Table S1. Characteristics of patients with ischemic stroke by the eGFR levels at admission

|  |  |  |
| --- | --- | --- |
| Variable | eGFR mL/min/1.73 m2 |  |
| Total (N=46707) | ≥90 (n=9367) | 60-89 (n=19904) | 30-59 (n=13704) | <30 (n=2203) | <15 or dialysis(n=1529) | p-value |
| n | % | n | % | n | % | n | % | n | % | n | % |
| Gender |  |  |  |  |  |  |  |  |  |  |  |  | <.0001 |
| Female | 18411 | 39.42 | 3552 | 37.92 | 7442 | 37.39 | 5608 | 40.92 | 1047 | 47.53 | 762 | 49.84 |  |
| Male | 28296 | 60.58 | 5815 | 62.08 | 12462 | 62.61 | 8096 | 59.08 | 1156 | 52.47 | 767 | 50.16 |  |
| Age, years |  |  |  |  |  |  |  |  |  |  |  |  | <.0001 |
| < 60 | 12378 | 26.50 | 5617 | 59.97 | 4749 | 23.86 | 1421 | 10.37 | 253 | 11.48 | 338 | 22.11 |  |
| 60-70 | 11521 | 24.67 | 2761 | 29.48 | 5227 | 26.26 | 2753 | 20.09 | 361 | 16.39 | 419 | 27.40 |  |
| 71-80 | 13680 | 29.29 | 865 | 9.23 | 6530 | 32.81 | 5104 | 37.24 | 748 | 33.95 | 433 | 28.32 |  |
| > 80 | 9128 | 19.54 | 124 | 1.32 | 3398 | 17.07 | 4426 | 32.3 | 841 | 38.18 | 339 | 22.17 |  |
| Median (Q1, Q3)  | 69.61 (59.36,78.01) | 57.58(50.00,63.86) | 69.97(60.48,77.44) | 75.48(67.84,81.89) | 76.96(68.77,83.08) | 70.18(61.03,78.92) | <.0001 |
| TOAST |  |  |  |  |  |  |  |  |  |  |  |  | <.0001 |
| Large artery atherosclerosis | 12433 | 26.62 | 2419 | 25.82 | 5258 | 26.42 | 3720 | 27.15 | 639 | 29.01 | 397 | 25.96 |  |
| Small vessel occlusion | 18002 | 38.54 | 4019 | 42.91 | 7958 | 39.98 | 4810 | 35.1 | 679 | 30.82 | 536 | 35.06 |  |
| Cardioembolism  | 3525 | 7.55 | 1048 | 11.19 | 1436 | 7.21 | 789 | 5.76 | 139 | 6.31 | 113 | 7.39 |  |
| Determined and undetermined etiology | 12747 | 27.29 | 1881 | 20.08 | 5252 | 26.39 | 4385 | 32.00 | 746 | 33.86 | 483 | 31.59 |  |
| Location |  |  |  |  |  |  |  |  |  |  |  |  | <.0001 |
| No significant finding | 9861 | 21.11 | 2088 | 22.29 | 4176 | 20.98 | 2825 | 20.61 | 445 | 20.20 | 327 | 21.39 |  |
| Anterior circulation  | 17473 | 37.41 | 3315 | 35.39 | 7573 | 38.05 | 5218 | 38.08 | 824 | 37.40 | 543 | 35.51 |  |
| Posterior circulation | 9365 | 20.05 | 2222 | 23.72 | 4007 | 20.13 | 2473 | 18.05 | 382 | 17.34 | 281 | 18.38 |  |
| Both | 1761 | 3.77 | 290 | 3.10 | 714 | 3.59 | 601 | 4.39 | 91 | 4.13 | 65 | 4.25 |  |
| Other | 8247 | 17.66 | 1452 | 15.50 | 3434 | 17.25 | 2587 | 18.88 | 461 | 20.93 | 313 | 20.47 |  |
| BMI, kg/m2 |  |  |  |  |  |  |  |  |  |  |  |  | <.0001 |
| <18.5 | 2009 | 4.30 | 356 | 3.80 | 840 | 4.22 | 582 | 4.25 | 126 | 5.72 | 105 | 6.87 |  |
| 18.5-25 | 24783 | 53.06 | 4717 | 50.36 | 10620 | 53.36 | 7363 | 53.73 | 1172 | 53.20 | 911 | 59.58 |  |
| ≥ 25 | 19915 | 42.64 | 4294 | 45.84 | 8444 | 42.42 | 5759 | 42.02 | 905 | 41.08 | 513 | 33.55 |  |
| Median (Q1, Q3) | 24.35(22.03,26.98) | 24.67(22.30,27.34) | 24.34(22.07,26.95) | 24.25(21.96,26.81) | 24.14(21.83,26.89) | 23.37(21.12,25.92) | <.0001 |
