**Supplemental table 1.** Associations between serum potassium levels, ESRD and mortality using the baseline serum potassium value (obtained with second EGFR <60 ml/min/1.73 m2)

|  |  |  |
| --- | --- | --- |
|  | Overall Mortality  HR (95%CI) | ESRD  HR (95%CI) |
|  |  |  |
| <3.5 mmol/l (N=1106) | 1.08 (0.94, 1.22) | 0.69 (0.48, 0.999) |
| 3.5-3.9 mmol/l (N=5392) | 1.00 (0.94, 1.08) | 0.97 (0.77, 1.21) |
| 4-4.9 mmol/l (N=24717) | Reference | Reference |
| 5-5.4 mmol/l (N=3931) | 1.08 (0.997, 1.17) | 0.85 (0.69, 1.05) |
| >5.5 mmol/l (N=1213) | 1.21 (1.08, 1.36) | 0.91 (0.70, 1.18) |

\*Models adjusted for age, gender, race, diabetes, hypertension, malignancy, Congestive heart failure, coronary artery disease, COPD/asthma, BMI group, history of ACE/ARB, potassium sparing diuretics, not potassium sparing diuretics, beta blockers, eGFR, potassium supplementation, cerebrovascular disease, peripheral vascular disease, serum bicarbonate, log glucose and albumin. Mean value imputation was used for serum bicarbonate, glucose and albumin

**Supplemental Table 2. Interaction between Age and baseline Potassium levels on overall mortality**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **Age 50**  **HR (95%CI)** | **Age 60**  **HR (95%CI)** | **Age 70**  **HR (95%CI)** | **Age 80**  **HR (95%CI)** |
|  |  |  |  |  |
| Adjusted model\* |  |  |  |  |
| <3.5 mmol/l | 1.20 (0.94, 1.54) | 1.14 (0.96, 1.36) | 1.09 (0.95, 1.24) | 1.04 (0.89, 1.20) |
| 3.5-3.9 mmol/l | 1.19 (1.01, 1.40) | 1.11 (0.99, 1.25) | 1.04 (0.96, 1.13) | 0.97 (0.90, 1.05) |
| 4-4.9 mmol/l | Ref | Ref | Ref | Ref |
| 5-5.4 mmol/l | 0.90 (0.74, 1.09) | 0.97 (0.84, 1.10) | 1.04 (0.95, 1.13) | 1.11 (1.02, 1.20) |
| >5.5 mmol/l | 1.24 (0.97, 1.57) | 1.23 (1.04, 1.45) | 1.22 (1.08, 1.37) | 1.21 (1.06, 1.37) |

\*Models adjusted for age, gender, race, diabetes, hypertension, malignancy, Congestive heart failure, coronary artery disease, COPD/asthma, BMI group, history of ACE/ARB, potassium sparing diuretics, not potassium sparing diuretics, beta blockers, eGFR, potassium supplementation, cerebrovascular disease, peripheral vascular disease, serum bicarbonate, log glucose and albumin. Mean value imputation was used for serum bicarbonate, glucose and albumin



**Figure 1.** Flow chart showing how patients were selected for this analysis.