**Table S1A** Baseline characteristics at admission in the total population and the four hemoglobin concentration from admission to discharge (ΔHgb)-based subcategories

| | Total (n = 2090) | Extreme hemodilution (n = 479) | Modest hemodilution (n = 555) | Modest hemoconcentration (n = 506) | Extreme hemoconcentration (n = 550) | p value (between groups) |
|---|---|---|---|---|---|---|
| Age, years†, ‡, ‖, # | 76.0 (65.0–83.0) | 75.0 (63.0–83.0) | 76.0 (67.0–84.0) | 77.0 (67.0–83.0) | 75.0 (63.0–82.0) | 0.0020* |
| Men | 1294 (61.9) | 309 (64.5) | 337 (60.7) | 308 (60.8) | 340 (61.8) | 0.5828 |
| SBP, mmHg‡, §, ‖, # | 135 (118–158) | 138 (116–168) | 139 (120–162) | 135 (118–151) | 132 (115–151) | 0.0008* |
| Resting HR, beats/min‡, § | 90 (72–110) | 95 (75–118) | 90 (74–110) | 87 (70–107) | 90 (72–109) | 0.0044* |
| CKD | 1318 (63.0) | 324 (67.6) | 357 (64.3) | 309 (61.0) | 328 (59.6) | 0.0389 |
| Ischemic etiology‡, §, ‖ | 594 (28.4) | 161 (33.6) | 173 (31.1) | 117 (23.1) | 143 (26.0) | 0.0007* |
| **Laboratory findings** | | | | | | |
| Hemoglobin, g/dL†, ‡, §, ‖ | 12.4 (10.9–13.9) | 13.4 (12.1–14.9) | 12.3 (10.9–13.7) | 12.2 (10.6–13.5) | 11.8 (10.4–13.4) | <0.0001* |
| Creatinine, mg/dL | 1.00 (0.77–1.30) | 1.03 (0.80–1.34) | 1.00 (0.80–1.33) | 0.96 (0.76–1.30) | 0.94 (0.73–1.24) | 0.0040* |
| BUN§, mg/dL | 20.8 (16.0–28.3) | 21.9 (16.6–30.2) | 21.7 (16.4–29.0) | 20.8 (16.1–27.6) | 19.3 (14.7–26.5) | 0.0001* |
| BUN/creatinine ratio | 20.7 (16.8–26.1) | 20.6 (16.3–27.0) | 21.0 (17.1–25.8) | 20.7 (17.0–25.8) | 20.3 (16.6–26.2) | 0.5556 |
| Sodium, mEq/L‡, § | 140.0 (138.0–142.0) | 139.6 (137.0–142.0) | 140.0 (1373.0–142.0) | 140.0 (138.0–142.0) | 140.0 (138.0–142.0) | 0.0002* |
| **Medications** | | | | | | |
| ACEI or ARBs | 923 (44.5) | 205 (42.9) | 271 (49.3) | 225 (44.9) | 222 (40.6) | 0.0293 |
| Digoxin | 173 (8.3) | 34 (7.1) | 43 (7.8) | 44 (8.7) | 52 (9.5) | 0.5278 |
| Loop diuretics | 909 (43.8) | 204 (42.7) | 258 (47.1) | 222 (44.2) | 225 (41.2) | 0.2362 |

| | | | | | | |
|---|---|---|---|---|---|---|
| **Beta-blockers** | **914 (44.1)** | **189 (39.8)** | **249 (45.4)** | **234 (46.6)** | **242 (44.4)** | **0.1623** |
| **Tolvaptan** | **23 (1.4)** | **5 (1.3)** | **6 (1.3)** | **9 (2.2)** | **3 (0.7)** | **0.3540** |

Data are presented as mean ± standard deviation or median ($1^{st}$–$3^{rd}$ quartile) for continuous variables, and as number (percentage) for categorical variables. Inter-subcategory comparisons were performed using analysis of variance or Wilcoxon's signed-rank test for continuous variables, and the chi-square test for categorical variables.

SBP, systolic blood pressure; HR, heart rate; CKD, chronic kidney disease; BUN, blood urea nitrogen; ACE-I, angiotensin-converting enzyme; ARB, angiotensin receptor blocker.

†$P < 0.05$ for extreme hemodilution *vs.* modest hemodilution, ‡$P < 0.05$ for extreme hemodilution *vs.* modest hemoconcentration, §$P < 0.05$ for extreme hemodilution *vs.* extreme hemoconcentration, ||$P < 0.05$ for modest hemodilution *vs.* modest hemoconcentration, #$P < 0.05$ for modest hemodilution *vs.* extreme hemoconcentration, *$P < 0.05$ for modest hemoconcentration *vs.* extreme hemoconcentration.

