Supplement 1a. Patient Characteristics of the entire study cohort at baseline (0 months) and beginning of various follow-up windows.

| **Follow Up Characteristics** | **0 months** N= 1,045,540 | **3 months** N= 958,893 | **6 months** N= 891,496 | **12 months** N= 796,391 | **24 months** N= 623,453 | **84 months** N= 93,802 |
|---|---|---|---|---|---|---|
| **Demographics** | | | | | | |
| Age (years) | 63 (15) | 63 (15) | 62 (15) | 61 (15) | 61 (15) | 56 (14) |
| 18-30 | 3 | 3 | 3 | 3 | 3 | 5 |
| 30-40 | 5 | 5 | 6 | 6 | 6 | 9 |
| 40-50 | 12 | 11 | 12 | 12 | 13 | 18 |
| 50-60 | 20 | 20 | 21 | 22 | 23 | 27 |
| 60-70 | 25 | 25 | 26 | 26 | 26 | 23 |
| 70-80 | 23 | 22 | 22 | 21 | 20 | 14 |
| 80+ | 15 | 13 | 12 | 11 | 9 | 4 |
| Sex | | | | | | |
| Women | 43 | 43 | 43 | 43 | 43 | 45 |
| Race | | | | | | |
| Asian | 4 | 4 | 5 | 5 | 5 | 5 |
| Black | 28 | 28 | 29 | 30 | 31 | 40 |
| Hispanic | 14 | 14 | 15 | 15 | 16 | 18 |
| Native American | 0.9 | 1 | 1 | 1 | 1 | 1 |
| White | 54 | 52 | 51 | 50 | 47 | 35 |
| BMI (99% non-missing) ($kg/m_2$) | | | | | | |
| < 18.5 | 3 | 3 | 3 | 3 | 3 | 3 |
| 18.5 – 25 | 30 | 29 | 29 | 28 | 27 | 27 |
| 25 – 30 | 28 | 28 | 28 | 28 | 28 | 27 |
| > 30 | 38 | 39 | 39 | 40 | 41 | 42 |
| Missing | 0.9 | 0.9 | 0.9 | 0.9 | 1 | 1 |
| Neighborhood Poverty | | | | | | |
| < 13.8% | 59 | 58 | 58 | 57 | 56 | 51 |
| 13.8 - < 20% | 18 | 18 | 18 | 19 | 19 | 20 |
| 20 - < 40% | 20 | 20 | 20 | 21 | 22 | 25 |
| ≥ 40% | 2 | 2 | 2 | 2 | 2 | 2 |
| Missing | 2 | 2 | 2 | 2 | 2 | 2 |
| Region | | | | | | |
| Midwest | 23 | 22 | 22 | 22 | 21 | 20 |
| Northeast | 19 | 19 | 19 | 18 | 18 | 17 |
| South | 39 | 39 | 39 | 39 | 40 | 41 |
| West | 20 | 20 | 20 | 21 | 21 | 23 |
| Missing | 0 | 0 | 0 | 0 | 0 | 0 |
| **Comorbidities** | | | | | | |
| Congestive Heart Failure | 32 | 31 | 30 | 29 | 27 | 22 |
| ASHD + Other | 33 | 31 | 31 | 30 | 28 | 21 |
| Hypertension | 86 | 87 | 87 | 87 | 88 | 85 |
| Diabetes Mellitus | 55 | 56 | 56 | 56 | 56 | 49 |

