

Supplementary material

Table S1. Biochemical data according to different age groups in CKD stage 3-5 patients.

| | Age groups | | | | | P-values |
|---|-------------|-------------|-------------|-------------|-------------|------------------|
| | <60 | 60-69 | 70-79 | 80-89 | ≥90 | |
| N (all: 436) | 62 | 74 | 106 | 140 | 54 | |
| Creatinine (mg/dL), median (IQR) | 2.76 (2.39) | 2.58 (1.32) | 2.20 (1.09) | 2.02 (1.02) | 1.86 (1.08) | <0.001 |
| eGFR CKD-EPI (mL/min/1.73m ²), median (IQR) | 22 (23) | 23 (19) | 26 (15) | 26 (15) | 26 (17) | 0.746 |
| Proteinuria (g/24h), n (%) | | | | | | |
| <0.3 | 13 (21.0%) | 16 (27.1%) | 38 (47.5%) | 56 (54.4%) | 28 (73.7%) | <0.001 |
| 0.3 - 1 | 12 (19.4%) | 9 (15.3%) | 13 (16.3%) | 25 (24.3%) | 5 (13.2%) | |
| ≥1 | 26 (41.9%) | 34 (57.6%) | 29 (36.3%) | 22 (21.4%) | 5 (13.2%) | |
| Albumin (g/dL), median (IQR) | 3.6 (0.8) | 3.7 (0.6) | 3.8 (0.5) | 3.6 (0.5) | 3.5 (0.3) | 0.009 |
| Albumin (g/dL) < 3.5, n (%) | 25 (40.3%) | 29 (39.2%) | 23 (21.7%) | 42 (30.0%) | 21 (38.9%) | 0.055 |
| Albumin (g/dL) < 3, n (%) | 7 (11.3%) | 5 (6.8%) | 8 (7.5%) | 7 (5.0%) | 3 (5.6%) | 0.416 |
| Total serum proteins (g/L), median (IQR) | 72 (7) | 74 (8) | 73 (9) | 72 (8) | 72 (8) | 0.466 |
| CRP (mg/L), median (IQR) | 4 (4) | 5 (11) | 4 (5) | 4 (7) | 5 (9) | 0.304 |
| PTH (ng/L), median (IQR) | 124 (200) | 94 (116) | 107 (104) | 85 (74) | 76 (56) | 0.027 |
| BUN (mg/dL), median (IQR) | 42.3 (28.5) | 42.0 (29.0) | 39.5 (28.1) | 42.6 (22.8) | 41.9 (22.8) | 0.901 |
| Bicarbonate (mmol/L), median (IQR) | 22 (5) | 23 (4) | 24 (5) | 24 (5) | 24 (4) | <0.001 |
| Hemoglobin (g/dL), median (IQR) | 11.7 (2.8) | 11.7 (3.1) | 11.8 (2.7) | 11.6 (2.3) | 11.5 (2.0) | 0.881 |
| Hemoglobin (g/dL) < 10, n (%) | 10 (16.1%) | 16 (21.6%) | 15 (14.3%) | 20 (14.3%) | 8 (14.8%) | 0.761 |
| Ferritin (μg/L), median (IQR) | 116 (222) | 174 (210) | 187 (222) | 158 (177) | 180 (183) | 0.054 |
| Transferrin (g/L), median (IQR) | 2.22 (0.59) | 2.30 (0.61) | 2.20 (0.57) | 2.28 (0.58) | 2.22 (0.41) | 0.436 |
| Uric acid (μmol/L), median (IQR) | 426 (195) | 443 (190) | 434 (159) | 462 (193) | 441 (146) | 0.158 |
| Total cholesterol (mmol/L), median (IQR) | 4.61 (2.05) | 4.87 (1.92) | 4.32 (1.33) | 4.46 (1.99) | 5.08 (2.10) | 0.026 |
| Vitamin D (ng/mL), median (IQR) | 23 (14) | 28 (25) | 27 (20) | 30 (17) | 32 (20) | 0.027 |
| Sodium (mmol/L), median (IQR) | 141 (3) | 140 (4) | 140 (4) | 141 (4) | 140 (4) | 0.779 |
| Potassium (mmol/L), median (IQR) | 4.5 (0.7) | 4.3 (0.6) | 4.2 (0.7) | 4.3 (0.6) | 4.3 (0.6) | 0.0039 |
| Calcium (mmol/L), median (IQR) | 2.33 (0.14) | 2.35 (0.19) | 2.34 (0.16) | 2.34 (0.17) | 2.33 (0.14) | 0.361 |
| Phosphate (mmol/L), median (IQR) | 1.24 (0.49) | 1.09 (0.35) | 1.05 (0.31) | 1.10 (0.28) | 1.14 (0.32) | 0.043 |
| Diabetes, n (%) | 21 (33.9%) | 41 (55.4%) | 59 (55.7%) | 58 (41.4%) | 13 (24.1%) | <0.001 |
| HbA1c (%) *, median (IQR) | 7.3 (1.3) | 7.0 (2.0) | 6.9 (1.6) | 6.8 (1.5%) | 7.2 (0.8) | 0.996 |

IQR: interquartile range; eGFR: estimated glomerular filtration rate according to the CKD-EPI formula; PTH: parathyroid hormone; BUN: blood urea nitrogen. * only for patients with diabetes, 95% available data. In bold, significant differences.

Table S2. Biochemical data across stages: age 60-69.

