

Supplementary File

Table S1. Demographics and comorbidities added into a non-parsimonious propensity model to predict dialysis at 90 days after hospital discharge.

| | HR | lower 95% CI | upper 95% CI | P |
|--------------------------------------|-------|-----------------|-----------------|--------|
| Age (per year) | 0.99 | 0.98 | 0.99 | <0.001 |
| Baseline comorbidities | | | | |
| Chronic kidney disease | 27.38 | 23.32 | 32.15 | <0.001 |
| Diabetics mellitus | 0.47 | 0.38 | 0.59 | <0.001 |
| Diabetics with microvascular disease | 1.43 | 1.19 | 1.72 | <0.001 |
| Metabolic disease | 3.04 | 1.73 | 5.32 | <0.001 |
| Mechanical ventilation | 0.61 | 0.46 | 0.82 | 0.001 |
| Tumor with metastasis | 0.40 | 0.21 | 0.76 | 0.005 |
| COPD | 0.80 | 0.64 | 0.99 | 0.037 |
| Operative categories | | | | |
| Hepatobiliary | 0.21 | 0.07 | 0.65 | 0.007 |
| Cardiothoracic | 0.38 | 0.20 | 0.70 | 0.002 |
| Upper GI | 0.29 | 0.08 | 1.11 | 0.071 |
| Index hospital comorbidities | | | | |

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|--|------|------|------|--------|
| Hematologic | 2.54 | 1.07 | 6.04 | 0.035 |
| Post discharge medication during survey | | | | |
| NSAID | 0.77 | 0.63 | 0.95 | 0.015 |
| ACEI/ARB | 1.46 | 1.21 | 1.77 | <0.001 |
| Diuretics | 0.81 | 0.67 | 0.99 | 0.037 |

Adjusted generalized $R^2 = 0.588$,

Abbreviations,

ACEI, angiotensin-converting-enzyme inhibitor; AKI, acute kidney injury; ARB, Angiotensin II receptor blockers; COPD, chronic obstructive pulmonary disease; ESRD, end stage renal disease; GI, Gastrointestinal; NSAID, nonsteroidal anti-inflammatory agents/analgesics.

Table S2a Propensity matched of baseline characteristics and clinical endpoints between patient without AKI or dialysis and recovery from AKI-dialysis.

| | Non-AKI (n=231) | Recoverable subgroup (n=231) | p |
|-----------------------|-----------------|------------------------------|-------|
| Male | 133(57.6%) | 126(54.5%) | 0.574 |
| Age (years) | 62.6±15.3 | 63.1±15.8 | 0.531 |
| Comorbidities | | | |
| Charlson score | 2.81±2.42 | 3±2.33 | 0.256 |
| Myocardial infarction | 9(3.9%) | 8(3.5%) | 0.999 |

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|---|------------|------------|-------|
| Congestive heart failure | 38(16.5%) | 36(15.6%) | 0.899 |
| Peripheral vascular disease | 10(4.3%) | 8(3.5%) | 0.811 |
| Cerebrovascular disease | 38(16.5%) | 40(17.3%) | 0.901 |
| Dementia | 9(3.9%) | 12(5.2%) | 0.656 |
| COPD | 47(20.3%) | 44(19%) | 0.815 |
| Rheumatologic disease | 6(2.6%) | 6(2.6%) | 0.999 |
| Hemiplegia | 5(2.2%) | 3(1.3%) | 0.724 |
| Solid tumor | 11(4.8%) | 15(6.5%) | 0.546 |
| Tumor with metastatic | 4(1.7%) | 5(2.2%) | 0.999 |
| AIDS | | | |
| Diabetes Mellitus | 126(54.5%) | 120(51.9%) | 0.641 |
| Diabetics with microvascular disease | 57(24.7%) | 68(29.4%) | 0.295 |
| Liver disease | | | |
| Moderate or Severe liver disease | 21(9.1%) | 20(8.7%) | 0.999 |
| Chronic Kidney disease | 104(45%) | 107(46.3%) | 0.852 |
| <i>Index hospital comorbidity</i> | | | |
| Cardiovascular | 16(6.9%) | 15(6.5%) | 0.999 |
| Respiratory | 41(17.7%) | 42(18.2%) | 0.999 |
| Renal | 2(0.9%) | 2(0.9%) | 0.999 |
| Hepatic | 3(1.3%) | 1(0.4%) | 0.623 |
| Neurologic | 5(2.2%) | 4(1.7%) | 0.999 |
| Hematologic | 0(0%) | 1(0.4%) | 0.999 |

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|--|------------|------------|-------|
| Metabolic | 1(0.4%) | 1(0.4%) | 0.999 |
| <i>Operative categories</i> | | | |
| Cardio-thorathic | 16(6.9%) | 12(5.2%) | 0.559 |
| Upper GI | 2(0.9%) | 1(0.4%) | 0.999 |
| Lower GI | 3(1.3%) | 4(1.7%) | 0.999 |
| Hepatobiliary | 2(0.9%) | 1(0.4%) | 0.999 |
| Mechanical ventilation | 19(8.2%) | 18(7.8%) | 0.999 |
| ICU admission during index hospitalization | 120(51.9%) | 116(50.2%) | 0.780 |
| <i>Post discharge medications during survey</i> | | | |
| ACEI/ARB | 45(19.5%) | 42(18.2%) | 0.812 |
| Statin | 16(6.9%) | 21(9.1%) | 0.493 |
| NSAID | 37(16%) | 30(13%) | 0.428 |
| Aspirin | 14(6.1%) | 18(7.8%) | 0.583 |
| Diuretics | 78(33.8%) | 74(32%) | 0.767 |

ACEI, angiotensin-converting-enzyme inhibitor; AKI, acute kidney injury; ARB, Angiotensin II receptor blockers; COPD, chronic obstructive pulmonary disease; ESRD, end stage renal disease; GI, Gastrointestinal; ICU, intensive care unit; MACE, major adverse cardiovascular events; NSAID, nonsteroidal anti-inflammatory agents/analgesics.