| | | | | | | |
|---|---|---|---|---|---|---|
| Cancer | 7 | 7 | 7 | 6 | 6 | 4 |
| Amputations | 3 | 3 | 3 | 3 | 3 | 2 |
| Peripheral vascular disease | 13 | 13 | 13 | 12 | 11 | 9 |
| CVA/TIA | 9 | 9 | 9 | 9 | 8 | 7 |
| COPD | 9 | 9 | 9 | 8 | 7 | 4 |
| Poor Functional Status | 14 | 13 | 12 | 11 | 10 | 8 |
| **Laboratory Values** | | | | | | |
| Albumin (g/dL) | 3.1 (0.7) | 3.2 (0.7) | 3.2 (0.7) | 3.2 (0.7) | 3.2 (0.7) | 3.2 (0.8) |
| < 3.5 | 48 | 48 | 47 | 47 | 46 | 48 |
| ≥ 3.5 | 26 | 27 | 27 | 28 | 29 | 30 |
| Missing | 26 | 26 | 26 | 25 | 25 | 22 |
| Hemoglobin (g/dL) | 9.8 (1.7) | 9.8 (1.7) | 9.8 (1.7) | 9.8 (1.7) | 9.8 (1.7) | 10.0 (1.9) |
| < 11 | 69 | 70 | 69 | 70 | 70 | 67 |
| 11 – 12 | 13 | 13 | 13 | 13 | 13 | 15 |
| > 12 | 8 | 8 | 8 | 8 | 8 | 10 |
| Missing | 10 | 10 | 10 | 10 | 10 | 8 |
| **Care** | | | | | | |
| History of Nursing Home | 7 | 6 | 5 | 5 | 4 | 3 |
| Nephrology Care | | | | | | |
| None | 29 | 28 | 28 | 28 | 28 | 36 |
| < 12 months | 33 | 33 | 33 | 34 | 34 | 32 |
| > 12 months | 26 | 26 | 27 | 27 | 27 | 21 |
| Unknown | 13 | 12 | 12 | 12 | 12 | 12 |
| Dialysis Access/Modality | | | | | | |
| Arteriovenous Fistula/ Arteriovenous Graft | 17 | 18 | 18 | 19 | 19 | 18 |
| Catheter | 76 | 75 | 74 | 73 | 73 | 77 |
| Peritoneal Dialysis | 7 | 8 | 8 | 8 | 8 | 6 |
| **Mortality** | | | | | | |
| Died | 61 | 58 | 55 | 51 | 45 | 26 |
| Cause of Mortality (anytime) | | | | | | |
| Cardiovascular | 23 | 22 | 21 | 20 | 18 | 10 |
| Infection | 6 | 5 | 5 | 4 | 4 | 2 |
| Malignancy | 2 | 2 | 2 | 2 | 1 | 0.5 |
| Withdrawal of Dialysis | 7 | 7 | 6 | 6 | 5 | 3 |
| Unknown/Other | 62 | 64 | 66 | 68 | 72 | 84 |
| **Kidney Recovery** | | | | | | |
| Recovered Function | 7 | 7 | 7 | 8 | 8 | 14 |
| **Transplant** | | | | | | |
| Kidney Transplant | 9 | 9 | 9 | 9 | 8 | 5 |

Numbers represent column percentages or mean (standard deviation), as appropriate. Terms: BMI- body mass index, ASHD- atherosclerotic heart disease, CVA/TIA- cerebrovascular accident/ transient ischemic attack, COPD- chronic obstructive pulmonary disease.

Supplement 1b. Characteristics of patients with kidney failure due to AKI for entire study cohort at baseline (0 months) and beginning of various follow-up windows.

| **Follow Up Characteristics** | **0 months** N= 32,598 | **3 months** N= 27,576 | **6 months** N= 24,346 | **12 months** N= 20,988 | **24 months** N= 16,621 | **84 months** N= 3,644 |
|---|---|---|---|---|---|---|
| **Demographics** | | | | | | |
| Age (years) | 66 (14) | 65 (14) | 64 (14) | 64 (14) | 62 (15) | 57 (15) |
| 18-30 | 2 | 2 | 2 | 2 | 2 | 5 |
| 30-40 | 4 | 4 | 4 | 5 | 5 | 9 |
| 40-50 | 8 | 8 | 9 | 10 | 11 | 16 |
| 50-60 | 17 | 18 | 19 | 19 | 21 | 25 |
| 60-70 | 25 | 26 | 26 | 26 | 26 | 24 |
| 70-80 | 27 | 26 | 25 | 25 | 23 | 17 |
| 80+ | 19 | 16 | 15 | 13 | 11 | 5 |
| Sex | | | | | | |
| Women | 42 | 42 | 41 | 41 | 41 | 38 |
| Race | | | | | | |
| Asian | 2 | 2 | 2 | 2 | 2 | 2 |
| Black | 15 | 15 | 15 | 16 | 16 | 19 |
| Hispanic | 7 | 7 | 7 | 7 | 8 | 8 |
| Native American | 0.5 | 0.5 | 0.5 | 0.5 | 0.6 | 0.6 |
| White | 76 | 75 | 75 | 75 | 74 | 71 |
| BMI (99% non-missing) ($kg/m_2$) | 29.8 (8.4) | 29.3 (8.5) | 29.4 (8.5) | 29.6 (8.6) | 29.8 (8.6) | 29.7 (8.5) |
| < 18.5 | 4 | 4 | 4 | 4 | 4 | 3 |
| 18.5 – 25 | 31 | 31 | 30 | 29 | 29 | 29 |
| 25 – 30 | 27 | 27 | 27 | 28 | 28 | 28 |
| > 30 | 37 | 37 | 38 | 38 | 39 | 39 |
| Missing | 1 | 1 | 1 | 1 | 1 | 1 |
| Neighborhood Poverty | | | | | | |
| < 13.8% | 68 | 68 | 68 | 68 | 67 | 66 |
| 13.8 - < 20% | 16 | 16 | 16 | 16 | 16 | 16 |
| 20 - < 40% | 14 | 14 | 14 | 14 | 14 | 15 |
| ≥ 40% | 1 | 1 | 1 | 1 | 1 | 1 |
| Missing | 1 | 1 | 1 | 1 | 1 | 2 |
| Region | | | | | | |
| Midwest | 31 | 31 | 31 | 31 | 31 | 29 |
| Northeast | 22 | 22 | 21 | 21 | 20 | 19 |
| South | 31 | 31 | 31 | 31 | 32 | 35 |
| West | 16 | 16 | 16 | 17 | 17 | 17 |
| Missing | 0 | 0 | 0 | 0 | 0 | 0 |
| **Comorbidities** | | | | | | |
| Congestive Heart Failure | 35 | 33 | 32 | 30 | 27 | 17 |
| ASHD + Other | 43 | 41 | 40 | 39 | 37 | 28 |
| Hypertension | 73 | 73 | 73 | 73 | 72 | 63 |
| Diabetes Mellitus | 40 | 40 | 40 | 40 | 39 | 30 |
| Cancer | 14 | 12 | 12 | 11 | 10 | 8 |
| Amputations | 3 | 3 | 3 | 3 | 3 | 2 |

