## **Supplemental Digital Content**

Methods

SDC Table 1. Clinical characteristics of the cohort.

SDC Table 2. Distribution of comorbid conditions.

SDC Figure 1. (A) Kaplan-Meier survival curves and cumulative survival probabilities for each kidney disease status for all-cause mortality (B) Causes of death per kidney disease group (C) Number at risk (D) Cumulative survival probabilities.

<sup>a</sup> Log-rank p-value <0.001 for comparison of groups with respect to no known kidney disease group using Bonferroni adjustment

<sup>b</sup> p<0.001 and <sup>c</sup> p<0.01 for comparison with respect to no known kidney disease group using Bonferroni adjustment

SDC Figure 2. Unadjusted cumulative incidence curves for cardiovascular-specific mortality by kidney disease status.

SDC Figure 3. Adjusted cumulative incidence curves for cardiovascular-specific mortality by kidney disease status (adjusted for age, gender, ethnicity, Charlson comorbidity index, emergent surgery status, surgery type, and admission day hemoglobin level as described in Methods). (A) Among patients who did not progress to ESRD (all groups with kidney disease have significantly higher rates compared to no kidney disease group, p<0.001) (B) Among patients who progressed to ESRD (P< 0.05 when comparing AKI with CKD to no kidney disease group).

SDC Figure 4. Adjusted cumulative incidence curves for cancer-specific mortality by kidney disease (adjusted for age, gender, ethnicity, Charlson comorbidity index, emergent surgery status, surgery type, and admission day hemoglobin level as described in Methods). All groups with kidney disease have significantly higher hazards ratios compared to no known kidney disease group with p<0.001 except for AKI with no CKD group (p=0.42).

SDC Figure 5. Unadjusted cumulative incidence curves for cardiovascular-specific mortality by kidney disease status after stratification by age and gender (A) Male, aged<50 years (B) Male, aged 50 to 64 years (C) Male, aged  $\geq$  65 years (D) Female, aged<50 years (E) Female, aged 50 to 64 years (F) Female, aged  $\geq$  65 years.

SDC Figure 6. Adjusted cumulative incidence curves for cardiovascular-specific mortality by kidney disease status after stratification by surgery type. (A) Cardiothoracic Surgery (B) Neurologic Surgery (C) Non-Cardiac General Surgery (D) Specialty Surgeries. All groups with acute or chronic kidney disease have significantly higher hazards ratios compared to no kidney disease group with p<0.05 except for CKD with no AKI for neurologic surgery (p=0.8)..