA levels and red blood cell parameters in all subjects

|                           | UA     |        | UA/Cr ratio |        |
|---------------------------|--------|--------|-------------|--------|
|                           | r      | p      | r           | p      |
| Age (years)               | -0.013 | 0.173  | -0.124      | <0.001 |
| BMI (Kg/m <sup>2</sup> )  | -0.007 | 0.466  | -0.001      | 0.939  |
| MCH (pg)                  | 0.074  | <0.001 | 0.039       | <0.001 |
| MCHC (g/l)                | 0.157  | <0.001 | 0.065       | <0.001 |
| MCV (fL)                  | -0.030 | 0.002  | -0.091      | <0.001 |
| RDW (%)                   | -0.011 | 0.243  | 0.007       | 0.448  |
| RBC (10 <sup>12</sup> /L) | 0.352  | <0.001 | 0.133       | <0.001 |
| Hemoglobin(g/l)           | 0.388  | <0.001 | 0.113       | <0.001 |

RDW: Red blood cell distribution width; MCH: mean corpuscular hemoglobin; MCHC: mean corpuscular hemoglobin concentration; MCV: mean corpuscular volume; RBC: red blood cell count; Cr: creatinine; UA: uric acid, BMI: body mass index.

Supplementary Table 2. Pearson correlation between UA levels and red blood cell parameters in male subjects

|                           | UA     |        | UA/Cr ratio |        |
|---------------------------|--------|--------|-------------|--------|
|                           | r      | p      | r           | p      |
| Age (years)               | -0.110 | <0.001 | -0.200      | <0.001 |
| BMI (Kg/m <sup>2</sup> )  | 0.013  | 0.290  | 0.007       | 0.592  |
| MCH (pg)                  | -0.014 | 0.254  | -0.030      | 0.018  |
| MCHC (g/l)                | 0.097  | <0.001 | 0.103       | <0.001 |
| MCV (fL)                  | -0.082 | <0.001 | -0.102      | <0.001 |
| RDW (%)                   | 0.001  | 0.960  | -0.031      | 0.012  |
| RBC (10 <sup>12</sup> /L) | 0.213  | <0.001 | 0.187       | <0.001 |
| Hemoglobin(g/l)           | 0.221  | <0.001 | 0.185       | <0.001 |

RDW: Red blood cell distribution width; MCH: mean corpuscular hemoglobin; MCHC: mean corpuscular hemoglobin concentration; MCV: mean corpuscular volume; RBC: red blood cell count; Cr: creatinine; UA: uric acid, BMI: body mass index.

Supplementary Table 3. Pearson correlation between UA levels and red blood cell parameters in female subjects

|                           | UA     |        | UA/Cr ratio |        |
|---------------------------|--------|--------|-------------|--------|
|                           | r      | p      | r           | p      |
| Age (years)               | 0.154  | <0.001 | -0.024      | 0.113  |
| BMI (Kg/m <sup>2</sup> )  | -0.028 | 0.064  | -0.011      | 0.467  |
| MCH (pg)                  | -0.025 | 0.097  | -0.046      | 0.002  |
| MCHC (g/l)                | 0.028  | 0.062  | 0.028       | 0.063  |
| MCV (fL)                  | -0.049 | 0.001  | -0.074      | <0.001 |
| RDW (%)                   | 0.012  | 0.443  | 0.052       | 0.001  |
| RBC (10 <sup>12</sup> /L) | 0.135  | <0.001 | 0.122       | <0.001 |
| Hemoglobin(g/l)           | 0.126  | <0.001 | 0.096       | <0.001 |

RDW: Red blood cell distribution width; MCH: mean corpuscular hemoglobin; MCHC: mean corpuscular hemoglobin concentration; MCV: mean corpuscular volume; RBC: red blood cell count; Cr: creatinine; UA: uric acid, BMI: body mass index.