| | | | | | | |
|---|---|---|---|---|---|---|
| Peripheral vascular disease | 15 | 14 | 14 | 13 | 12 | 9 |
| CVA/TIA | 10 | 10 | 9 | 9 | 8 | 6 |
| COPD | 15 | 14 | 14 | 13 | 12 | 8 |
| Poor Functional Status | 26 | 24 | 22 | 21 | 20 | 15 |
| **Laboratory Values** | | | | | | |
| Albumin (g/dL) | 2.8 (0.8) | 2.8 (0.8) | 2.9 (0.8) | 2.9 (0.8) | 2.8 (0.8) | 2.8 (0.8) |
| < 3.5 | 60 | 60 | 59 | 59 | 60 | 63 |
| ≥ 3.5 | 14 | 14 | 15 | 15 | 15 | 14 |
| Missing | 26 | 26 | 26 | 26 | 26 | 23 |
| Hemoglobin (g/dL) | 9.9 (1.8) | 10.0 (1.8) | 10.0 (1.8) | 10.0 (1.9) | 10.1 (1.9) | 10.4 (2.1) |
| < 11 | 69 | 68 | 68 | 67 | 66 | 61 |
| 11 – 12 | 12 | 12 | 12 | 12 | 12 | 14 |
| > 12 | 9 | 10 | 10 | 11 | 12 | 16 |
| Missing | 11 | 11 | 11 | 11 | 11 | 9 |
| **Care** | | | | | | |
| History of Nursing Home | 17 | 16 | 14 | 13 | 12 | 9 |
| Nephrology Care | | | | | | |
| None | 62 | 62 | 63 | 63 | 65 | 75 |
| < 12 months | 18 | 18 | 18 | 18 | 17 | 12 |
| > 12 months | 7 | 8 | 8 | 7 | 7 | 3 |
| Unknown | 13 | 12 | 12 | 12 | 11 | 10 |
| Dialysis Access/Modality | | | | | | |
| Arteriovenous Fistula/ Arteriovenous Graft | 2<br>97 | 2<br>97 | 2<br>97 | 2<br>97 | 2<br>97 | 2<br>98 |
| Catheter | | | | | | |
| Peritoneal Dialysis | 0.8 | 0.8 | 0.8 | 0.8 | 0.7 | 0.4 |
| **Mortality** | | | | | | |
| Died | 66 | 60 | 55 | 48 | 39 | 16 |
| Cause of Mortality (anytime) | | | | | | |
| Cardiovascular | 18 | 16 | 14 | 12 | 10 | 3 |
| Infection | 6 | 6 | 5 | 4 | 3 | 0.7 |
| Malignancy | 3 | 3 | 2 | 2 | 1 | 0.3 |
| Withdrawal of Dialysis | 7 | 6 | 6 | 5 | 4 | 2 |
| Unknown/Other | 65 | 70 | 73 | 78 | 83 | 94 |
| **Kidney Recovery** | | | | | | |
| Recovered Function | 35 | 41 | 45 | 49 | 55 | 76 |
| **Transplant** | | | | | | |
| Kidney Transplant | 2 | 2 | 3 | 2 | 2 | 0.8 |

Numbers represent column percentages or mean (standard deviation), as appropriate. Terms: BMI- body mass index, ASHD- atherosclerotic heart disease, CVA/TIA- cerebrovascular accident/ transient ischemic attack, COPD- chronic obstructive pulmonary disease.

