**Supplementary Table 3.** Association between SBP and the secondary outcomes according to each follow-up period with the Cox model with baseline covariables, the time-dependent Cox model, and MSM

| Variable | Continuous model | Categorical model (mmHg) | | | | |
|---|---|---|---|---|---|---|
| | Per 10 mmHg increase | <110 (n = 26,673) | 110–119 (n = 47,366) | 120–129 (n = 48,745) | 130–139 (n = 47,150) | ≥140 (n = 26,036) |
| Secondary outcome 1 (eGFR to <60 mL/min/1.73 m$^2$ twice) | | | | | | |
| Follow-up of 3 years | | | | | | |
|   Events | 1,907 (1.0) | 110 (0.4) | 351 (0.7) | 390 (0.8) | 581 (1.2) | 475 (1.8) |
|   Cox model | 1.06 (1.03–1.09) | 0.84 (0.68–1.04) | 1.12 (0.97–1.29) | Reference | 1.12 (0.99–1.28) | 1.23 (1.07–1.41) |
|   Time-dependent Cox model | 1.07 (1.05–1.10) | 0.90 (0.74–1.08) | 1.11 (0.97–1.26) | Reference | 1.17 (1.04–1.31) | 1.32 (1.17–1.49) |
|   MSM | 1.24 (1.21–1.27) | 0.64 (0.55–0.76) | 0.87 (0.77–0.99) | Reference | 1.25 (1.12–1.41) | 1.99 (1.77–2.25) |
| Follow-up of 4 years | | | | | | |
|   Events | 2,194 (1.1) | 132 (0.5) | 398 (0.8) | 461 (1.0) | 660 (1.4) | 543 (2.1) |
|   Cox model | 1.05 (1.02–1.08) | 0.86 (0.70–1.04) | 1.07 (0.93–1.22) | Reference | 1.08 (0.96–1.22) | 1.19 (1.05–1.35) |
|   Time-dependent Cox model | 1.08 (1.05–1.10) | 0.90 (0.74–1.08) | 1.12 (0.99–1.28) | Reference | 1.18 (1.05–1.32) | 1.33 (1.19–1.50) |
|   MSM | 1.22 (1.20–1.26) | 0.65 (0.55–0.77) | 0.87 (0.77–0.99) | Reference | 1.24 (1.10–1.39) | 1.94 (1.72–2.18) |
| Follow-up of 5 years | | | | | | |
|   Events | 2,446 (1.2) | 147 (0.6) | 440 (0.9) | 514 (1.1) | 738 (1.6) | 607 (2.3) |
|   Cox model | 1.05 (1.03–1.08) | 0.85 (0.71–1.03) | 1.05 (0.93–1.20) | Reference | 1.08 (0.96–1.21) | 1.19 (1.06–1.34) |
|   Time-dependent Cox model | 1.08 (1.05–1.10) | 0.90 (0.75–1.08) | 1.13 (0.99–1.28) | Reference | 1.18 (1.05–1.32) | 1.34 (1.19–1.51) |
|   MSM | 1.23 (1.20–1.26) | 0.67 (0.57–0.79) | 0.87 (0.77–0.98) | Reference | 1.22 (1.09–1.37) | 1.91 (1.70–2.15) |
| Secondary outcome 2 (a newly developed proteinuria twice) | | | | | | |
| Follow-up of 3 years | | | | | | |
|   Events | 714 (0.4) | 41 (0.2) | 122 (0.3) | 158 (0.3) | 219 (0.5) | 174 (0.7) |
|   Cox model | 1.08 (1.06–1.11) | 0.76 (0.63–0.92) | 1.05 (0.93–1.19) | Reference | 1.16 (1.04–1.30) | 1.31 (1.16–1.47) |
|   Time-dependent Cox model | 1.16 (1.12–1.21) | 0.64 (0.47–0.86) | 0.83 (0.68–1.02) | Reference | 1.10 (0.92–1.31) | 1.49 (1.24–1.80) |
|   MSM | 1.11 (1.07–1.15) | 0.88 (0.71–1.09) | 0.86 (0.71–1.03) | Reference | 1.06 (0.89–1.26) | 1.30 (1.07–1.58) |
| Follow-up of 4 years | | | | | | |
|   Events | 866 (0.4) | 53 (0.2) | 152 (0.3) | 199 (0.4) | 258 (0.6) | 204 (0.8) |
|   Cox model | 1.08 (1.06–1.11) | 0.78 (0.66–0.92) | 1.00 (0.89–1.13) | Reference | 1.12 (1.01–1.24) | 1.26 (1.13–1.41) |
|   Time-dependent Cox model | 1.17 (1.12–1.22) | 0.61 (0.45–0.82) | 0.83 (0.68–1.01) | Reference | 1.07 (0.90–1.27) | 1.48 (1.23–1.78) |
|   MSM | 1.10 (1.06–1.15) | 0.87 (0.71–1.08) | 0.84 (0.70–1.01) | Reference | 1.04 (0.87–1.23) | 1.25 (1.03–1.51) |
| Follow-up of 5 years | | | | | | |
|   Events | 987 (0.5) | 62 (0.2) | 174 (0.4) | 223 (0.5) | 297 (0.6) | 231 (0.9) |
|   Cox model | 1.08 (1.06–1.11) | 0.78 (0.67–0.91) | 1.00 (0.90–1.11) | Reference | 1.13 (1.02–1.24) | 1.27 (1.15–1.41) |
|   Time-dependent Cox model | 1.17 (1.12–1.22) | 0.60 (0.45–0.80) | 0.82 (0.67–0.99) | Reference | 1.07 (0.90–1.27) | 1.46 (1.22–1.76) |
|   MSM | 1.10 (1.06–1.15) | 0.85 (0.69–1.05) | 0.82 (0.69–0.98) | Reference | 1.02 (0.86–1.21) | 1.21 (1.00–1.46) |

Data are expressed as number (%) or hazard ratio (95% confidence interval). SBP was treated as the summarized average value over the observation period.

eGFR, estimated glomerular filtration rate; MSM, marginal structural model; SBP, systolic blood pressure.