| Comorbidity |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Smoking |  |  |  |  |  |  |  |  |  |  |  |  | <.0001 |
| Current | 11674 | 24.99 | 3283 | 35.05 | 5138 | 25.81 | 2674 | 19.51 | 359 | 16.30 | 220 | 14.39 |  |
| Past | 5965 | 12.77 | 928 | 9.91 | 2518 | 12.65 | 1975 | 14.41 | 337 | 15.30 | 207 | 13.54 |  |
| Atrial fibrillation  | 3514 | 7.52 | 382 | 4.08 | 1457 | 7.32 | 1329 | 9.70 | 212 | 9.62 | 134 | 8.76 | <.0001 |
| Previous stroke history | 11733 | 25.12 | 1557 | 16.62 | 4804 | 24.14 | 4127 | 30.12 | 772 | 35.04 | 473 | 30.94 | <.0001 |
| Ischemic heart disease | 5876 | 12.58 | 617 | 6.59 | 2196 | 11.03 | 2193 | 16 | 483 | 21.92 | 387 | 25.31 | <.0001 |
| Congestive heart failure | 1101 | 2.36 | 92 | 0.98 | 342 | 1.72 | 469 | 3.42 | 113 | 5.13 | 85 | 5.56 | <.0001 |
| Diabetes mellitus | 19053 | 40.79 | 3677 | 39.25 | 7254 | 36.44 | 5890 | 42.98 | 1275 | 57.88 | 957 | 62.59 | <.0001 |
| Systolic blood pressure, mm Hg  |  |  |  |  |  |  |  |  |  |  |  |  | <.0001 |
| < 120 | 3547 | 7.59 | 716 | 7.64 | 1290 | 6.48 | 1083 | 7.90 | 264 | 11.98 | 194 | 12.69 |  |
| 120-139 | 8046 | 17.23 | 1628 | 17.38 | 3396 | 17.06 | 2370 | 17.29 | 388 | 17.61 | 264 | 17.27 |  |
| 140-159 | 12678 | 27.14 | 2614 | 27.91 | 5491 | 27.59 | 3660 | 26.71 | 549 | 24.92 | 364.00 | 23.81 |  |
| 160-179 | 10589 | 22.67 | 2107 | 22.49 | 4657 | 23.4 | 3051 | 22.26 | 462 | 20.97 | 312 | 20.41 |  |
| 180-199 | 6731 | 14.41 | 1342 | 14.33 | 2943 | 14.79 | 1950 | 14.23 | 285 | 12.94 | 211 | 13.8 |  |
| ≥ 200 | 5113 | 10.95 | 960 | 10.25 | 2127 | 10.69 | 1590 | 11.60 | 255 | 11.58 | 184 | 12.03 |  |
| Median (Q1, Q3) | 158(140,180) | 158(139,179) | 159(140,180) | 158(139,180) | 156(136,179) | 157(135,181) | <.0001 |
| Diastolic blood pressure, mm Hg |  |  |  |  |  |  |  |  |  |  |  |  | <.0001 |
| <80 | 14449 | 30.94 | 2151 | 22.96 | 5762 | 28.95 | 4884 | 35.64 | 976 | 44.30 | 676 | 44.21 |  |
| 80-89 | 10602 | 22.70 | 2101 | 22.43 | 4678 | 23.50 | 3063 | 22.35 | 447 | 20.29 | 313 | 20.47 |  |
| 90-99 | 9314 | 19.94 | 2070 | 22.10 | 4123 | 20.71 | 2515 | 18.35 | 368 | 16.7 | 238 | 15.57 |  |
| 100-109 | 6086 | 13.03 | 1476 | 15.76 | 2657 | 13.35 | 1595 | 11.64 | 203 | 9.21 | 155 | 10.14 |  |
| 110-119 | 3326 | 7.12 | 851 | 9.09 | 1441 | 7.24 | 851 | 6.21 | 100 | 4.54 | 83 | 5.43 |  |
| ≥ 120 | 2930 | 6.27 | 718 | 7.67 | 1243 | 6.24 | 796 | 5.81 | 109 | 4.95 | 64 | 4.19 |  |
| Median (Q1, Q3) | 88(76,100) | 91(80,104) | 88(78,100) | 85(74,99) | 82(70,95) | 82(70,96) | <.0001 |
| Cholesterol, mg/dL |  |  |  |  |  |  |  |  |  |  |  |  | <.0001 |
| < 120 | 13468 | 28.84 | 2288 | 24.43 | 5921 | 29.75 | 4284 | 31.26 | 595 | 27.01 | 380 | 24.85 |  |
| 120-159 | 10811 | 23.15 | 2019 | 21.55 | 4581 | 23.02 | 3257 | 23.77 | 564 | 25.60 | 390 | 25.51 |  |