Supplement 2. Mortality rates of patients with kidney failure due AKI, diabetes mellitus, or other causes for various follow-up windows.

| Variable | Total Number of patients in cohort | Number of patients that died (%) | Total follow-up in months | Mean follow-up in months | Total follow-up in years | Mean follow-up in years | Deaths per person-years (95% CI) |
|---|---|---|---|---|---|---|---|
| **Baseline to end of study** | | | | | | | |
| All | 1045540 | 625149 (59.8) | 38936372.1 | 37.2 | 3251360.3 | 3.11 | 0.19 (0.19-0.19) |
| AKI | 32598 | 21411 (65.7) | 1146389.0 | 35.2 | 95728.6 | 2.93 | 0.22 (0.22-0.23) |
| DM | 480444 | 299350 (62.3) | 18033008.2 | 37.5 | 1505836.4 | 3.13 | 0.20 (0.20-0.20) |
| Other | 532498 | 304388 (57.2) | 19756974.9 | 37.1 | 1649795.3 | 3.10 | 0.18 (0.18-0.19) |
| **Baseline to 3 months** | | | | | | | |
| All | 1045540 | 82598 (7.9) | 3015463.7 | 2.9 | 251804.6 | 0.24 | 0.33 (0.33-0.33) |
| AKI | 32598 | 4990 (15.3) | 90826.3 | 2.8 | 7584.4 | 0.23 | 0.66 (0.64-0.68) |
| DM | 480444 | 31448 (6.5) | 1395785.6 | 2.9 | 116554.3 | 0.24 | 0.27 (0.27-0.27) |
| Other | 532498 | 46160 (8.7) | 1528851.8 | 2.9 | 127665.9 | 0.24 | 0.36 (0.36-0.36) |
| **3 months to 6 months** | | | | | | | |
| All | 958893 | 61922 (6.5) | 2770103.1 | 2.9 | 231315.9 | 0.24 | 0.27 (0.27-0.27) |
| AKI | 27576 | 3206 (11.6) | 77413.4 | 2.8 | 6464.4 | 0.23 | 0.50 (0.48-0.51) |
| DM | 447979 | 26033 (5.8) | 1300653.0 | 2.9 | 108610.3 | 0.24 | 0.24 (0.24-0.24) |
| Other | 483338 | 32683 (6.8) | 1392036.7 | 2.9 | 116241.3 | 0.24 | 0.28 (0.28-0.28) |
| **6 months to 12 months** | | | | | | | |
| All | 891496 | 83208 (9.3) | 5050370.4 | 5.7 | 421728.4 | 0.47 | 0.20 (0.20-0.20) |
| AKI | 24346 | 3269 (13.4) | 135105.8 | 5.5 | 11281.9 | 0.46 | 0.29 (0.28-0.30) |
| DM | 420381 | 37886 (9.0) | 2392867.9 | 5.7 | 199815.1 | 0.48 | 0.19 (0.19-0.19) |
| Other | 446769 | 42053 (9.4) | 2522396.8 | 5.6 | 210631.4 | 0.47 | 0.20 (0.20-0.20) |
| **12 months to 24 months** | | | | | | | |
| All | 796391 | 120541 (15.1) | 8585710.4 | 10.8 | 716945.0 | 0.90 | 0.17 (0.17-0.17) |
| AKI | 20988 | 3511 (16.7) | 225771.4 | 10.8 | 18852.9 | 0.90 | 0.19 (0.18-0.19) |
| DM | 378559 | 59367 (15.7) | 4085150.6 | 10.8 | 341128.3 | 0.90 | 0.17 (0.17-0.18) |
| Other | 396844 | 57663 (14.5) | 4274788.4 | 10.8 | 356963.9 | 0.90 | 0.16 (0.16-0.16) |
| **24 months to 36 months** | | | | | | | |
| All | 623453 | 88873 (14.3) | 6397846.7 | 10.3 | 534248.7 | 0.86 | 0.17 (0.17-0.17) |
| AKI | 16621 | 2182 (13.1) | 175361.3 | 10.6 | 14643.5 | 0.88 | 0.15 (0.14-0.16) |
| DM | 296067 | 46011 (15.5) | 3021628.5 | 10.2 | 252319.4 | 0.85 | 0.18 (0.18-0.18) |
| Other | 310765 | 40680 (13.1) | 3200856.9 | 10.3 | 267285.8 | 0.86 | 0.15 (0.15-0.15) |
| **36 months to 48 months** | | | | | | | |
| All | 450389 | 65236 (14.5) | 4574531.5 | 10.2 | 381993.7 | 0.85 | 0.17 (0.17-0.17) |
| AKI | 12776 | 1472 (11.5) | 135958.2 | 10.6 | 11353.1 | 0.89 | 0.13 (0.12-0.14) |
| DM | 211051 | 34302 (16.3) | 2124803.1 | 10.1 | 177430.5 | 0.84 | 0.19 (0.19-0.20) |
| Other | 226562 | 29462 (13.0) | 2313770.3 | 10.2 | 193210.1 | 0.85 | 0.15 (0.15-0.15) |
| **48 months to 60 months** | | | | | | | |
| All | 318096 | 46005 (14.5) | 3194508.3 | 10.0 | 266755.7 | 0.85 | 0.17 (0.17-0.17) |
| AKI | 9966 | 1057 (10.6) | 104496.0 | 10.5 | 8725.9 | 0.84 | 0.12 (0.11-0.13) |
| DM | 146148 | 24415 (16.7) | 1451616.7 | 9.9 | 121216.5 | 0.88 | 0.20 (0.20-0.20) |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Other | 161982 | 20533 (12.7) | 1638395.6 | 10.1 | 136813.3 | 0.83 | 0.15 (0.15-0.15) |
| **60 months to 72 months** | | | | | | | |
| All | 219649 | 31596 (14.4) | 2175821.1 | 9.9 | 181690.7 | 0.83 | 0.17 (0.17-0.18) |
| AKI | 7482 | 691 (9.2) | 76390.1 | 10.2 | 6378.9 | 0.85 | 0.11 (0.10-0.12) |
| DM | 98308 | 16615 (16.9) | 961213.6 | 9.8 | 80265.6 | 0.82 | 0.21 (0.20-0.21) |
| Other | 113859 | 14290 (12.6) | 1138217.3 | 10.0 | 95046.2 | 0.83 | 0.15 (0.15-0.15) |
| **72 months to 84 months** | | | | | | | |
| All | 146873 | 20627 (14.0) | 1424204.0 | 9.7 | 118927.4 | 0.81 | 0.17 (0.17-0.18) |
| AKI | 5317 | 444 (8.4) | 53488.7 | 10.1 | 4466.5 | 0.84 | 0.10 (0.09-0.11) |
| DM | 63803 | 10803 (16.9) | 608642.3 | 9.5 | 50824.3 | 0.80 | 0.21 (0.21-0.22) |
| Other | 77753 | 9380 (12.1) | 762073.1 | 9.8 | 63636.5 | 0.82 | 0.15 (0.14-0.15) |
| **84 months to 96 months** | | | | | | | |
| All | 93802 | 12764 (13.6) | 884730.0 | 9.4 | 73878.9 | 0.79 | 0.17 (0.17-0.18) |
| AKI | 3644 | 296 (8.1) | 35082.8 | 9.6 | 2929.6 | 0.80 | 0.10 (0.09-0.11) |
| DM | 39256 | 6697 (17.1) | 361872.4 | 9.2 | 30218.0 | 0.77 | 0.22 (0.22-0.23) |
| Other | 50902 | 5771 (11.3) | 48774.9 | 9.6 | 40731.4 | 0.80 | 0.14 (0.14-0.15) |

