### Supplementary Table 1: Male lung cancer incidence trends by countries and age, 2000–2012.

| Countries | Age (years) | Trend 1 | Trend 2 | Trend 3 | AAPC 2000–2012 |
|-----------|-------------|---------|---------|---------|-----------------|
|           |             | Period  | APC     | Period  | APC             |                |
| China     | ASIR        | 2000–200| –2.5* (-2.9, | 2009–201 | –0.3 (-2.2, 1.6) | –2.0* (-2.4, 1.5) |
|           |             | 2000–201| –3.2* (-5.5, |         |                 | –3.2* (-5.5, 1.6) |
| China     | <40         | 2000–200| 0.6 (-1.3, 2.5) | 2007–201 | –4.7* (-7.7, 0.1) | –1.6* (-3.1, 0.2) |
| China     | 40–49       | 2000–200| –0.1 (-1.0, 0.9) | 2009–201 | 6.2* (0.7, 11.9) | 1.5* (0.2, 2.8) |
| China     | 50–59       | 2000–200| –3.9* (-4.5, | 2009–201 | 1.1 (-2.2, 4.6) | –2.6* (-3.4, 1.9) |
| China     | 60–69       | 2000–200| –3.3) |         |                 | –2.9* (-3.4, 1.9) |
| China     | 70–79       | 2000–201| –2.9* (-3.4, |         |                 | –2.3) |
| Country   | Group | 2000–201 | 2003–2003 | 2008–201 |
|-----------|-------|----------|----------|---------|
| China     | >80   | −2.6\(^*\) (−3.3, −1.9) | | −2.6\(^*\) (−3.3, −1.9) |
|           | 2000–201 | −1.2\(^*\) (−1.6, −1.1) | | −1.2\(^*\) (−1.6, −1.1) |
| South Korea | ASIR | 2000–201 | −3.4\(^*\) (−5.6, −1.6) | | −3.4\(^*\) (−5.6, −1.6) |
| South Korea | <40  | 2000–201 | −1.6\(^*\) (−2.7, −1.1) | | −1.6\(^*\) (−2.7, −1.1) |
| South Korea | 40–49 | 2000–201 | −1.8\(^*\) (−2.3, −1.2) | | −1.8\(^*\) (−2.3, −1.2) |
| South Korea | 50–59| 2000–201 | −1.1\(^*\) (−1.7, −0.6) | | −1.1\(^*\) (−1.7, −0.6) |
| South Korea | 60–69| 2000–201 | −1.6\(^*\) (−2.2, −1.0) | | −1.6\(^*\) (−2.2, −1.0) |
| South Korea | 70–79| 2000–201 | 0.6 (−0.3, 1.5) | | 0.6 (−0.3, 1.5) |
| South Korea | >80  | 2000–201 | −0.9\(^*\) (−1.9, −0) | | −0.9\(^*\) (−1.9, −0) |
| USA       | ASIR | 2000–200 | −2.4\(^*\) (−2.9, −2.5) | 2003–200 | −2.4\(^*\) (−2.9, −1.8) | 2008–201 | −3.8\(^*\) (−4.3, −2.5) | 2008–201 | −3.8\(^*\) (−4.3, −2.5) |
| Age Group | USA 2000–2001 | USA 2003–2000 | USA 2008–2001 | USA 2000–2001 | USA 2003–2000 | USA 2008–2001 |
|-----------|---------------|---------------|---------------|---------------|---------------|---------------|
| <40       | -3.9* (-4.9, 3) | -3.0          | -3.9* (-4.9, 3) | -3.0          | -3.9* (-4.9, 3) | -3.0          |
| 40–49     | -1.8          | -3.2* (-4.6, 8) | -8.1* (-9.4, 2) | -1.8          | -3.2* (-4.6, 8) | -8.1* (-9.4, 2) |
| 50–59     | -2.4* (-2.5, 2) | -2.4* (-2.5, 2) | -3.4          | -2.4* (-2.5, 2) | -3.4          | -2.4* (-2.5, 2) |
| 60–69     | -1.3          | -3.8          | -2.9          | -1.3          | -3.8          | -2.9          |
| 70–79     | 0 (-0.7, 0.8) | -0.8          | -2.9          | -2.9          | -0.8          | -2.9          |
| >80       | 1.0* (0.4, 1.6) | -0.9 (-2.1, 0.4) | -3.5* (-4.7, 9) | -3.5* (-4.7, 9) | -0.9 (-2.1, 0.4) | -3.5* (-4.7, 9) |
| ASIR      | -1.8          | -0.5          | -1.1          | -1.8          | -0.5          | -1.1          |
| <40       | 2             | -0.2 (-2.0, 1.5) | -0.2 (-2.0, 1.5) | -0.2 (-2.0, 1.5) | -0.2 (-2.0, 1.5) | -0.2 (-2.0, 1.5) |
| Country      | Age Group | Start Year – End Year | 2000–2003 Mean (95% CI) | 2003–2007 Mean (95% CI) | 2007–2011 Mean (95% CI) |
|--------------|-----------|-----------------------|-------------------------|-------------------------|-------------------------|
| United Kingdom | 40–49     | 3 0.2)                | 2                       | -1.2 (-2.6, 0.2)       | -2.7 (-4.5, 0.9)       |
| United Kingdom | 50–59     | 2 -1.5)               |                         | -1.6 (-1.9, 0.2)       | -1.5 (-2.1, 0.5)       |
| United Kingdom | 60–69     | 2 -1.2)               |                         | -1.6 (-1.9, 0.2)       | -1.2                   |
| United Kingdom | 70–79     | 2 0.4)                | 9 -0.7)                 | 2                       | 1.2 (-1.6, 4.1)        |
| Australia ASIR # | 2000–2001 | -1.3 (-1.7, 0.3)     | 7 2.2 (-0.7, 5.2)       | 2                       | 1.0 (-2.3, 0.2)        |
| Australia ASIR # | 2000–201  | -0.3 (-2.3, 1.8)     |                         |                         | -0.3 (-2.3, 1.8)       |
| Australia     | <40       | 2                     |                         |                         | -0.3 (-2.1, 1.6)       |
| Australia     | 40–49     | 2                     |                         |                         | -0.3 (-2.1, 1.6)       |
| Australia     | 50–59     | 2000–201              | -1.7 (-2.2, 0.2)        |                         |                         |
| Age Group | 2000–201 | AAPC | ASIR |
|-----------|-----------|------|------|
| Australia | 60–69     | 2    | –1.1 | –1.1 |
|           | 2000–201  | –1.6* (-2.2, | –1.6* (-2.2, |
|           | 70–79     | 2    | –1.0 | –1.0 |
|           | 2000–201  | 0.5 (–0.1, 1.2) | 0.5 (0.1, 1.2) |