| | 60-69 years (n=74) | | | | |
|---|--------------------|-------------|-------------|-------------|------------------|
| | CKD Stages | | | | |
| N | 3A | 3B | 4 | 5 | P-values |
| Creatinine (mg/L), median (IQR) | 1.33 (0.06) | 1.92 (0.28) | 2.89 (0.61) | 5.21 (2.34) | <0.001 |
| eGFR EPI (mL/min/1.73m ²), median (IQR) | 55 (6) | 35 (4) | 20 (5) | 10 (5) | <0.001 |
| Charlson index, median (IQR) | 8 (4) | 6 (4) | 8 (3) | 7 (3) | 0.085 |
| MIS, median (IQR) | 7 (2) | 3 (3) | 5 (4) | 6 (4) | 0.382 |
| SGA, n (%) | | | | | |
| A | 6 (100%) | 18 (85.7%) | 25 (75.8%) | 12 (85.7%) | |
| B | 0 | 3 (14.3%) | 7 (21.2%) | 2 (14.3%) | 0.877 |
| C | 0 | 0 | 1 (3.0%) | 0 | |
| Diabetes, n (%) | 3 (50.0%) | 8 (38.1%) | 22 (66.7%) | 8 (57.1%) | 0.225 |
| Cardiopathy, n (%) | 5 (83.3%) | 5 (23.8%) | 10 (30.3%) | 4 (28.6%) | 0.060 |
| Neoplasia, n (%) | 1 (16.7%) | 4 (19.0%) | 8 (24.2%) | 0 (0%) | 0.221 |
| BMI (kg.m ⁻²), median (IQR) | 25.9 (10.1) | 29.4 (9.0) | 29.2 (8.0) | 27.2 (10.8) | 0.714 |
| Albumin (g/dL), median (IQR) | 3.8 (0.3) | 3.7 (0.8) | 3.5 (0.6) | 3.6 (0.5) | 0.298 |
| Total serum proteins (g/L), median (IQR) | 74 (2) | 75 (8) | 74 (6) | 73 (12) | 0.779 |
| CRP (mg/L), median (IQR) | 19 (38) | 5 (8) | 4 (7) | 6 (14) | 0.381 |
| PTH (ng/L), median (IQR) | 70 (20) | 48 (53) | 101 (107) | 285 (659) | <0.001 |
| BUN (mg/dL), median (IQR) | 28.1 (4.3) | 31.9 (19.3) | 47.4 (23.0) | 73.0 (46.0) | <0.001 |
| Bicarbonate (mmol/L), median (IQR) | 25 (1) | 23 (3) | 23 (5) | 21 (4) | 0.134 |
| Hemoglobin (g/dL), median (IQR) | 13.0 (1.1) | 12.5 (2.7) | 11.3 (2.5) | 10.1 (2.7) | 0.032 |
| Ferritin (μg/L), median (IQR) | 177 (147) | 164 (247) | 140 (136) | 239 (197) | 0.644 |
| Transferrin (g/L), median (IQR) | 2.42 (0.40) | 2.41 (0.54) | 2.22 (0.63) | 2.03 (0.47) | 0.182 |
| Uric acid (μmol/L), median (IQR) | 384 (111) | 427 (179) | 481 (218) | 442 (138) | 0.290 |
| Total cholesterol (mmol/L), median (IQR) | 5.00 (1.58) | 5.37 (1.28) | 4.71 (1.96) | 3.99 (2.12) | 0.214 |
| Vit D (ng/mL), median (IQR) | 26 (15) | 32 (26) | 29 (26) | 27 (19) | 0.771 |
| Sodium (mmol/L), median (IQR) | 141 (2) | 139 (3) | 140 (4) | 140 (4) | 0.808 |
| Potassium (mmol/L), median (IQR) | 4.3 (0.5) | 3.9 (0.5) | 4.3 (0.4) | 4.3 (1.1) | 0.053 |
| Calcium (mmol/L), median (IQR) | 2.29 (0.13) | 2.42 (0.13) | 2.35 (0.18) | 2.25 (0.15) | 0.109 |
| Phosphate (mmol/L), median (IQR) | 0.89 (0.19) | 0.96 (0.18) | 1.16 (0.28) | 1.40 (0.26) | <0.001 |
| Diabetes, n (%) | 3 (50.0%) | 8 (38.1%) | 22 (66.7%) | 8 (57.1%) | 0.225 |
| HbA1c (%) *, median (IQR) | 8.1 (1.8) | 8.0 (1.7) | 6.9 (1.5) | 5.9 (0.6) | 0.050 |

IQR: interquartile range; eGFR: estimated glomerular filtration rate according to the CKD-EPI formula; MIS: Malnutrition-Inflammation index; SGA: Subjective Global Assessment; BMI: Body Mass Index; PTH: parathyroid hormone; BUN: blood urea nitrogen. * only for those with diabetes in this group, with 92% available data (for CKD stages 3A, 3B, 4 and 5: 3,8,20,7 respectively). In bold, significant differences.

Table S3. Biochemical data across stages: age 70-79.

| | 70-79 years old (n=106) | | | | |
|---|-------------------------|-------------|-------------|-------------|------------------|
| | CKD Stages | | | | P-values |
| N | 3A | 3B | 4 | 5 | |
| Creatinine (mg/L), median (IQR) | 1.25 (0.29) | 1.82 (0.34) | 2.58 (0.57) | 4.58 (1.59) | <0.001 |
| eGFR EPI (mL/min/1.73m ²), median (IQR) | 47 (8) | 35 (6) | 23 (5) | 11 (5) | <0.001 |
| Charlson index, median (IQR) | 6 (4) | 8 (2) | 8 (2) | 8 (3) | <0.001 |
| MIS, median (IQR) | 5 (5) | 4 (3) | 6 (3) | 5 (5) | 0.112 |
| SGA, n (%) | | | | | |
| A | 8 (72.7%) | 31 (96.9%) | 41 (91.1%) | 14 (77.8%) | 0.053 |
| B | 3 (27.3%) | 1 (3.1%) | 3 (6.7%) | 4 (22.2%) | |
| C | 0 (0%) | 0 (0%) | 1 (2.2%) | 0 (0%) | |
| Diabetes, n (%) | 4 (36.4%) | 13 (40.6%) | 31 (68.9%) | 11 (61.1%) | 0.045 |
| Cardiopathy, n (%) | 2 (18.2%) | 10 (31.3%) | 19 (42.2%) | 6 (33.3%) | 0.489 |
| Neoplasia, n (%) | 2 (18.2%) | 3 (9.4%) | 7 (15.6%) | 5 (27.8%) | 0.367 |
| BMI (kg.m ⁻²), median (IQR) | 27.3 (3.8) | 29.5 (6.2) | 30.5 (9.7) | 29.4 (11.8) | 0.444 |
| Albumin (g/dL), median (IQR) | 3.9 (0.3) | 3.9 (0.3) | 3.7 (0.5) | 3.8 (0.8) | 0.066 |
| Total serum proteins (g/L), median (IQR) | 74 (7) | 75 (8) | 72 (10) | 73 (7) | 0.485 |
| CRP (mg/L), median (IQR) | 4 (20) | 4 (3) | 4 (5) | 8 (16) | 0.278 |
| PTH (ng/L), median (IQR) | 72 (25) | 56 (48) | 125 (91) | 257 (148) | <0.001 |
| BUN (mg/dL), median (IQR) | 24.4 (4.9) | 32.2 (11.9) | 50.4 (23.1) | 64.4 (27.2) | <0.001 |
| Bicarbonate (mmol/L), median (IQR) | 26 (3) | 24 (4) | 24 (5) | 22 (4) | 0.006 |
| Hemoglobin (g/dL), median (IQR) | 12.2 (3.2) | 13.1 (2.6) | 11.6 (2.2) | 11.0 (1.6) | 0.002 |
| Ferritin (μg/L), median (IQR) | 171 (226) | 196 (223) | 211 (196) | 175 (396) | 0.886 |
| Transferrin (g/L), median (IQR) | 2.19 (0.11) | 2.36 (0.67) | 2.19 (0.68) | 2.20 (0.39) | 0.030 |
| Uric acid (μmol/L), median (IQR) | 434 (107) | 406 (86) | 439 (188) | 468 (168) | 0.587 |
| Total cholesterol (mmol/L), median (IQR) | 4.82 (1.32) | 4.67 (1.56) | 4.00 (1.18) | 4.01 (1.53) | 0.223 |
| Vit D (ng/mL), median (IQR) | 24 (28) | 25 (19) | 27 (21) | 26 (16) | 0.803 |
| Sodium (mmol/L), median (IQR) | 139 (4) | 139 (4) | 141 (4) | 141 (2) | 0.061 |
| Potassium (mmol/L), median (IQR) | 4.2 (0.8) | 4.2 (0.4) | 4.2 (0.8) | 4.5 (0.7) | 0.160 |
| Calcium (mmol/L), median (IQR) | 2.32 (0.09) | 2.41 (0.11) | 2.32 (0.18) | 2.29 (0.13) | 0.007 |
| Phosphate (mmol/L), median (IQR) | 0.96 (0.16) | 0.99 (0.20) | 1.06 (0.31) | 1.52 (0.50) | <0.001 |
| Diabetes, n (%) | 4 (36.4%) | 13 (40.6%) | 31 (68.9%) | 11 (61.1%) | 0.045 |
| HbA1c (%) *, median (IQR) | 6.4 (0.4) | 6.9 (1.4) | 7.2 (1.7) | 6.8 (1.9) | 0.205 |

IQR: interquartile range; eGFR: estimated glomerular filtration rate according to the CKD-EPI formula; MIS: Malnutrition-Inflammation index; SGA: Subjective Global Assessment; BMI: Body Mass Index; PTH: parathyroid hormone; BUN: blood urea nitrogen. * only for those with diabetes in this group, with 98% available data (for CKD stages 3A, 3B, 4 and 5: 4, 13, 30, 11 respectively). In bold, significant differences.