ESKD: end-stage kidney disease; AKI: acute kidney injury; DM: Diabetes Mellitus

Supplement 3a. Unadjusted hazard ratios for association of mortality with cause of kidney failure (AKI vs. each listed group) after excluding patients with arteriovenous access and non-AKI patients that eventually recovered kidney function for various post-dialysis initiation time periods, with censoring for transplant.

| Follow-Up Time Period | AKI vs. Diabetes Mellitus Hazard Ratio (95% Confidence Interval) | AKI vs. Others Hazard Ratio (95% Confidence Interval) |
|---|---|---|
| 0-3 months | 2.38 (2.31-2.46) | 1.72 (1.67-1.77) |
| 3-6 months | 2.04 (1.97-2.12) | 1.69 (1.63-1.76) |
| 6-12 months | 1.51 (1.46-1.57) | 1.40 (1.35-1.45) |
| 12-24 months | 1.06 (1.02-1.10) | 1.11 (1.07-1.15) |
| 24-36 months | 0.81 (0.78-0.85) | 0.94 (0.90-0.98) |
| 36-48 months | 0.66 (0.63-0.70) | 0.80 (0.76-0.85) |
| 48-60 months | 0.59 (0.55-0.63) | 0.75 (0.71-0.80) |
| 60-72 months | 0.51 (0.48-0.56) | 0.67 (0.62-0.72) |
| 72-84 months | 0.46 (0.42-0.51) | 0.63 (0.57-0.69) |
| 84-96 months | 0.45 (0.40-0.51) | 0.67 (0.59-0.75) |

[AKI: acute kidney injury]

Supplement 3b. Adjusted hazard ratios for association of mortality with cause of kidney failure (AKI vs. each listed group) after excluding patients with arteriovenous access and non-AKI patients that eventually recovered kidney function for various post-dialysis initiation time periods, with censoring for transplant.

