Supplementary Table 1. Trends in crude, age-standardized ischemic stroke incidence rate per 100,000 person-year by sex, 2010-2019

| Sex | Year | Crude Rate per 100,000 | Age standardized rate per 100,000 (2005 population of the year of Korea) | Age standardized rate per 100,000 (WHO standard population) |
|-----|------|-----------------------|------------------------------------------------------------------------|-------------------------------------------------------------|
| Men | 2010 | 106.7 (105.2, 108.2)  | 101.0 (99.6,102.4)                                                  | 106.3 (104.8, 107.8)                                         |
|     | 2011 | 106.7 (105.2, 108.2)  | 98.4 (97.0,99.7)                                                   | 103.3 (101.9, 104.8)                                         |
|     | 2012 | 105 (103.5, 106.4)    | 93.4 (92.1,94.6)                                                   | 98.2 (96.9, 99.6)                                             |
|     | 2013 | 105.6 (104.1, 107.0)  | 91.8 (90.5,93.0)                                                   | 96.6 (95.2, 97.9)                                             |
|     | 2014 | 105.4 (104.0, 106.9)  | 89.3 (88.0,90.5)                                                   | 93.8 (92.6, 95.1)                                             |
|     | 2015 | 103.9 (102.5, 105.2)  | 85.7 (84.6,86.9)                                                   | 90.1 (88.9, 91.4)                                             |
|     | 2016 | 108.3 (106.9, 109.7)  | 87.1 (86.0,88.3)                                                   | 91.5 (90.3, 92.7)                                             |
|     | 2017 | 113.5 (112.1, 115.0)  | 88.7 (87.6,89.9)                                                   | 93.3 (92.1, 94.5)                                             |
|     | 2018 | 115.8 (114.4, 117.3)  | 87.7 (86.6,88.9)                                                   | 92.4 (91.3, 93.6)                                             |
|     | 2019 | 124.8 (123.3, 126.3)  | 92.2 (91.1,93.4)                                                   | 97.1 (95.9, 98.3)                                             |

| P for trend | 0.073 | 0.040 | 0.040 |

| Women | 2010 | 90.1 (88.8, 91.5) | 67.6 (66.5,68.6) | 71.8 (70.8, 72.9) |
|       | 2011 | 90.0 (88.7, 91.3) | 65.9 (64.9,66.9) | 70.1 (69.0, 71.1) |
|       | 2012 | 86.5 (85.2, 87.8) | 61.3 (60.4,62.3) | 65.3 (64.3, 66.3) |
|       | 2013 | 84.6 (83.4, 85.9) | 58.3 (57.3,59.2) | 62.1 (61.2, 63.1) |
|       | 2014 | 85.0 (83.8, 86.3) | 56.8 (55.9,57.7) | 60.6 (59.6, 61.5) |
|       | 2015 | 83.5 (82.3, 84.7) | 54.1 (53.3,55.0) | 57.9 (57.1, 58.8) |
|       | 2016 | 83.0 (81.8, 84.3) | 52.1 (51.3,53.0) | 55.8 (54.9, 56.6) |
|       | 2017 | 85.3 (84.1, 86.6) | 52.0 (51.2,52.8) | 55.7 (54.8, 56.5) |
|       | 2018 | 85.3 (84.1, 86.5) | 50.7 (49.9,51.5) | 54.4 (53.5, 55.2) |
|       | 2019 | 93.4 (92.1, 94.7) | 55.0 (54.2,55.9) | 58.7 (57.8, 59.6) |

| P for trend | 0.431 | < 0.001 | < 0.001 |
Supplementary Table 2. Trends in crude ischemic stroke incidence rate per 100,000 person-year of age groups by sex, 2010-2019

|         | Men             |          |          |          |          |          |         | Women    |          |          |          |          |          |          |
|---------|-----------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
|         | 20-29           | 30-39    | 40-49    | 50-59    | 60-69†   | 70-79    | 80-      | 20-29    | 30-39    | 40-49    | 50-59    | 60-69    | 70-79    | 80-      |
| 2010    | 4.2             | 15.9     | 55.8     | 132.9    | 272.1    | 478.3    | 666.1    | 3.8      | 10.3     | 33.8     | 72.1     | 170.1    | 369.9    | 536.1    |
| 2011    | 4.7             | 16.7     | 55.7     | 128.6    | 268.7    | 455.4    | 624.3    | 4.3      | 11.7     | 32.7     | 68.8     | 166.1    | 353.3    | 530.2    |
| 2012    | 4.7             | 16.3     | 49.8     | 126.9    | 250.2    | 439.7    | 589.2    | 4.9      | 10.9     | 30.1     | 68.2     | 148.9    | 326.5    | 492.2    |
| 2013    | 5.2             | 16.7     | 49.7     | 123.5    | 240.6    | 435.4    | 584.1    | 4.6      | 10.9     | 28.3     | 63.2     | 137.2    | 316.5    | 486.3    |
| 2014    | 5.8             | 17.4     | 49.1     | 121.6    | 229.6    | 418.9    | 559.4    | 4.8      | 11.1     | 28.3     | 59.6     | 131.2    | 306.3    | 488.9    |
| 2015    | 4.6             | 15.5     | 48.5     | 116      | 221.1    | 404      | 547.2    | 5.9      | 10.4     | 24.6     | 58       | 122.2    | 295.9    | 476.2    |
| 2016    | 3.8             | 15.8     | 50.6     | 124.4    | 217.3    | 406.5    | 551.5    | 3.2      | 9.4      | 25.6     | 55.9     | 115.3    | 287.8    | 476.4    |
| 2017    | 3.3             | 16.4     | 51.4     | 124.5    | 226.6    | 400.8    | 592.1    | 3.8      | 10.3     | 25.4     | 54.4     | 114.8    | 278.8    | 492.5    |
| 2018    | 4.6             | 14.9     | 49.3     | 123.6    | 225.7    | 395.8    | 596.6    | 4.9      | 11.3     | 25.1     | 54       | 103.7    | 272.4    | 484.2    |
| 2019    | 5.3             | 18.7     | 50.3     | 133.9    | 233.8    | 411.6    | 601.1    | 6.7      | 11.8     | 30       | 60.5     | 117.2    | 273.5    | 502.4    |
| P-for trend | 0.788 | 0.929 | 0.425 | 0.531 | 0.156 | 0.002 | 0.531 | 0.128 | 0.655 | 0.025 | 0.002 | < 0.001 | < 0.001 | 0.245 |