| 160-199 | 11513 | 24.65 | 2536 | 27.07 | 4967 | 24.95 | 3167 | 23.11 | 479 | 21.74 | 364 | 23.81 |  |
| ≥ 200 | 10915 | 23.37 | 2524 | 26.95 | 4435 | 22.28 | 2996 | 21.86 | 565 | 25.65 | 395 | 25.83 |  |
| Median (Q1, Q3) | 156(110,196) | 165(121,203) | 155(109,195) | 152(107,192) | 156(116,200) | 159(120,201) | <.0001 |
| Hemoglobin, g/dL Median (Q1, Q3)  | 13.8(12.5,15.1) | 14.5(13.3,15.6) | 14.1(12.9,15.2) | 13.4(12.1,14.7) | 11.8(10.4,13.2) | 10.9(9.6,12.2) | <.0001 |
| HbA1c, %Median (Q1, Q3)  | 7.19(6.20,7.78) | 7.55(6.00,7.84) | 7.18(6.10,7.63) | 7.13(6.30,7.60) | 7.19(6.40,7.78) | 7.19(6.20,7.78) | <.0001 |
| Albumin, g/dLMedian (Q1, Q3)  | 3.76(3.55,3.91) | 3.83(3.70,3.90) | 3.76(3.60,3.90) | 3.67(3.50,3.84) | 3.61(3.39,3.80) | 3.68(3.30,3.84) | 0.08 |
| LDL cholesterol, mg/dLMedian (Q1, Q3) | 73.4(40.0,106.0) | 77.4(42.0,116.0) | 73.8(40.5,107.0) | 64.9(39.0,99.0) | 66.0(37.0,95.0) | 73.0(39.0,95.0) | <.0001 |
| NIHSS score at admission |  |  |  |  |  |  |  |  |  |  |  |  | <.0001 |
| ≤5 | 28327 | 60.65 | 6372 | 68.03 | 12380 | 62.2 | 7640 | 55.75 | 1121 | 50.89 | 814 | 53.24 |  |
| 6-20 | 14796 | 31.68 | 2615 | 27.92 | 6163 | 30.96 | 4690 | 34.22 | 806 | 36.59 | 522 | 34.14 |  |
| >20 | 3584 | 7.67 | 380 | 4.06 | 1361 | 6.84 | 1374 | 10.03 | 276 | 12.53 | 193 | 12.62 |  |
|  | 4(3,9) | 4(3,7) | 4(3,8) | 5(3,10) | 5(4,12) | 5(4,12) |  |
| Medicine before admission |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Antiplatelet | 8981 | 19.23 | 1176 | 12.55 | 3617 | 18.17 | 3180 | 23.20 | 597 | 27.10 | 411 | 26.88 | <.0001 |
| Warfarin | 1164 | 2.49 | 185 | 1.98 | 509 | 2.56 | 383 | 2.79 | 64 | 2.91 | 23 | 1.50 | 0.0001 |
| Statin | 9750 | 20.87 | 2453 | 26.19 | 4175 | 20.98 | 2448 | 17.86 | 393 | 17.84 | 281 | 18.38 | <.0001 |
| Treatment  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| rTPA | 1382 | 2.96 | 292 | 3.12 | 624 | 3.14 | 397 | 2.90 | 52 | 2.36 | 17 | 1.11 | <.0001 |
| Discharge disposition |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Death | 1535 | 3.29 | 149 | 1.59 | 527 | 2.65 | 570 | 4.16 | 152 | 6.90 | 137 | 8.96 | <.0001 |
| Home  | 40074 | 85.80 | 8504 | 90.79 | 17345 | 87.14 | 11346 | 82.79 | 1704 | 77.35 | 1175 | 76.85 | <.0001 |
| Nursing home  | 2613 | 5.59 | 270 | 2.88 | 1012 | 5.08 | 1013 | 7.39 | 215 | 9.76 | 103 | 6.74 | <.0001 |
| Respiratory Care Ward | 2261 | 4.84 | 424 | 4.53 | 946 | 4.75 | 687 | 5.01 | 113 | 5.13 | 91 | 5.95 | <.0001 |
| Transfer | 224 | 0.48 | 20 | 0.21 | 74 | 0.37 | 88 | 0.64 | 19 | 0.86 | 23 | 1.50 | <.0001 |

Abbreviations: eGFR, estimated glomerular ﬁltration rate; Q1, 25th percentile; Q3, 75th percentile; TOAST, Trial of ORG 10172 in Acute Stroke Treatment; BMI, body mass index; HbA1c, glycohemoglobin; LDL, low-density lipoprotein; NIHSS, National Institutes of Health Stroke Scale; rTPA, recombinant tissue-type plasminogen activator.