| Follow-Up Time Period | AKI vs. Diabetes Mellitus Hazard Ratio (95% Confidence Interval) | AKI vs. Others Hazard Ratio (95% Confidence Interval) |
|---|---|---|
| 0-3 months | 1.17 (1.14-1.21) | 0.94 (0.91-0.97) |
| 3-6 months | 1.08 (1.04-1.12) | 0.98 (0.95-1.02) |
| 6-12 months | 0.88 (0.85-0.91) | 0.89 (0.85-0.92) |
| 12-24 months | 0.69 (0.67-0.72) | 0.78 (0.75-0.81) |
| 24-36 months | 0.57 (0.54-0.59) | 0.69 (0.66-0.72) |
| 36-48 months | 0.49 (0.46-0.52) | 0.61 (0.57-0.64) |
| 48-60 months | 0.45 (0.42-0.48) | 0.58 (0.54-0.62) |
| 60-72 months | 0.40 (0.37-0.43) | 0.51 (0.48-0.56) |
| 72-84 months | 0.37 (0.33-0.41) | 0.48 (0.44-0.53) |
| 84-96 months | 0.37 (0.33-0.42) | 0.50 (0.45-0.57) |

[AKI: acute kidney injury]

Supplement 4. Kidney recovery rates in patients with kidney failure due to acute kidney injury, for follow-up periods beginning at baseline and extending to 3, 6, or 12 months, or to the end of the study.

| **Characteristics** | | Sex | | Race | | | | | Age | | Diabetes Mellitus | | Congestive Heart Failure | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | All N= 32,598 | Men N= 18,926 | Women N= 13,672 | Asian N= 534 | Black N= 4,880 | Hispanic N= 2,312 | Native American N= 157 | White N= 24,715 | Octogenarian N= 6,101 | Non-0ctogenarian N= 26,497 | Yes N= 12,933 | No N= 19,665 | Yes N= 11,402 | No N= 21,196 |
| **3 months** | | | | | | | | | | | | | | |
| Recovered function (%) | 7950 (24.4) | 4977 (26.3) | 2973 (21.7) | 111 (20.8) | 989 (20.3) | 514 (22.2) | 35 (22.3) | 6301 (25.5) | 849 (13.9) | 7101 (26.8) | 2727 (21.1) | 5223 (26.6) | 1801 (15.8) | 6149 (29.0) |
| Total follow-up in months | 79415.6 | 45614.9 | 33800.6 | 1343.9 | 12344.7 | 5708.9 | 383.7 | 59634.38 | 14931.9 | 64483.7 | 32426.0 | 46989.6 | 28698.2 | 50717.4 |
| Average follow-up in months | 2.4 | 2.4 | 2.5 | 2.5 | 2.5 | 2.5 | 2.4 | 2.4 | 2.4 | 2.4 | 2.5 | 2.4 | 2.5 | 2.4 |
| Total follow-up in years | 6631.6 | 3809.1 | 2822.5 | 112.2 | 1030.8 | 476.7 | 32.0 | 4979.7 | 1246.9 | 5384.7 | 2707.7 | 3923.8 | 2396.4 | 4235.1 |
| Average follow-up in years | 0.20 | 0.20 | 0.21 | 0.21 | 0.21 | 0.21 | 0.20 | 0.20 | 0.20 | 0.20 | 0.21 | 0.20 | 0.21 | 0.20 |
| Recovered function in per person-years [95% CI] | 1.2 [1.2-1.2] | 1.3 [1.3-1.3] | 1.1 [1.0-1.1] | 1.0 [0.8-1.2] | 1.0 [0.9-1.0] | 1.1 [1.0-1.2] | 1.1 [0.8-1.5] | 1.3 [1.2-1.3] | 0.7 [0.6-0.7] | 1.3 [1.3-1.3] | 1.0 [1.0-1.0] | 1.3 [1.3-1.4] | 0.8 [0.7-0.8] | 1.5 [1.4-1.5] |
| **6 months** | | | | | | | | | | | | | | |
| Recovered function (%) | 10038 (30.8) | 6267 (33.1) | 3771 (27.6) | 138 (25.8) | 1282 (26.3) | 679 (29.4) | 47 (30.0) | 7892 (31.9) | 1130 (18.6) | 8905 (33.6) | 3567 (27.6) | 6471 (32.9) | 2415 (21.2) | 7623 (36.0) |
| Total follow-up in months | 130266.2 | 74165.3 | 56100.9 | 2289.4 | 20787.8 | 9451.61 | 651.1 | 97086.2 | 24165.5 | 106100.7 | 53987.9 | 76278.3 | 47765.2 | 82501.0 |
| Average follow-up in months | 4.0 | 4.0 | 4.1 | 4.3 | 4.3 | 4.1 | 4.1 | 3.9 | 4.0 | 4.0 | 4.2 | 3.9 | 4.2 | 3.9 |
| Total follow-up in years | 10877.8 | 6193.1 | 4684.67 | 191.2 | 1735.9 | 789.3 | 54.4 | 8107.1 | 2017.9 | 8859.9 | 4508.2 | 6369.6 | 3988.6 | 6889.2 |
| Average follow-up in years | 0.33 | 0.33 | 0.34 | 0.36 | 0.36 | 0.34 | 0.35 | 0.33 | 0.33 | 0.33 | 0.35 | 0.32 | 0.35 | 0.33 |
| Recovered function in per person-years [95% CI] | 0.9 [0.9-0.9] | 1.0 [1.0-1.0] | 0.8 [0.8-0.8] | 0.7 [0.6-0.9] | 0.7 [0.7-0.8] | 0.9 [0.8-0.9] | 0.9 [0.6-1.1] | 1.0 [1.0-1.0] | 0.6 [0.5-0.6] | 1.0 [1.0-1.0] | 0.8 [0.8-0.8] | 1.0 [1.0-1.0] | 0.6 (0.6-0.6) | 1.1 (1.1-1.1) |
| **12 months** | | | | | | | | | | | | | | |
| Recovered function (%) | 10926 (33.5) | 6811 (36.0) | 4115 (30.0) | 154 (28.8) | 1406 (28.8) | 748 (32.3) | 52 (33.1) | 8566 (34.7) | 1244 (20.4) | 9682 (36.5) | 3881 (30.0) | 7045 (35.8) | 2655 (23.3) | 8271 (39.0) |
| Total follow-up in months | 207397.5 | 117076.2 | 90321.3 | 3846.5 | 34064.0 | 15322.3 | 1080.4 | 153084.4 | 37265.2 | 170132.3 | 87202.2 | 120195.28 | 76154.0 | 131243.5 |

