

**Table S1** Subgroup analysis of lung cancer incidence after propensity score matching

| Characteristics         | Group     | Number | Events | Person-years | IR (Per 100,000 PY) | HR (95% CI)         | P-value |
|-------------------------|-----------|--------|--------|--------------|---------------------|---------------------|---------|
| Age group, years        |           |        |        |              |                     |                     |         |
| 40–49                   | ARB group | 34323  | 26     | 144989       | 17.9                | REF                 | 0.0266  |
|                         | CCB group | 34323  | 46     | 147401       | 31.2                | 1.723 (1.065–2.788) |         |
| 50–59                   | ARB group | 67374  | 152    | 285350       | 53.3                | REF                 | 0.1278  |
|                         | CCB group | 67374  | 187    | 294160       | 63.6                | 1.181 (0.953–1.463) |         |
| 60–69                   | ARB group | 45888  | 273    | 187648       | 145.5               | REF                 | 0.0592  |
|                         | CCB group | 45888  | 338    | 196181       | 172.3               | 1.166 (0.994–1.368) |         |
| ≥70                     | ARB group | 19366  | 203    | 75588        | 268.6               | REF                 | 0.5608  |
|                         | CCB group | 19366  | 201    | 78872        | 254.8               | 0.944 (0.777–1.147) |         |
| Smoking history         |           |        |        |              |                     |                     |         |
| Never smoker            | ARB group | 107662 | 292    | 451983.3     | 64.6                | REF                 | 0.1009  |
|                         | CCB group | 107685 | 348    | 468883.9     | 74.2                | 1.139 (0.975–1.331) |         |
| Ever/current smoker     | ARB group | 65869  | 363    | 269342.9     | 134.8               | REF                 | 0.0685  |
|                         | CCB group | 65846  | 424    | 273872.3     | 154.8               | 1.139 (0.990–1.311) |         |
| Duration of medical use |           |        |        |              |                     |                     |         |
| ≥1 year and <2 years    | ARB group | 33631  | 108    | 88067.5      | 122.6               | REF                 | 0.6524  |
|                         | CCB group | 32680  | 120    | 90881.17     | 132.0               | 1.062 (0.818–1.377) |         |
| ≥2 year and <3 years    | ARB group | 24422  | 110    | 85874.12     | 128.1               | REF                 | 0.8073  |
|                         | CCB group | 23345  | 112    | 84061.78     | 133.2               | 1.033 (0.794–1.344) |         |
| ≥3 years                | ARB group | 72971  | 310    | 452870.4     | 68.5                | REF                 | 0.0118  |
|                         | CCB group | 69437  | 375    | 442957.6     | 84.7                | 1.213 (1.044–1.410) |         |

IR, incidence rate; ARB, angiotensin receptor blocker; CCB, calcium channel blocker; HR, hazard ratio; CI, confidence interval.

**Table S2** Subgroup analysis of all-cause mortality after propensity scoring matching

| Characteristics         | Group     | Number | Events | Person-years | IR (Per 100,000PY) | HR (95% CI)         | P value |
|-------------------------|-----------|--------|--------|--------------|--------------------|---------------------|---------|
| Age group               |           |        |        |              |                    |                     |         |
| 40–49                   | ARB group | 34323  | 177    | 145047       | 122.0              |                     |         |
|                         | CCB group | 34323  | 281    | 147505       | 190.5              | 1.554 (1.288–1.876) | <0.0001 |
| 50–59                   | ARB group | 67374  | 555    | 285689       | 194.3              |                     |         |
|                         | CCB group | 67374  | 783    | 294579       | 265.8              | 1.354 (1.215–1.510) | <0.0001 |
| 60–69                   | ARB group | 45888  | 741    | 188181       | 393.8              |                     |         |
|                         | CCB group | 45888  | 1050   | 196778       | 533.6              | 1.325 (1.206–1.456) | <0.0001 |
| ≥70                     | ARB group | 19366  | 1130   | 75833        | 1490.1             |                     |         |
|                         | CCB group | 19366  | 1330   | 79088        | 1681.7             | 1.111(1.027–1.203)  | 0.009   |
| Smoking history         |           |        |        |              |                    |                     |         |
| Never smoker            | ARB group | 107662 | 1404   | 452596       | 310.2              |                     |         |
|                         | CCB group | 107685 | 1873   | 469545.3     | 398.9              | 1.267 (1.182–1.358) | <0.0001 |
| Ever/current smoker     | ARB group | 65869  | 1221   | 269906.1     | 452.4              |                     |         |
|                         | CCB group | 65846  | 1607   | 274547.4     | 585.3              | 1.282 (1.190–1.381) | <0.0001 |
| Duration of medical use |           |        |        |              |                    |                     |         |
| ≥1 year and <2 years    | ARB group | 33631  | 605    | 88221.39     | 685.8              |                     |         |
|                         | CCB group | 32680  | 692    | 91042.72     | 760.1              | 1.063 (0.953–1.186) | 0.2694  |
| ≥2 year and <3 years    | ARB group | 24422  | 388    | 86018.94     | 451.1              |                     |         |
|                         | CCB group | 23345  | 508    | 84212.7      | 603.2              | 1.292 (1.132–1.474) | 0.0001  |
| ≥3 years                | ARB group | 72971  | 759    | 453571.4     | 167.3              |                     |         |
|                         | CCB group | 69437  | 980    | 443760.4     | 220.8              | 1.260 (1.146–1.385) | <0.0001 |

IR, incidence rate; ARB, angiotensin receptor blocker; CCB, calcium channel blocker; HR, hazard ratio; CI, confidence interval.

**Table S3** Subgroup analysis of lung cancer incidence and all-cause mortality with a multivariate analysis model after excluding patients with a history of medication (aspirin, statins, and metformin)

| Items                      | Group     | Crude               |         | Model 1             |         | Model 2             |         | Model 3             |         |
|----------------------------|-----------|---------------------|---------|---------------------|---------|---------------------|---------|---------------------|---------|
|                            |           | HR (95% CI)         | P-value | HR (95% CI)         | P-value | HR (95% CI)         | P-value | HR (95% CI)         | P-value |
| Lung cancer incidence risk | ARB group | REF                 |         | REF                 |         | REF                 |         | REF                 |         |
|                            | CCB Group | 1.580 (1.460–1.709) | <0.0001 | 1.093 (1.008–1.184) | 0.0309  | 1.075 (0.991–1.165) | 0.0803  | 1.075 (0.992–1.165) | 0.0790  |
| All-cause mortality        | ARB group | REF                 |         |                     |         |                     |         |                     |         |
|                            | CCB Group | 2.001 (1.928–2.076) | <0.0001 | 1.278 (1.231–1.328) | <0.0001 | 1.260 (1.213–1.309) | <0.0001 | 1.260 (1.213–1.309) | <0.0001 |

Model 1 was adjusted for age and sex; Model 2 was adjusted for age, sex, BMI, smoking status, alcohol consumption, medical history, and CCI; Model 3 was adjusted for age, sex, BMI, smoking status, alcohol consumption, medical history, CCI, and medication. ARB, angiotensin receptor blocker; CCB, calcium channel blocker; HR, hazard ratio; CI, confidence interval. CCI, Charlson comorbidity index.