Table S4. Biochemical data across stages: age 80-89.

| 80-89 years old (n=138) | | | | | |
|---|-------------|-------------|-------------|-------------|------------------|
| | CKD Stages | | | | P-values |
| N | 3A | 3B | 4 | 5 | |
| Creatinine (mg/L), median (IQR) | 1.08 (0.28) | 1.68 (0.30) | 2.27 (0.69) | 3.85 (1.57) | <0.001 |
| eGFR EPI (mL/min/1.73m ²), median (IQR) | 51 (4) | 35 (5) | 23 (8) | 10 (5) | <0.001 |
| Charlson index, median (IQR) | 7 (1) | 8 (3) | 9 (2) | 8 (3) | 0.027 |
| MIS, median (IQR) | 5 (3) | 6 (4) | 5 (4) | 6 (6) | 0.218 |
| SGA, n (%) | | | | | |
| A | 8 (80.0%) | 31 (75.6%) | 56 (78.8%) | 10 (58.8%) | 0.192 |
| B | 2 (20.0%) | 9 (22.0%) | 15 (21.2%) | 5 (29.4%) | |
| C | 0 (0%) | 1 (2.4%) | 0 (0%) | 2 (11.8%) | |
| Diabetes, n (%) | 2 (20.0%) | 15 (35.7%) | 35 (49.3%) | 6 (35.3%) | 0.235 |
| Cardiopathy, n (%) | 5 (50.0%) | 17 (40.5%) | 34 (47.9%) | 8 (47.1%) | 0.873 |
| Neoplasia, n (%) | 0 (0%) | 13 (31.0%) | 16 (22.5%) | 2 (11.8%) | 0.130 |
| BMI (kg.m ⁻²), median (IQR) | 30.2 (7.5) | 26.6 (4.2) | 28.5 (5.5) | 26.1 (4.4) | 0.175 |
| Albumin (g/dL), median (IQR) | 3.8 (0.4) | 3.8 (0.6) | 3.6 (0.4) | 3.4 (0.5) | 0.032 |
| Total serum proteins (g/L), median (IQR) | 69 (7) | 71 (8) | 74 (8) | 72 (10) | 0.146 |
| CRP (mg/L), median (IQR) | 4 (3) | 5 (9) | 3 (6) | 5 (7) | 0.702 |
| PTH (ng/L), median (IQR) | 49 (36) | 78 (53) | 91 (74) | 172 (135) | <0.001 |
| BUN (mg/dL), median (IQR) | 27.9 (14.8) | 31.4 (15.1) | 45.8 (19.3) | 57.0 (29.7) | <0.001 |
| Bicarbonate (mmol/L), median (IQR) | 26 (5) | 25 (5) | 24 (4) | 20 (4) | <0.001 |
| Hemoglobin (g/dL), median (IQR) | 12.2 (1.5) | 11.8 (2.4) | 11.6 (2.0) | 9.9 (1.8) | <0.001 |
| Ferritin (μg/L), median (IQR) | 163 (190) | 161 (188) | 144 (148) | 180 (191) | 0.414 |
| Transferrin (g/L), median (IQR) | 2.23 (0.62) | 2.15 (0.41) | 2.37 (0.49) | 2.14 (0.80) | 0.180 |
| Uric acid (μmol/L), median (IQR) | 437 (84) | 442 (154) | 518 (208) | 485 (184) | 0.081 |
| Total cholesterol (mmol/L), median (IQR) | 5.10 (1.68) | 4.34 (1.61) | 4.34 (2.24) | 4.87 (1.45) | 0.096 |
| Vit D (ng/mL), median (IQR) | 37 (15) | 27 (17) | 32 (16) | 31 (23) | 0.727 |
| Sodium (mmol/L), median (IQR) | 141 (2) | 141 (4) | 140 (4) | 139 (6) | 0.147 |
| Potassium (mmol/L), median (IQR) | 4.2 (0.6) | 4.3 (0.7) | 4.3 (0.5) | 4.3 (0.6) | 0.886 |
| Calcium (mmol/L), median (IQR) | 2.28 (0.22) | 2.36 (0.16) | 2.34 (0.15) | 2.34 (0.26) | 0.165 |
| Phosphate (mmol/L), median (IQR) | 1.02 (0.15) | 1.02 (0.24) | 1.11 (0.26) | 1.43 (0.35) | <0.001 |
| Diabetes, n (%) | 2 (20.0%) | 15 (35.7%) | 35 (49.3%) | 6 (35.3%) | 0.235 |
| HbA1c (%) *, median (IQR) | 7.1 (0.5) | 7.1 (1.5) | 6.9 (1.8) | 6.4 (1.4) | 0.692 |

IQR: interquartile range; eGFR: estimated glomerular filtration rate according to the CKD-EPI formula; MIS: Malnutrition-Inflammation index; SGA: Subjective Global Assessment; BMI: Body Mass Index; PTH: parathyroid hormone; BUN: blood urea nitrogen. * only for those with diabetes in this group, with 98% available data (for CKD stages 3A, 3B, 4 and 5: 2, 14, 35, 6, respectively). In bold, significant differences.

Table S5. Biochemical data across stages: age ≥90.