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Average follow-up in months | 6.4 | 6.2 | 6.6 | 7.2 | 7.0 | 6.6 | 6.9 | 6.2 | 6.1 | 6.4 | 6.7 | 6.1 | 6.7 | 6.2 |
| Total follow-up in years | 17318.6 | 9776.4 | 7542.2 | 321.2 | 2844.5 | 1279.5 | 90.2 | 12783.2 | 3111.8 | 14206.8 | 7281.8 | 10036.8 | 6359.2 | 10959.4 |
| Average follow-up in years | 0.53 | 0.52 | 0.55 | 0.60 | 0.58 | 0.55 | 0.57 | 0.52 | 0.51 | 0.54 | 0.56 | 0.51 | 0.56 | 0.52 |
| Recovered function in per person-years) [95% CI] | 0.6 [0.6-0.6] | 0.7 [0.7-0.7] | 0.5 [0.5-0.6] | 0.5 [0.4-0.6] | 0.5 [0.5-0.5] | 0.6 [0.5-0.6] | 0.6 [0.4-0.8] | 0.7 [0.7-0.7] | 0.4 [0.4-0.4] | 0.7 [0.7-0.7] | 0.5 [0.5-0.6] | 0.7 [0.7-0.7] | 0.4 [0.4-0.4] | 0.8 [0.7-0.8] |
| **End of Study** | | | | | | | | | | | | | | |
| Recovered function (%) | 11498 (35.3) | 7141 (37.7) | 4357 (31.9) | 163 (30.5) | 1481 (30.3) | 789 (34.1) | 54 (34.4) | 9011 (36.5) | 1305 (21.4) | 10193 (38.5) | 4050 (31.3) | 7448 (37.9) | 2796 (24.5) | 8702 (41.1) |
| Total follow-up in months | 527668.1 | 294025.2 | 233643.0 | 12406.1 | 98973.4 | 43961.4 | 3393.1 | 368934.2 | 78246.0 | 449422.1 | 224580.1 | 303088.0 | 179035.1 | 348633.0 |
| Average follow-up in months | 16.2 | 15.5 | 17.1 | 23.2 | 20.3 | 19.0 | 21.6 | 14.9 | 12.8 | 17.0 | 17.4 | 15.4 | 15.7 | 16.4 |
| Total follow-up in years | 44062.6 | 24552.4 | 19510.2 | 1036.0 | 8264.7 | 3671.0 | 283.3 | 30807.6 | 6533.9 | 37528.7 | 18753.4 | 25309.2 | 14950.2 | 29112.4 |
| Average follow-up in years | 1.35 | 1.30 | 1.43 | 1.94 | 1.69 | 1.59 | 1.80 | 1.24 | 1.07 | 1.42 | 1.45 | 1.29 | 1.31 | 1.37 |
| Recovered function in per person-years [95% CI] | 0.3 [0.3-0.3] | 0.3 [0.3-0.3] | 0.2 [0.2-0.2] | 0.2 [0.1-0.2] | 0.2 [0.2-0.2] | 0.2 [0.2-0.2] | 0.2 [0.1-0.2] | 0.3 [0.3-0.3] | 0.2 [0.2-0.2] | 0.3 [0.3-0.3] | 0.2 [0.2-0.2] | 0.3 [0.3-0.3] | 0.2 [0.2-0.2] | 0.3 [0.3-0.3] |

