Supplementary Figure 1.

Panel A

| Variable                      | Hazard ratio | p-value |
|-------------------------------|--------------|---------|
| Sex (female vs male)          | 0.75         | <0.001  |
| Age (year)                    | 1.02         | <0.001  |
| Diseases                      |              |         |
| Hypertension                  | 0.64         | 0.066   |
| Diabetes                      | 1.03         | <0.001  |
| Dyslipidemia                  | 0.61         | <0.001  |
| Coronary heart disease        | 0.69         | <0.001  |
| Treatments                    |              |         |
| Loop Diuretic                 | 0.55         | <0.001  |
| Anti-aldosterone              | 0.87         | <0.001  |
| Beta blocker                  | 0.61         | 0.013   |
| ACEI                          | 0.60         | <0.001  |
| ARB                           | 0.67         | <0.001  |

Panel B

| Variable                      | Hazard ratio | p-value |
|-------------------------------|--------------|---------|
| Sex (female vs male)          | 0.75         | <0.001  |
| Age (year)                    | 1.02         | <0.001  |
| Diseases                      |              |         |
| Hypertension                  | 0.95         | 0.347   |
| Diabetes                      | 1.01         | 0.011   |
| Dyslipidemia                  | 0.72         | <0.001  |
| Coronary heart disease        | 0.72         | <0.001  |
| eGFR (mL/min/1.73m2)          |              |         |
| 61-90                         | 0.48         | <0.001  |
| 45-60                         | 0.84         | <0.001  |
| 30-45                         | 0.85         | <0.001  |
| 15-30                         | 0.89         | <0.001  |
| <15                           | 0.87         | <0.001  |
| Treatments                    |              |         |
| Loop Diuretic                 | 0.63         | <0.001  |
| Anti-aldosterone              | 0.87         | <0.001  |
| Beta blocker                  | 0.66         | <0.001  |
| ACEI                          | 0.65         | <0.001  |
| ARB                           | 0.78         | <0.001  |

# Events: 13779; Global p-value (Log-Rank): 0
ACI: 45(37.3); Concordance index: 0.67
Panel C

Hazard ratio

| Condition                        | Hazard Ratio | p-value |
|----------------------------------|--------------|---------|
| Sex (female vs male) (N=20535)   | 0.81 (0.80 - 0.86) | <0.001*** |
| Age (year) (N=573544)            | 1.04 (1.01 - 1.07) | <0.001*** |
| Diseases                         |              |         |
| Hypertension (N=47967)           | 1.03 (1.00 - 1.10) |        |
| Diabetes (N=25367)               | 1.05 (0.98 - 1.05) | 0.048 *  |
| Dyslipidemia (N=38037)           | 0.81 (0.76 - 0.86) |        |
| Coronary heart disease (N=16500) | 0.84 (0.69 - 0.92) |        |
| Treatments                       |              |         |
| Loop Diuretic (N=42970)          | 0.44 (0.38 - 0.52) | <0.001*** |
| Anti-aldosterone (N=1000)        | 0.76 (0.70 - 0.87) | <0.001*** |
| Beta blocker (N=21883)           | 0.85 (0.80 - 0.92) | <0.001*** |
| ACEI (N=17306)                   | 0.85 (0.80 - 0.92) | <0.001*** |
| ARB (N=24379)                    | 0.86 (0.80 - 0.92) | <0.001*** |

Panel D

Hazard ratio

| Condition                        | Hazard Ratio | p-value |
|----------------------------------|--------------|---------|
| Sex (female vs male) (N=30635)   | 0.79 (0.76 - 0.83) | <0.001*** |
| Age (year) (N=57154)             | 1.02 (1.01 - 1.05) | <0.001*** |
| Diseases                         |              |         |
| Hypertension (N=47967)           | 1.00 (0.98 - 1.03) | 0.063 |
| Diabetes (N=25367)               | 1.02 (1.00 - 1.05) | 0.04 *  |
| Dyslipidemia (N=38037)           | 0.74 (0.70 - 0.78) | <0.001*** |
| Coronary heart disease (N=16500) | 0.73 (0.69 - 0.77) | <0.001*** |
| eGFR (mL/min/1.73m2)             |              |         |
| 60-90                            | 1.40 (1.37 - 1.44) | <0.001*** |
| 45-60                            | 1.43 (1.40 - 1.46) | <0.001*** |
| 30-44                            | 1.93 (1.80 - 2.02) | <0.001*** |
| 15-30                            | 2.03 (1.90 - 2.18) | <0.001*** |
| <15                              | 1.58 (1.55 - 1.66) | <0.001*** |
| Treatments                       |              |         |
| Loop Diuretic (N=42970)          | 0.35 (0.33 - 0.37) | <0.001*** |
| Anti-aldosterone (N=11000)       | 0.76 (0.70 - 0.83) | <0.001*** |
| Beta blocker (N=21883)           | 0.93 (0.88 - 0.99) | <0.001*** |
| ACEI (N=17306)                   | 0.83 (0.79 - 0.87) | <0.001*** |
| ARB (N=24379)                    | 0.81 (0.76 - 0.86) | <0.001*** |