| ≥90 years old (n=53) | | | | | |
|---|-------------|-------------|-------------|-------------|------------------|
| N | CKD Stages | | | | P-values |
| | 3A 5 | 3B 17 | 4 21 | 5 11 | |
| Creatinine (mg/L), median (IQR) | 1.07 (0.21) | 1.44 (0.22) | 2.11 (0.66) | 4.06 (0.85) | <0.001 |
| eGFR EPI (mL/min/1.73m ²), median (IQR) | 46 (4) | 35 (7) | 22 (7) | 10 (3) | <0.001 |
| Charlson index, median (IQR) | 8 (1) | 9 (1) | 8 (2) | 9 (2) | 0.741 |
| MIS, median (IQR) | 6 (1) | 5 (2) | 7 (4) | 9 (4) | 0.349 |
| SGA, n (%) | | | | | |
| A | 2 (40%) | 8 (47.1%) | 9 (42.9%) | 4 (36.4%) | 0.481 |
| B | 3 (60%) | 9 (52.9%) | 12 (57.1%) | 5 (45.4%) | |
| C | 0 (0%) | 0 (0%) | 0 (0%) | 2 (18.2%) | |
| Diabetes, n (%) | 1 (20%) | 5 (29%) | 4 (19%) | 3 (27%) | 0.900 |
| Cardiopathy, n (%) | 4 (80%) | 5 (29%) | 7 (33%) | 6 (55%) | 0.160 |
| Neoplasia, n (%) | 0 (0%) | 2 (12%) | 3 (14%) | 2 (18%) | 0.999 |
| BMI (kg.m ⁻²), median (IQR) | 24.9 (8.1) | 27.8 (4.9) | 24.0 (4.4) | 27.8 (5.7) | 0.394 |
| Albumin (g/dL), median (IQR) | 3.7 (0.0) | 3.6 (0.2) | 3.4 (0.5) | 3.5 (0.2) | 0.143 |
| Total serum proteins (g/L), median (IQR) | 71 (3) | 73 (8) | 72 (9) | 71 (5) | 0.705 |
| CRP (mg/L), median (IQR) | 3 (3) | 3 (5) | 8 (11) | 10 (10) | 0.310 |
| PTH (ng/L), median (IQR) | 64 (63) | 83 (53) | 56 (56) | 162 (180) | 0.051 |
| BUN (mg/dL), median (IQR) | 28.3 (7.8) | 33.3 (13.0) | 45.7 (10.1) | 70.0 (40.8) | 0.009 |
| Bicarbonate (mmol/L), median (IQR) | 24 (3) | 25 (4) | 24 (6) | 22 (6) | 0.140 |
| Hemoglobin (g/dL), median (IQR) | 12.8 (1.9) | 12.4 (1.8) | 11.2 (1.5) | 10.5 (1.7) | 0.005 |
| Ferritin (μg/L), median (IQR) | 135 (136) | 158 (158) | 231 (220) | 176 (190) | 0.795 |
| Transferrin (g/L), median (IQR) | 2.33 (0.18) | 2.26 (0.21) | 2.13 (0.41) | 2.06 (1.00) | 0.492 |
| Uric acid (μmol/L), median (IQR) | 459 (62) | 414 (121) | 458 (155) | 500 (149) | 0.718 |
| Total cholesterol (mmol/L), median (IQR) | 4.66 (1.04) | 5.22 (1.65) | 5.28 (2.10) | 5.02 (2.79) | 0.706 |
| Vit D (ng/mL), median (IQR) | 34 (11) | 30 (18) | 35 (22) | 22 (30) | 0.298 |
| Sodium (mmol/L), median (IQR) | 141 (3) | 142 (5) | 140 (4) | 139 (5) | 0.884 |
| Potassium (mmol/L), median (IQR) | 4.3 (0.0) | 3.9 (0.6) | 4.4 (0.2) | 4.0 (1.3) | 0.048 |
| Calcium (mmol/L), median (IQR) | 2.38 (0.12) | 2.35 (0.15) | 2.35 (0.16) | 2.29 (0.15) | 0.021 |
| Phosphate (mmol/L), median (IQR) | 0.98 (0.03) | 1.06 (0.18) | 1.14 (0.23) | 1.49 (0.64) | 0.002 |
| Diabetes, n (%) | 1 (20%) | 5 (29%) | 4 (19%) | 3 (27%) | 0.900 |
| HbA1c (%) *, median (IQR) | 7.43 (0.0) | 7.17 (0.41) | 6.53 (0.85) | 7.35 (0.59) | - |

IQR: interquartile range; eGFR: estimated glomerular filtration rate according to the CKD-EPI formula; MIS: Malnutrition-Inflammation index; SGA: Subjective Global Assessment; BMI: Body Mass Index; PTH: parathyroid hormone; BUN: blood urea nitrogen. * only for those with diabetes in this group, with 92% available data (for CKD stages 3A, 3B, 4 and 5: 1, 4, 4, 3, respectively). In bold, significant differences.

Table S6. Distribution of protein intake across stages and ages.

| | Age | | | | | | | | | | | |
|--|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
| | <60 | | | 60 - 79 | | | ≥80 | | | p-value | overall | |
| | Stage | | | Stage | | | Stage | | | | | |
| | 3 | 4 | 5 | p-value | 3 | 4 | 5 | p-value | 3 | 4 | 5 | p-value |
| N | 26 | 20 | 16 | | 70 | 78 | 32 | | 74 | 92 | 28 | |
| Protein intake at referral, median (IQR) | 1.20 (0.20) | 1.20 (0.30) | 1.20 (0.18) | 0.968 0.352 | 1.10 (0.23) | 1.10 (0.20) | 1.00 (0.38) | 0.203 0.515 | 1.00 (0.30) | 1.00 (0.30) | 1.00 (0.20) | 0.912 0.746 |
| Protein intake classifications, n (%) | | | | | | | | | | | | |
| ≤0.8 g/kg/d | 0 (50.0%) | 1 (29.4%) | 1 (28.6%) | | 6 (56.7%) | 4 (51.4%) | 4 (55.2%) | | 8 (50.0%) | 9 (60.2%) | 3 (53.9%) | |
| 0.81-0.19 g/kg/d | 13 (50.0%) | 5 (29.4%) | 4 (28.6%) | | 38 (56.7%) | 38 (51.4%) | 16 (55.2%) | | 36 (50.0%) | 53 (60.2%) | 14 (53.9%) | |
| ≥1.2 g/kg/d | 13 (50.0%) | 11 (64.7%) | 9 (64.3%) | | 23 (34.3%) | 32 (43.2%) | 9 (31.0%) | | 28 (38.9%) | 26 (29.6%) | 9 (34.6%) | |

IQR: interquartile range.

Table S7. Distribution of protein intake across CCI groups and ages.

| | Age | | | | | | | | | | | | overall | |
|--|----------------|----------------|---------|---------|----------------|----------------|----------------|-------|----------------|----------------|----------------|-------|---------|--|
| | <60 | | | 60 - 79 | | | ≥80 | | | | | | | |
| | CCI | | p-value | CCI | | p-value | CCI | | p-value | | | | | |
| | ≤7 | 8 to 10 | ≥11 | | ≤7 | 8 to 10 | ≥11 | | ≤7 | 8 to 10 | ≥11 | | | |
| N | 53 | 9 | 0 | | 84 | 79 | 17 | | 60 | 106 | 28 | | | |
| Protein intake at referral, median (IQR) | 1.20 (0.19) | 1.20 (0.20) | - | 0.434 | 1.10 (0.20) | 1.00 (0.30) | 1.10 (0.20) | 0.992 | 1.00 (0.20) | 1.10 (0.30) | 1.00 (0.35) | 0.223 | 0.105 | |
| Protein intake classifications, n (%) | | | | 0.999 | | | | 0.778 | | | | 0.369 | | |
| ≤0.8 g/kg/d | 2 (4.0%) | 0 (0%) | - | | 7 (8.5%) | 5 (6.7%) | 2 (15.4%) | | 5 (8.6%) | 9 (8.9%) | 6 (22.2%) | | | |
| 0.81-0.19 g/kg/d | 19 (38.0%) | 3 (42.9%) | | | 43 (52.5%) | 43 (57.3%) | 6 (46.1%) | | 34 (58.6%) | 55 (54.5%) | 14 (51.9%) | | | |
| ≥1.2 g/kg/d | 29 (58.0%) | 4 (57.1%) | - | | 32 (39.0%) | 27 (36.0%) | 5 (38.5%) | | 19 (32.8%) | 37 (36.6%) | 7 (25.9%) | | | |

IQR: interquartile range.

