

## Supplemental Material

**Supplemental Table 1.** Baseline characteristics of 1910 adults with chronic kidney disease based on estimated glomerular filtration rate (eGFR) stage.

|                                                 | All               | GFR stage (ml/min/1.73m <sup>2</sup> ) |                  |                   |                    |                    |
|-------------------------------------------------|-------------------|----------------------------------------|------------------|-------------------|--------------------|--------------------|
|                                                 |                   | ≥ 90<br>n=308                          | 60-89<br>n=365   | 30-59<br>n=711    | 15-29<br>n=411     | < 15<br>n=115      |
| Age (year) <sup>a</sup>                         | 53 ± 12           | 44 ± 11                                | 51 ± 12          | 56 ± 11           | 57 ± 11            | 57 ± 11            |
| Sex (male %)                                    | 62                | 49                                     | 67               | 66                | 62                 | 55                 |
| eGFR (ml/min/1.73m <sup>2</sup> ) <sup>a</sup>  | 53 ± 31           | 108 ± 11                               | 73 ± 9           | 44 ± 9            | 23 ± 4             | 12 ± 2             |
| 24-hour urine protein (mg/day) <sup>a</sup>     | 546<br>[166-1580] | 222<br>[68-761]                        | 306<br>[110-884] | 522<br>[178-1567] | 1077<br>[430-2552] | 1788<br>[662-3800] |
| Alcohol drinking (%) <sup>a</sup>               | 36                | 49                                     | 47               | 35                | 26                 | 15                 |
| Active smoking (%) <sup>a</sup>                 | 16                | 20                                     | 16               | 16                | 17                 | 12                 |
| Health-enhancing physical activity (%)          | 42                | 41                                     | 48               | 44                | 35                 | 39                 |
| Body mass index (kg/m <sup>2</sup> )            | 24.5<br>± 3.4     | 24.4 ±<br>4.1                          | 24.4 ± 3.0       | 24.7 ± 3.2        | 24.4 ± 3.4         | 24.2 ± 3.3         |
| Hemoglobin (g/dl) <sup>a</sup>                  | 12.8 ± 2.0        | 14.0 ± 1.5                             | 14.0 ± 1.8       | 12.9 ± 1.9        | 11.5 ± 1.6         | 10.5 ± 1.2         |
| Serum albumin (g/dl) <sup>a</sup>               | 4.2 ± 0.4         | 4.3 ± 0.4                              | 4.3 ± 0.4        | 4.2 ± 0.4         | 4.0 ± 0.5          | 4.0 ± 0.5          |
| Unmarried (%)                                   | 16                | 23                                     | 14               | 13                | 16                 | 25                 |
| Low income (%) <sup>a</sup>                     | 23                | 14                                     | 17               | 22                | 35                 | 33                 |
| Low education (%) <sup>a</sup>                  | 23                | 11                                     | 17               | 24                | 32                 | 33                 |
| Diabetes (%) <sup>a</sup>                       | 33                | 15                                     | 18               | 36                | 48                 | 45                 |
| Hypertension (%) <sup>a</sup>                   | 96                | 85                                     | 97               | 98                | 99                 | 97                 |
| Cardiovascular disease (%) <sup>a</sup>         | 11                | 5                                      | 7                | 12                | 17                 | 12                 |
| Physical component summary <sup>a</sup>         | 73 ± 18           | 79 ± 14                                | 77 ± 15          | 73 ± 19           | 66 ± 20            | 63 ± 21            |
| Mental component summary <sup>a</sup>           | 70 ± 18           | 74 ± 15                                | 73 ± 16          | 70 ± 19           | 65 ± 20            | 62 ± 21            |
| Low physical component summary (%) <sup>a</sup> | 16                | 7                                      | 9                | 15                | 25                 | 34                 |
| Low mental component summary (%) <sup>a</sup>   | 16                | 8                                      | 10               | 15                | 23                 | 30                 |
| Sleep duration (hour) <sup>a</sup>              | 6.9 ± 1.3         | 6.8 ± 1.2                              | 6.8 ± 1.1        | 6.9 ± 1.3         | 7.2 ± 1.5          | 7.1 ± 1.4          |
| Short sleeper (%)                               | 11                | 10                                     | 10               | 12                | 10                 | 9                  |
| Long sleeper (%) <sup>a</sup>                   | 7                 | 3                                      | 4                | 6                 | 14                 | 10                 |

Data are expressed as mean ± SD or median [interquartile range].

<sup>a</sup> P for trend <0.001

**Supplemental Figure 1.** Flowchart of 1910 study participants from the KoreaN cohort study for Outcome in patients With Chronic Kidney Disease (KNOW-CKD).