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Supplementary Table 3. Trends in age-standardized incidence rate of ischemic stroke per 100,000 person-year according to household income, 2010-2019

|       | Medical aid beneficiaries | 1st       | 2nd       | 3rd       | 4th       | 5th       |
|-------|---------------------------|-----------|-----------|-----------|-----------|-----------|
| 2010  | 126.3 (120.5, 132.0)      | 89.4 (87.0, 91.8) | 91.0 (88.4, 93.6) | 86.4 (84.1, 88.6) | 86.3 (84.3, 88.2) | 84.0 (82.4, 85.5) |
| 2011  | 121.9 (116.3, 127.5)      | 87.8 (85.5, 90.1) | 88.9 (86.3, 91.4) | 88.2 (85.9, 90.5) | 82.5 (80.6, 84.4) | 80.1 (78.6, 81.6) |
| 2012  | 118.3 (112.5, 124.2)      | 84.6 (82.3, 86.8) | 84.0 (81.7, 86.4) | 82.0 (79.8, 84.1) | 79.5 (77.7, 81.4) | 74.9 (73.4, 76.3) |
| 2013  | 118.1 (112.0, 124.2)      | 80.0 (77.9, 82.0) | 82.0 (79.6, 84.3) | 80.9 (78.8, 83.0) | 78.0 (76.2, 79.8) | 71.4 (70.0, 72.7) |
| 2014  | 114.6 (108.5, 120.7)      | 77.9 (75.9, 79.9) | 80.4 (78.1, 82.6) | 78.8 (76.8, 80.8) | 74.9 (73.2, 76.6) | 70.6 (69.3, 72.0) |
| 2015  | 109.3 (103.4, 115.1)      | 74.8 (72.8, 76.7) | 76.3 (74.1, 78.5) | 75.1 (73.2, 77.1) | 71.9 (70.3, 73.5) | 68.1 (66.8, 69.5) |
| 2016  | 105.8 (100.4, 111.1)      | 76.2 (74.2, 78.1) | 77.2 (75.2, 79.3) | 75.3 (73.4, 77.3) | 70.7 (69.2, 72.3) | 66.3 (65.0, 67.6) |
| 2017  | 119.6 (113.3, 125.9)      | 75.6 (73.8, 77.5) | 76.5 (74.5, 78.6) | 76.6 (74.7, 78.4) | 71.7 (70.2, 73.3) | 67.1 (65.8, 68.4) |
| 2018  | 119.1 (113.2, 125.1)      | 75.8 (73.9, 77.6) | 76.5 (74.5, 78.6) | 73.9 (72.1, 75.7) | 69.7 (68.2, 71.2) | 65.2 (64.0, 66.5) |
| 2019  | 128.5 (122.0, 135.0)      | 82.0 (80.2, 83.8) | 78.4 (76.2, 80.5) | 77.0 (75.2, 78.9) | 76.8 (75.2, 78.4) | 68.9 (67.6, 70.2) |
| P-for trend | 0.531 | 0.025 | 0.003 | 0.010 | 0.003 | 0.002 |
**Supplementary Table 4. Trends in rate ratio of ischemic stroke incidence rates between medical aid beneficiaries and highest income group**

| Year | Rate ratio (C.I.) |
|------|------------------|
| 2010 | 1.50 (1.43, 1.58) |
| 2011 | 1.52 (1.45, 1.60) |
| 2012 | 1.58 (1.50, 1.67) |
| 2013 | 1.65 (1.57, 1.75) |
| 2014 | 1.62 (1.53, 1.72) |
| 2015 | 1.60 (1.52, 1.70) |
| 2016 | 1.60 (1.51, 1.68) |
| 2017 | 1.78 (1.68, 1.89) |
| 2018 | 1.83 (1.73, 1.93) |
| 2019 | 1.87 (1.77, 1.97) |