Table S2b Propensity matched of baseline characteristics and clinical endpoints between patient with or without recovery from AKI-dialysis.

| | <i>Non recoverable subgroup</i> (n=543) | <i>Recoverable subgroup</i> (n=543) | p |
|---|--|--|----------|
| Male | 286(52.7%) | 298(54.9%) | 0.503 |
| Age (years) | 62.7±15.5 | 63.6±15.8 | 0.314 |
| Comorbidity | | | |
| Charlson score | 3.4±2.42 | 3.37±2.42 | 0.749 |
| Myocardial infarction | 15(2.8%) | 20(3.7%) | 0.492 |
| Congestive heart failure | 107(19.7%) | 107(19.7%) | 0.999 |
| Peripheral vascular disease | 24(4.4%) | 22(4.1%) | 0.880 |
| Cerebrovascular disease | 84(15.5%) | 97(17.9%) | 0.329 |
| Dementia | 19(3.5%) | 25(4.6%) | 0.442 |
| COPD | 112(20.6%) | 98(18%) | 0.318 |
| Rheumatologic disease | 11(2%) | 13(2.4%) | 0.837 |
| Hemiplegia | 12(2.2%) | 15(2.8%) | 0.697 |
| Solid tumor | 36(6.6%) | 40(7.4%) | 0.721 |
| Tumor with metastatic | 13(2.4%) | 12(2.2%) | 0.999 |
| Diabetic Mellitus | 289(53.2%) | 289(53.2%) | 0.999 |
| Diabetics with microvascular disease | 195(35.9%) | 184(33.9%) | 0.524 |
| Liver disease | | | |

| | | | |
|--|------------|------------|-------|
| Moderate or Severe liver disease | 56(10.3%) | 57(10.5%) | 0.999 |
| Chronic Kidney disease | 313(57.6%) | 304(56%) | 0.624 |
| <i>Index hospital comorbidity</i> | | | |
| Cardiovascular | 22(4.1%) | 24(4.4%) | 0.880 |
| Respiratory | 74(13.6%) | 94(17.3%) | 0.111 |
| Renal | 290(53.4%) | 292(53.8%) | 0.952 |
| Hepatic | 11(2%) | 10(1.8%) | 0.999 |
| Neurologic | 9(1.7%) | 10(1.8%) | 0.999 |
| Hematologic | 3(0.6%) | 3(0.6%) | 0.999 |
| Metabolic | 23(4.2%) | 24(4.4%) | 0.999 |
| <i>Operative categories</i> | | | |
| Cardiothoracic | 13(2.4%) | 9(1.7%) | 0.519 |
| Upper GI | 2(0.4%) | 4(0.7%) | 0.687 |
| Lower GI | 3(0.6%) | 8(1.5%) | 0.224 |
| Hepatobiliary | 2(0.4%) | 4(0.7%) | 0.687 |
| Mechanical ventilation | 41(7.6%) | 39(7.2%) | 0.908 |
| ICU admission during index hospitalization | 281(51.7%) | 264(48.6%) | 0.336 |
| <i>Post discharge medications</i> | | | |
| ACEI/ARB | 149(27.4%) | 140(25.8%) | 0.583 |
| Statin | 59(10.9%) | 50(9.2%) | 0.419 |
| NSAID | 90(16.6%) | 82(15.1%) | 0.561 |

| | | | |
|------------------|------------|------------|-------|
| Aspirin | 42(7.7%) | 39(7.2%) | 0.817 |
| Diuretics | 205(37.8%) | 192(35.4%) | 0.450 |

ACEI, angiotensin-converting-enzyme inhibitor; AKI, acute kidney injury; ARB, Angiotensin II receptor blockers; COPD, chronic obstructive pulmonary disease; ESRD, end stage renal disease; GI, Gastrointestinal; ICU, intensive care unit; MACE, major adverse cardiovascular events; NSAID, nonsteroidal anti-inflammatory agents/analgesics.

Table S3

Risk of long-term mortality using the critical NSARF database by Cox proportional hazard model. (Abbreviations; AKI, acute kidney injury; DM, diabetics mellitus; CI, confidence interval; CKD, chronic kidney disease; CHF, congestive heart failure; HR, hazard ratio)

| | HR | lower 95% CI | upper 95% CI | P |
|---|------|-----------------|-----------------|--------|
| Age (per year) | 1.03 | 1.03 | 1.03 | <0.001 |
| Sex | 1.30 | 1.19 | 1.41 | <0.001 |
| Charlson | 1.13 | 1.12 | 1.14 | <0.001 |
| CKD | 1.47 | 1.23 | 1.75 | <0.001 |
| Non-AKI vs. Dialysis withdrawal subgroup | 0.69 | 0.54 | 0.87 | 0.002 |
| Non- withdrawal vs. Dialysis withdrawal subgroup | 1.64 | 1.05 | 2.56 | 0.031 |
| HTN | 0.74 | 0.67 | 0.80 | <0.001 |
| Moderate Severe liver disease | 1.14 | 0.85 | 1.52 | 0.377 |
| Mild liver disease | 1.13 | 0.86 | 1.49 | 0.381 |
| CHF | 1.48 | 1.31 | 1.68 | <0.001 |
| DM | 1.11 | 1.01 | 1.22 | 0.031 |

Adjusted generalized R^2 =0.211, C- index= 0.76

