Table S3. Associations of serum calcium levels with all-cause death, cardiovascular event, and kidney event in non-dialysis dependent CKD patients

| Incident rate (/1,000 person-years) | Univariate HR (95% CI) | P | Model 1 HR (95% CI) | P | Model 2 HR (95% CI) | P | Model 3 HR (95% CI) | P |
|------------------------------------|------------------------|---|----------------------|---|----------------------|---|----------------------|---|
| **All-cause death**                |                        |   |                      |   |                      |   |                      |   |
| Serum calcium                      |                        |   |                      |   |                      |   |                      |   |
| < 9.1 mg/dL                        | 18.5                   | 1.01 (0.45-2.30) | 0.975 | 0.87 (0.38-1.99) | 0.737 | 0.80 (0.35-1.86) | 0.608 | 0.66 (0.28-1.58) | 0.348 |
| 9.2-9.3 mg/dL                      | 18.0                   | 1.00 (0.43-2.32) | 1.000 | 1.00 (0.43-2.32) | 0.995 | 0.96 (0.41-2.23) | 0.919 | 1.06 (0.44-2.55) | 0.890 |
| 9.4-9.6 mg/dL                      | 18.1                   | 1.00 [reference] | 1.000 | 1.00 [reference] | 1.000 | 1.00 [reference] | 1.000 | 1.00 [reference] | 1.000 |
| ≥ 9.7 mg/dL                        | 25.3                   | 1.40 (0.64-3.07) | 0.402 | 1.44 (0.65-3.18) | 0.364 | 1.45 (0.66-3.21) | 0.354 | 1.55 (0.64-3.76) | 0.333 |
| per 1-mg/dL increase               | 1.34 (0.75-2.39)       | 0.320 | 1.48 (0.84-2.61) | 0.173 | 1.47 (0.86-2.49) | 0.158 | 1.47 (0.81-2.69) | 0.210 |
| **Cardiovascular event**           |                        |   |                      |   |                      |   |                      |   |
| Serum calcium                      |                        |   |                      |   |                      |   |                      |   |
| < 9.1 mg/dL                        | 38.3                   | 3.58 (1.53-8.37) | 0.003 | 2.92 (1.23-6.89) | 0.015 | 2.01 (0.84-4.85) | 0.119 | 2.05 (0.84-5.00) | 0.115 |
| 9.2-9.3 mg/dL                      | 24.2                   | 2.28 (0.91-5.70) | 0.079 | 2.23 (0.89-5.62) | 0.087 | 1.84 (0.73-4.64) | 0.198 | 1.93 (0.76-4.89) | 0.167 |
| 9.4-9.6 mg/dL                      | 10.7                   | 1.00 [reference] | 1.000 | 1.00 [reference] | 1.000 | 1.00 [reference] | 1.000 | 1.00 [reference] | 1.000 |
| ≥ 9.7 mg/dL                        | 15.9                   | 1.47 (0.53-4.06) | 0.454 | 1.47 (0.53-4.07) | 0.456 | 1.34 (0.48-3.71) | 0.575 | 1.23 (0.44-3.49) | 0.695 |
| per 1-mg/dL increase               | 0.43 (0.26-0.71)       | 0.001 | 0.44 (0.26-0.77) | 0.004 | 0.59 (0.34-1.04) | 0.069 | 0.57 (0.31-1.02) | 0.056 |
| **Kidney event**                   |                        |   |                      |   |                      |   |                      |   |
| Serum calcium                      |                        |   |                      |   |                      |   |                      |   |
| < 9.1 mg/dL                        | 72.2                   | 2.63 (1.51-4.58) | 0.001 | 2.53 (1.44-4.45) | 0.001 | 1.23 (0.68-2.24) | 0.490 | 1.11 (0.59-2.09) | 0.754 |
| 9.2-9.3 mg/dL                      | 43.8                   | 1.58 (0.85-2.93) | 0.147 | 1.59 (0.85-2.94) | 0.144 | 1.18 (0.63-2.21) | 0.605 | 1.51 (0.78-2.91) | 0.224 |
| 9.4-9.6 mg/dL                      | 27.8                   | 1.00 [reference] | 1.000 | 1.00 [reference] | 1.000 | 1.00 [reference] | 1.000 | 1.00 [reference] | 1.000 |
| ≥ 9.7 mg/dL                        | 42.8                   | 1.55 (0.82-2.90) | 0.175 | 1.55 (0.82-2.92) | 0.174 | 1.53 (0.81-2.91) | 0.192 | 0.91 (0.45-1.86) | 0.799 |
| per 1-mg/dL increase               | 0.58 (0.39-0.87)       | 0.009 | 0.60 (0.39-0.90) | 0.014 | 1.08 (0.76-1.53) | 0.683 | 1.08 (0.74-1.59) | 0.688 |

HR: hazard ratio, CI: confidence interval. Model 1, adjusted for age and sex. Model 2, adjusted for Model 1 covariates plus smoking history, diabetes, history of cardiovascular disease, and eGFR. Model 3, adjusted for Model 2 covariates plus body mass index, systolic blood pressure, proteinuria positive, serum albumin, hemoglobin, and serum phosphorus.