Table S8. Cox regression analysis of survival according to baseline diet and CCI .

| | Hazard ratio | CI 95% | | p-value |
|--|--------------|--------|--------|---------|
| | | Lower | Higher | |
| Protein intake at referral ≥ 1 g/kg/day | 1.053 | 0.639 | 1.737 | 0.838 |
| CCI dichotomized at median (≥ 8) | 3.812 | 2.271 | 6.398 | <0.001 |
| Gender (female/male) | 0.936 | 0.611 | 1.434 | 0.761 |

Concordance c-index: 0.65 ($\pm 0.029_{SE}$); AIC: 981.8; CCI: Charlson Comorbidity Index.

Table S9. Cox regression analysis of survival according to baseline diet and age.

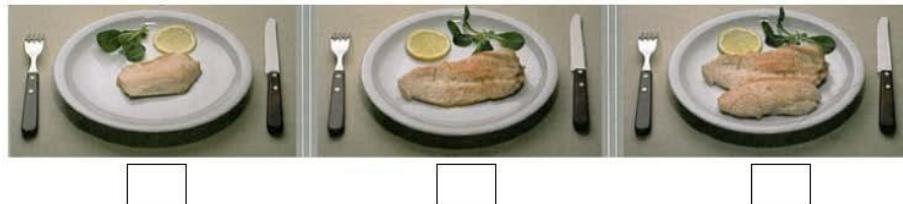
| | Hazard ratio | CI 95% | | p-value |
|---|--------------|--------|--------|---------|
| | | Lower | Higher | |
| Protein intake at referral ≥ 1 g/kg/day | 1.007 | 0.611 | 1.660 | 0.979 |
| Age dichotomized at median (≥ 78 years old) | 2.458 | 1.570 | 3.850 | <0.001 |
| Gender (female/male) | 0.832 | 0.543 | 1.276 | 0.400 |

Concordance c-index: 0.61 ($\pm 0.028_{SE}$); AIC: 996.9. In bold, significant differences.

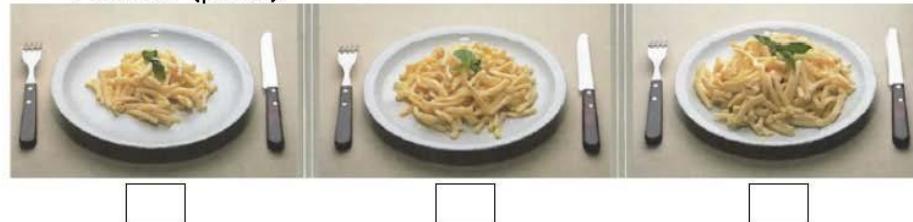
Portions :

Veuillez cocher les cases correspondant aux portions consommées pour un repas

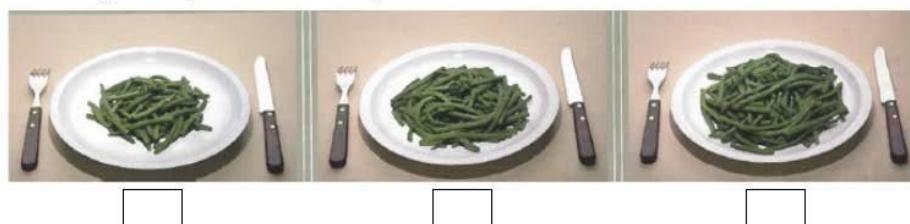
- Viande



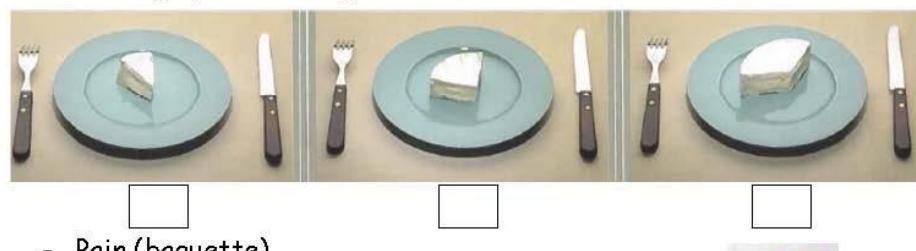
- Féculent (pâtes)



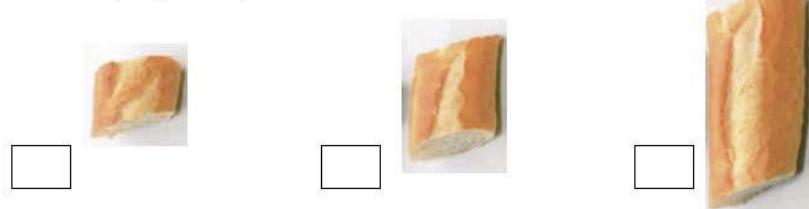
- Légumes (haricots verts)



- Fromage (camembert)



- Pain (baguette)



Equipe de Diététique/nutrition - Centre Hospitalier - 194, avenue Rubillard - 72037 LE MANS Cedex 9

Figure S1. Visual aid for the serving size currently employed in our service to integrate the 7-day food diary and the interview with the dietitian.