**Table S1B** Baseline characteristics at discharge in the total population and four ΔHgb-based subcategories

| | **Total (n = 2090)** | **Extreme hemodilution (n = 479)** | **Modest hemodilution (n = 555)** | **Modest hemoconcentration (n = 506)** | **Extreme hemoconcentration (n = 550)** | **p value (between groups)** |
|---|---|---|---|---|---|---|
| **Systolic BP, mmHg** | **110 (100–122)** | **110 (100–124)** | **110 (98–122)** | **110 (100–122)** | **110 (100–120)** | **0.4218** |
| **Resting HR, beats/min** | **70 (61–78)** | **70 (61–80)** | **70 (60–78)** | **70 (62–78)** | **70 (61–80)** | **0.4239** |
| **WRF (ΔCr > 0.3)** | **211 (10.0)** | **55 (11.4)** | **64 (11.5)** | **43 (8.5)** | **49 (8.9)** | **0.2063** |
| **LVEF, %** | **44.0 (31.0–58.0)** | **43.0 (30.0–56.0)** | **42.0 (30.0–58.0)** | **45.0 (32.0–58.0)** | **45.0 (32.0–59.0)** | **0.0440** |
| **Laboratory findings** | | | | | | |
| **Hemoglobin, g/dL†, ‡, §, ‖, #, **** | **12.4 (10.9–13.9)** | **11.6 (10.5–12.9)** | **12.0 (10.7–13.4)** | **12.5 (11.0–14.0)** | **13.3 (11.9–15.0)** | **<0.0001*** |
| **Creatinine, mg/dL** | **1.10 (0.80–1.30)** | **1.00 (0.76–1.91)** | **1.01 (0.80–1.40)** | **1.00 (0.80–1.30)** | **0.99 (1.80–1.25)** | **0.1735** |

| | | | | | | |
|---|---|---|---|---|---|---|
| **BUN, mg/dL** | **22.4 (16.7–31.0)** | **21.0 (16.0–29.6)** | **22.9 (16.7–32.0)** | **23.0 (16.8–31.5)** | **22.3 (17.5–30.7)** | **0.1628** |
| **BUN/creatinine ratio[§]** | **22.1 (17.5–27.3)** | **21.9 (16.4–26.9)** | **21.7 (17.6–26.7)** | **22.0 (17.4–27.4)** | **23.1 (18.4–28.7)** | **0.0052*** |
| **Sodium mEq/L** | **139.0 (137.0–141.0)** | **139.0 (137.0–141.0)** | **139.0 (137.0–141.0)** | **139.2 (137.0–141.0)** | **139.0 (137.0–141.0)** | **0.1213** |
| **Medications** | | | | | | |
| **ACEI or ARBs** | **1,444 (69.0)** | **327 (68.2)** | **393 (70.8)** | **351 (69.3)** | **373 (67.8)** | **0.7148** |
| **Digoxin[‡, §, ‖, #]** | **187 (8.9)** | **28 (5.85)** | **34 (6.13)** | **57 (11.2)** | **68 (12.3)** | **<0.0001*** |
| **Loop diuretics[†, ‡, §]** | **1,617 (77.4)** | **338 (70.)** | **444 (80.2)** | **393 (77.6)** | **442 (80.3)** | **0.0005*** |
| **Beta-blockers** | **1638 (78.4)** | **363 (75.7)** | **450 (81.0)** | **396 (78.2)** | **429 (78.1)** | **0.2267** |
| **Tolvaptan** | **51 (2.8)** | **12 (2.9)** | **13 (2.7)** | **17 (3.9)** | **9 (1.9)** | **0.3880** |

Data are presented as mean ± standard deviation or median ($1^{st}$–$3^{rd}$ quartile) for continuous variables, and as number (percentage) for categorical variables. Inter-subcategory comparisons were performed using analysis of variance or Wilcoxon's signed-rank test for continuous variables, and the chi-square test for categorical variables.

WRF, worsening renal function; EF, ejection fraction; LVEF, left ventricular ejection fraction.

$^{\dagger}P < 0.05$ for extreme hemodilution *vs.* modest hemodilution, $^{\ddagger}P < 0.05$ for extreme hemodilution *vs.* modest hemoconcentration, $^{\S}P < 0.05$ for extreme hemodilution *vs.* extreme hemoconcentration, $^{\|}P < 0.05$ for modest hemodilution *vs.* modest hemoconcentration, $^{\#}P < 0.05$ for modest hemodilution *vs.* extreme hemoconcentration, $^{*}P < 0.05$ for modest hemoconcentration *vs.* extreme hemoconcentration.