Supplement 5: Risk factors associated with kidney recovery within 12 months in patients with kidney failure due to acute kidney injury, censored for transplant and death.

| Variable | Hazards Ratio (95% CI) | P-value |
|---|---|---|
| **Demographics** | | |
| Year of dialysis initiation | 0.98 (0.97-0.99) | <0.001 |
| Age (years) | | <0.001 |
| 18-29 | Reference | |
| 30-39 | 1.00 (0.87-1.15) | 0.993 |
| 40-49 | 0.82 (0.72-0.93) | 0.002 |
| 50-59 | 0.68 (0.60-0.77) | <0.001 |
| 60-69 | 0.57 (0.51-0.65) | <0.001 |
| 70-79 | 0.50 (0.45-0.57) | <0.001 |
| 80+ | 0.40 (0.35-0.46) | <0.001 |
| Sex | | <0.001 |
| Female | 0.85 (0.82-0.89) | <0.001 |
| Race/Ethnicity | | <0.001 |
| Asian | 0.80 (0.68-0.94) | 0.007 |
| Black | 0.67 (0.63-0.71) | <0.001 |
| Hispanic | 0.83 (0.76-0.89) | <0.001 |
| Native American | 0.73 (0.56-0.97) | 0.027 |
| White | Reference | |
| Body Mass Index (kg/m2) | | <0.001 |
| <18.5 | 0.79 (0.71-0.89) | <0.001 |
| 18.5 – 24.99 | Reference | |
| 25-30 | 1.26 (1.20-1.32) | <0.001 |
| >30 | 1.32 (1.25-1.38) | <0.001 |
| Missing | 1.12 (0.92-1.36) | 0.254 |
| Neighborhood Poverty | | 0.278 |
| <13.8 | Reference | |
| 13.8 - < 20% | 1.00 (0.95-1.05) | 0.021 |
| 20 - < 40% | 0.96 (0.91-1.02) | 0.228 |
| ≥ 40% | 0.82 (0.67-1.02) | 0.074 |
| Missing | 0.92 (0.76-1.10) | 0.335 |
| Region | | <0.001 |
| Midwest | 0.91 (0.87-0.95) | <0.001 |
| Northeast | 0.76 (0.71-0.80) | <0.001 |
| South | Reference | |
| West | 0.90 (0.84-0.95) | <0.001 |
| Unknown | 1.34 (0.33-5.45) | 0.679 |
| **Comorbidities** | | |
| Congestive Heart Failure | 0.69 (0.65-0.72) | <0.001 |
| Atherosclerotic Heart Disease | 0.97 (0.93-1.01) | 0.128 |
| +Other | | <0.001 |

| | | |
|---|---|---|
| Hypertension | 0.89 (0.86-0.94) | <0.001 |
| Diabetes Mellitus | 0.89 (0.85-0.93) | <0.001 |
| Cancer | 0.88 (0.82-0.93) | 0.002 |
| Amputation | 0.82 (0.72-0.93) | 0.382 |
| Peripheral Vascular Disease | 0.97 (0.92-1.04) | 0.053 |
| CVA/TIA | 0.93 (0.87-1.00) | 0.012 |
| Chronic Obstructive Pulmonary Disease | 0.93 (0.87-0.98) | <0.001 |
| Poor Functional Status | 0.73 (0.69-0.77) | |
| **Laboratory Values** | | |
| Albumin (g/dL) | | <0.001 |
| <3.5 | 1.16 (1.09-1.23) | <0.001 |
| >3.5 | Reference | |
| Missing | 1.12 (1.05-1.20) | <0.001 |
| Hemoglobin (g/dL) | | <0.001 |
| <11 | 0.64 (0.61-0.68) | <0.001 |
| 11-12 | 0.81 (0.75-0.87) | <0.001 |
| >12 | Reference | |
| Missing | 0.66 (0.61-0.72) | <0.001 |
| **Care** | | |
| History of Nursing Home | 0.97 (0.91-1.03) | 0.315 |
| Nephrology Care | | <0.001 |
| None | Reference | |
| 0-12 months | 0.51 (0.48-0.54) | <0.001 |
| > 12 months | 0.40 (0.37-0.45) | <0.001 |
| Unknown | 0.74 (0.70-0.79) | <0.001 |

[Cox proportional hazards model; Co-morbidities and history of nursing home indicate the patient had the comorbidity and/or had been in a nursing home. Terms: CVA/TIA-cerebrovascular accident/ transient ischemic attack]