

**Supplementary Table S5. Baseline characteristics of individuals with different CKD stages**

|   | CKD stages    |               |               |               |               |               |               | <i>P</i> value<br>(ANOVA) |
|---|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------------------|
|   | All           | CKD stage 1   | CKD stage 2   | CKD stage 3a  | CKD stage 3b  | CKD stage 4   | CKD stage 5   |                           |
| No. of patients                         | 3605          | 111 (3.1%)    | 231 (6.4%)    | 408 (11.3%)   | 766 (21.2%)   | 940 (26.1%)   | 1149 (31.9%)  |                           |
| <b>Demographics and medical history</b> |               |               |               |               |               |               |               |                           |
| Body mass index (Kg/m <sup>2</sup> )    | 24.6 (3.7)    | 24.5 (4.5)    | 25.2 (3.6)    | 25.5 (3.3)    | 24.8 (3.5)    | 24.8 (3.6)    | 24.0 (3.7)    | 0.164                     |
| <b>Laboratory data</b>                  |               |               |               |               |               |               |               |                           |
| Hemoglobin (g/dl)                       | 11.2 (2.5)    | 13.6 (2.0)    | 13.9 (1.9)    | 13.5 (1.9)    | 12.5 (1.9)    | 10.8 (1.8)    | 9.1 (1.4)     | <0.001                    |
| Hemoglobin > 10.0 g/dl                  | 2272 (63.0%)  | 106 (95.5%)   | 226 (97.8%)   | 389 (95.3%)   | 687 (89.7%)   | 614 (65.3%)   | 250 (21.8%)   | <0.001                    |
| Albumin (g/dl)                          | 3.8 (0.6)     | 3.9 (0.7)     | 3.9 (0.6)     | 4.1 (0.5)     | 4.0 (0.5)     | 3.8 (0.5)     | 3.7 (0.5)     | <0.001                    |
| Iron (mg/dl)                            | 73.8 (36.0)   | 79.2 (56.3)   | 90.1 (57.7)   | 86.7 (30.5)   | 79.3 (33.3)   | 69.9 (29.3)   | 64.9 (33.0)   | <0.001                    |
| Ferritin (ng/ml)                        | 276.4 (277.0) | 188.3 (279.3) | 256.9 (271.9) | 236.2 (224.4) | 243.2 (230.5) | 266.5 (259.7) | 333.2 (323.6) | <0.001                    |
| Iron saturation (%)                     | 29.1 (15.7)   | 33.8 (28.7)   | 36.6 (25.8)   | 31.4 (13.2)   | 29.1 (12.9)   | 28.2 (13.6)   | 27.2 (14.9)   | <0.001                    |
| Bicarbonate (mEq/l)                     | 22.1 (4.5)    | 25.4 (3.9)    | 25.7 (3.7)    | 25.1 (3.0)    | 24.1 (3.3)    | 22.1 (3.7)    | 18.5 (3.9)    | <0.001                    |
| C-reactive protein > 3.0 mg/l           | 1183 (32.8%)  | 31 (27.9%)    | 70 (30.3%)    | 94 (23.0%)    | 228 (29.8%)   | 310 (33.0%)   | 450 (39.2%)   | <0.001                    |

Data are presented as mean (standard error), median (interquartile range), or count (percentage %).

Abbreviations: CKD: chronic kidney disease.