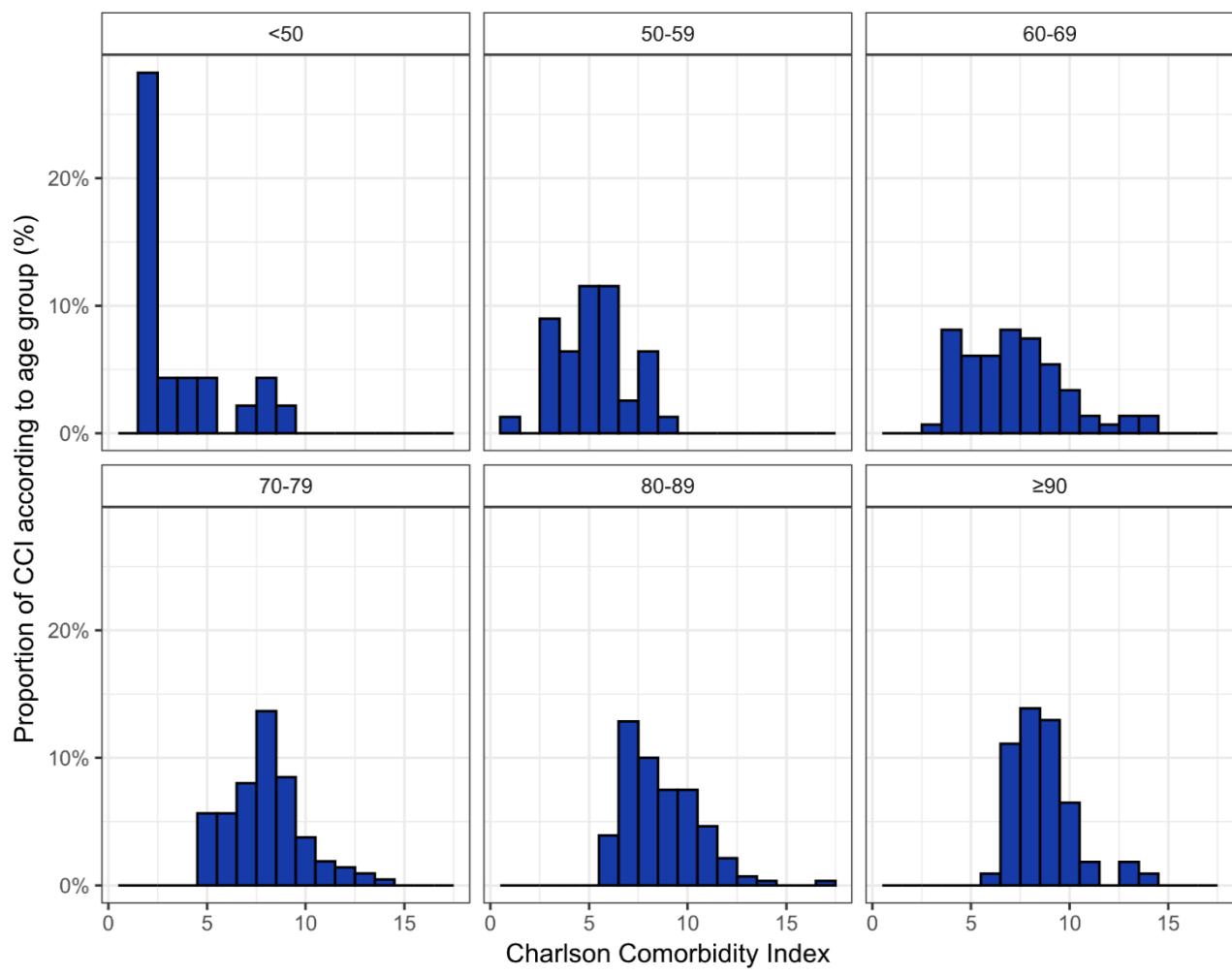


Figure S2. Charlson Comorbidity Index distribution according to age groups.

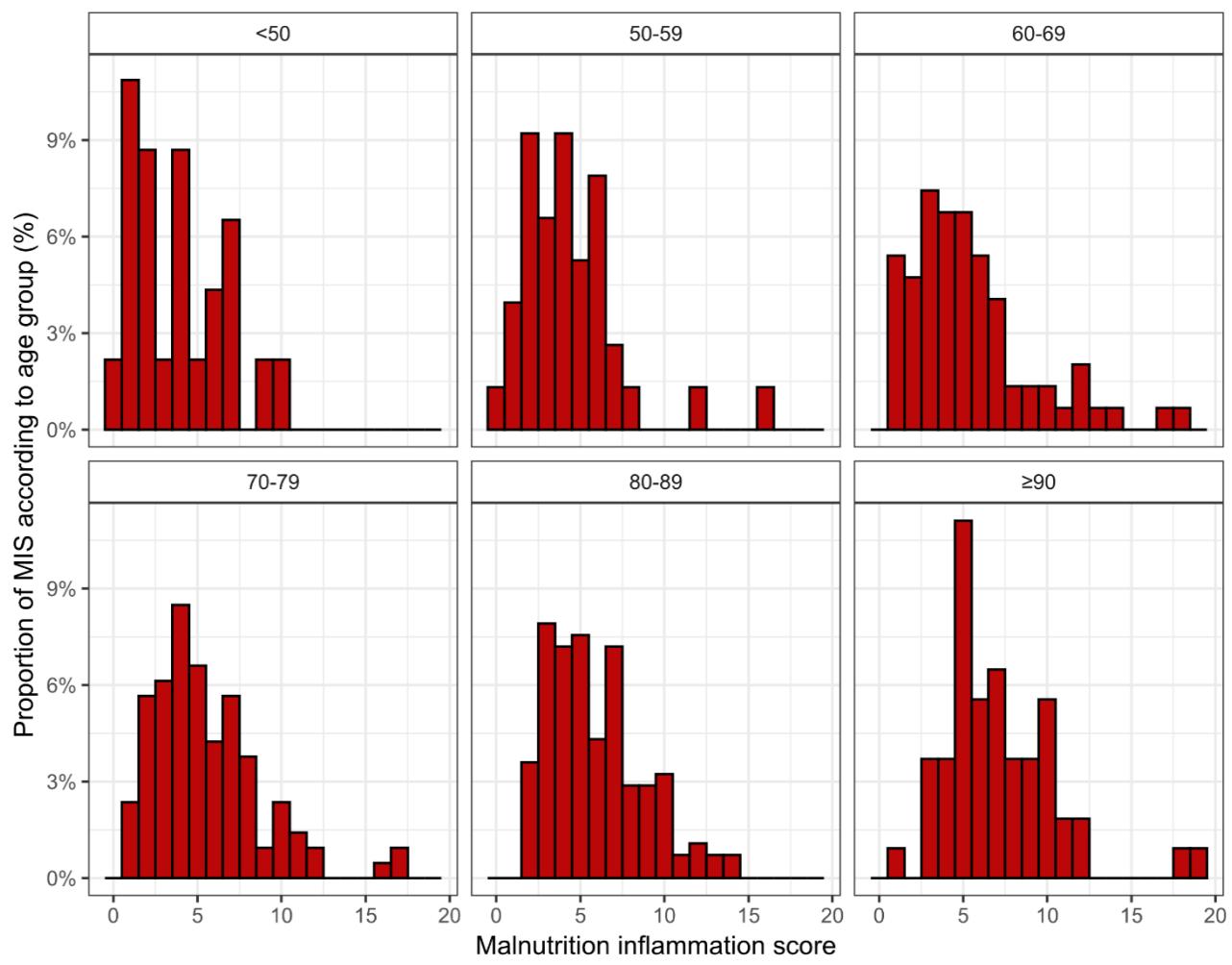


Figure S3. Malnutrition-Inflammation Score distribution according to age groups.

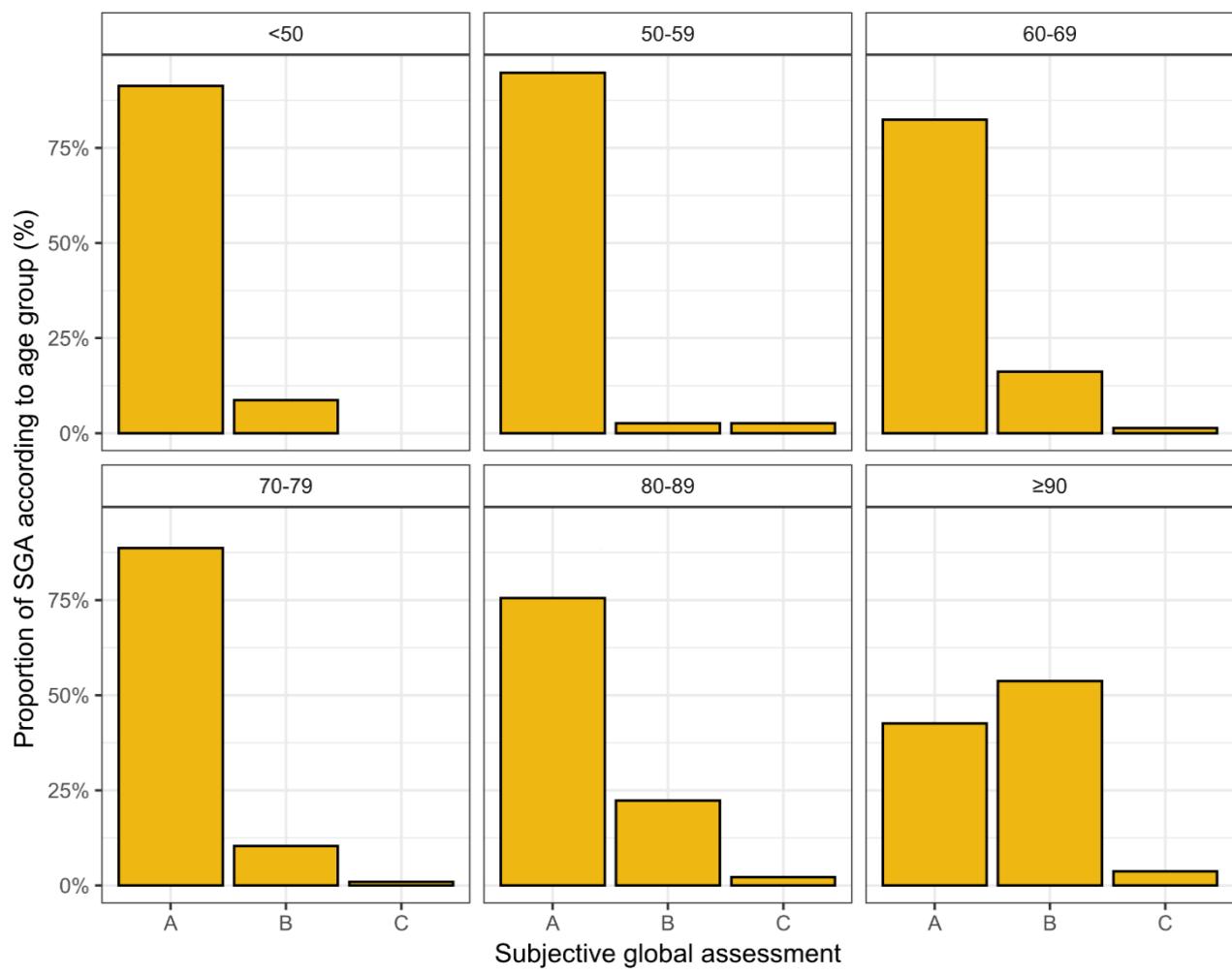


Figure S4. Subjective Global Assessment distribution according to age groups.

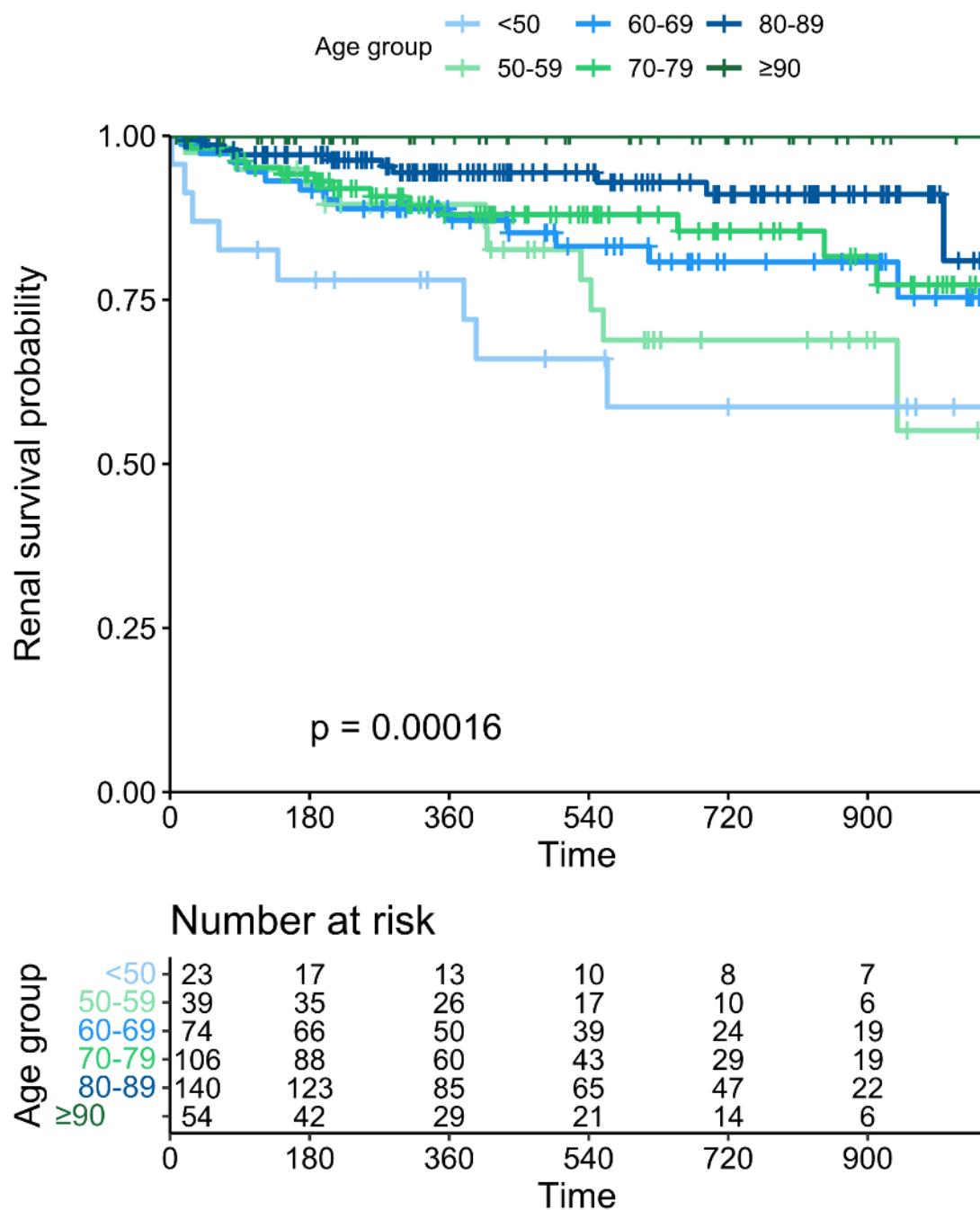


Figure S5. Renal survival in patients followed up at UIRAV, according to age at referral.

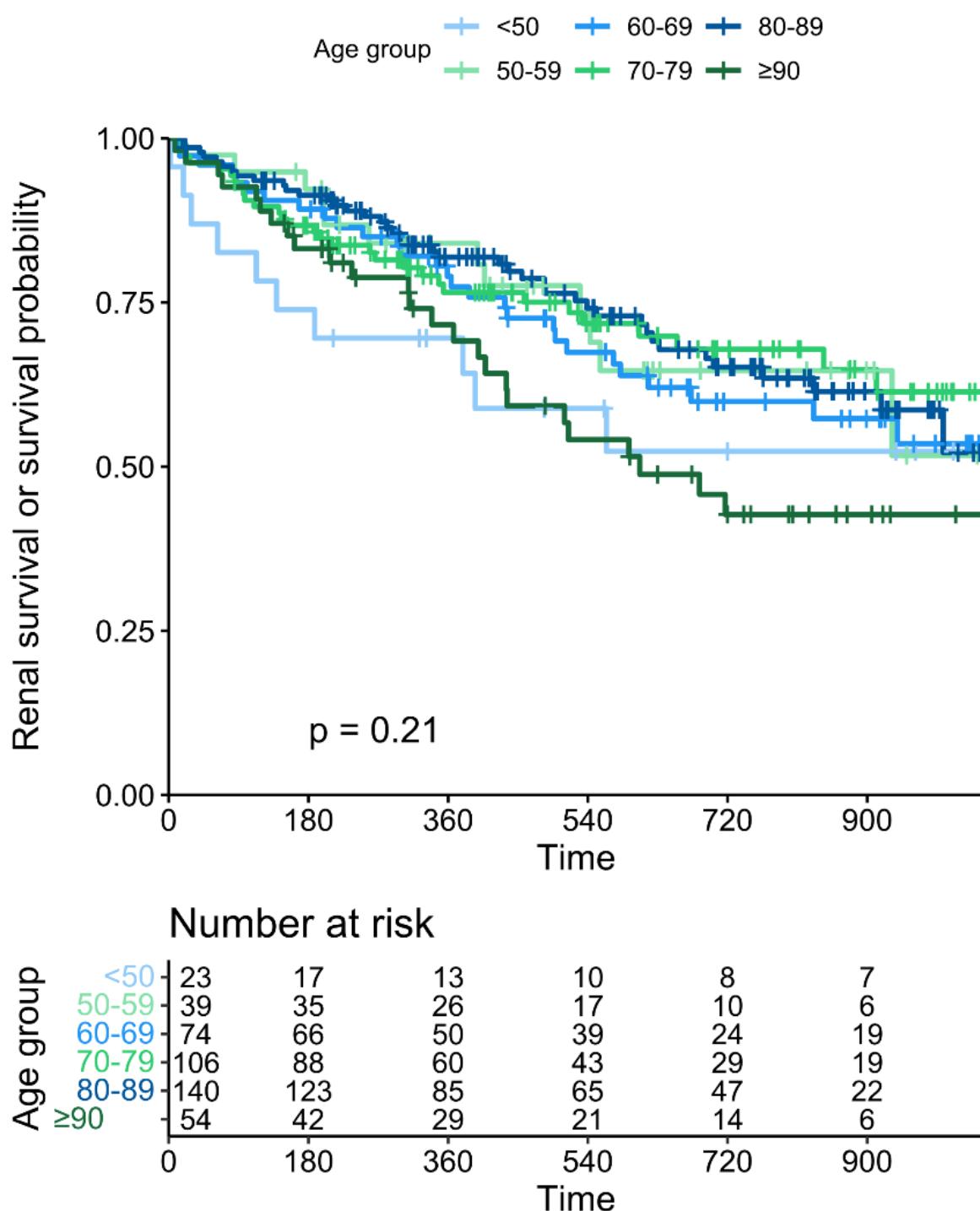


Figure S6. Total drop out (death, dialysis start, or loss to follow-up) in patients at UIRAV, according to age at referral.

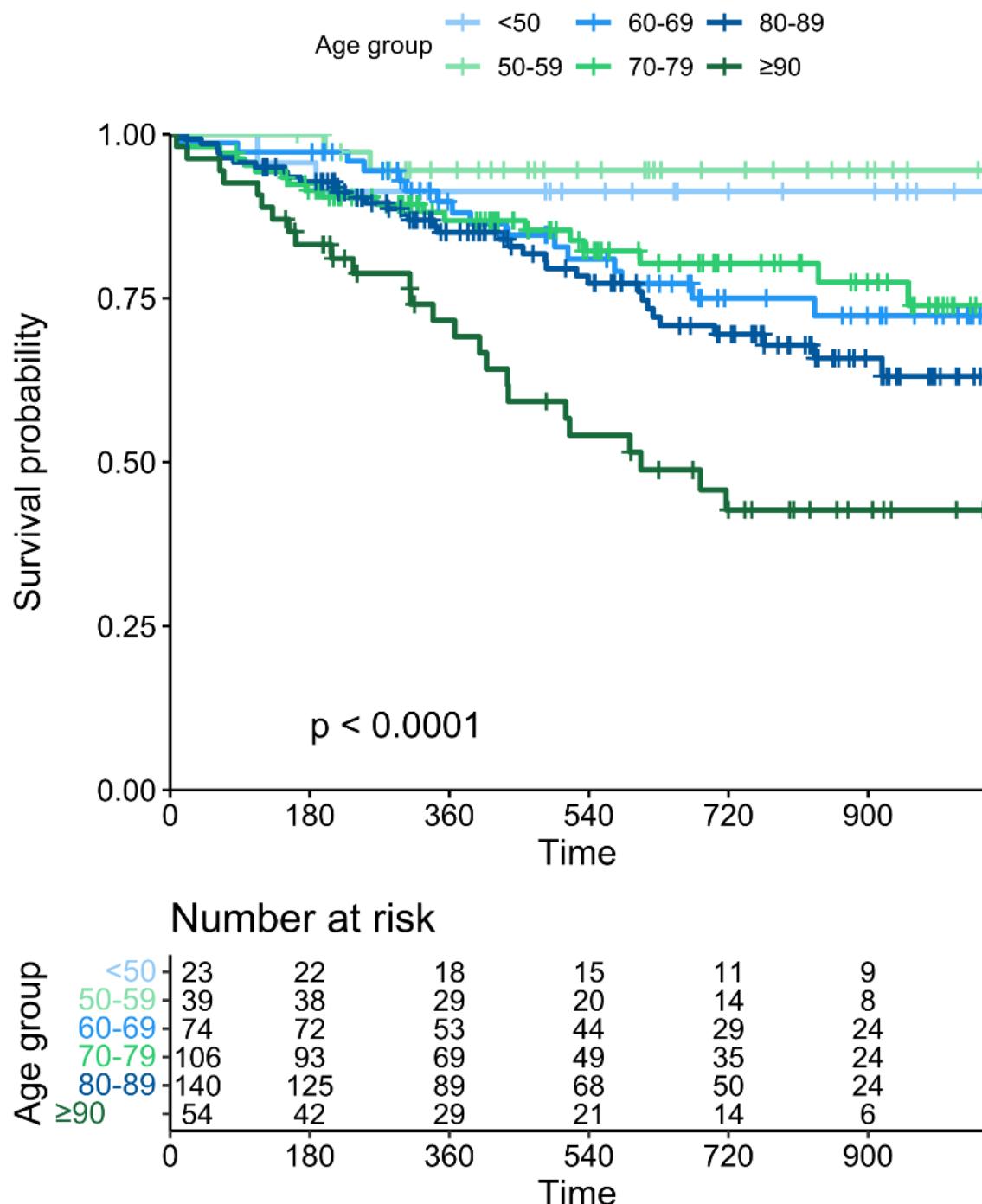


Figure S7. Survival in patients followed up at UIRAV, according to age at referral.