AAPC: Average annual percent change; APC: Annual percent change; ASIR: Age-standardized incidence rate; USA: The United States of America. *The APC or AAPC is significantly different from zero \((P < 0.05)\). ASIR was calculated by using world Segi’s standard population.
Supplementary Table 2: Female lung cancer incidence trends by countries and age, 2000–2012.

| Countries | Age (years) | Trend 1 | Trend 2 | Trend 3 | AAPC 2000–2012 |
|-----------|-------------|---------|---------|---------|-----------------|
|           |             | Period  | APC     | Period  | APC             |                 |
| China     | ASIR        | 2000–200| 2008–201|         |                 |                 |
|           | <40         | 2       | 2       | 2       |                 |                 |
| China     | 40–49       | 2       | 2       | 2       | 1.8* (0.9, 2.8) | 1.8* (0.9, 2.8) |
|           | 50–59       | 9       | 2       | 2       | 0 (−1.4, 1.5)   | 2.6* (0.6, 4.6) |
|           | 60–69       | 9       | 2       | 2       | −0.8            | −0.2 (−2.4, 2.0) |
|           | 70–79       | 2       |         |         | −0.5            | −1.2* (−2.0, 1.5) |
| China     | >80         | 2000–201| 2008–201|         |                 | −1.9* (−2.4, 1.3) |
|                | ASIR | 2000–200 | 2003–201 |
|----------------|------|----------|----------|
| South Korea    | 3    | –2.3 (–4.8, 0.3) | 2 | 2.3* (1.8, 2.8) |
| South Korea    | <40  | 2.0 (–0.4, 4.6) | 2.0 (–0.4, 4.6) |
| South Korea    | 40–49| 2 | 3.2* (1.8, 4.7) | 3.2* (1.8, 4.7) |
| South Korea    | 50–59| 2 | 2.8* (1.7, 4.1) | 2.8* (1.7, 4.1) |
| South Korea    | 60–69| 4 | –0.5 | 2 | 4.1* (2.8, 5.4) |
| South Korea    | 70–79| 2 | –0.3 (–1.0, 0.3) | –0.3 (–1.0, 0.3) |
| South Korea    | >80  | 2 | 1.2* (0.2, 2.2) | 1.2* (0.2, 2.2) |
| USA            | 6    | 0.4 (–0.1, 0.8) | 2 | –1.7 |
| Age Group | Year | Value | Lower CI | Upper CI | Year | Value | Lower CI | Upper CI | Year | Value | Lower CI | Upper CI |
|-----------|------|-------|----------|----------|------|-------|----------|----------|------|-------|----------|----------|
| USA       | <40  | 2     | -2.8     |          |      |       |          |          |      |       | -2.8     |          |
|           |      |       |          |          |      |       |          |          |      |       |          |          |
| USA       | 40–49| 5     | 2.9* (1.5, 4.3) | -2.4 (-5.4, 0.7) | 2     | -4.0   |          |          |      |       | -0.3     |          |
|           |      |       |          |          |      |       |          |          |      |       |          |          |
| USA       | 50–59| 7     | -1.2     |          | 2     | -0.1   | (-0.9, 0.8) |          |      |       | -0.6     |          |
|           |      |       |          |          |      |       |          |          |      |       |          |          |
| USA       | 60–69| 6     | -0.3 (-0.9, 0.2) |          | 2     | -2.9   |          |          |      |       | -1.6     |          |
|           |      |       |          |          |      |       |          |          |      |       |          |          |
| USA       | 70–79| 5     | 2.0* (1.3, 2.7) | -0.3 (-3.3, 2.8) | 2     | -1.0   |          |          |      |       | -0.1 (-0.6, 0.8) | 0.1 |
|           |      |       |          |          |      |       |          |          |      |       |          |          |
| USA       | >80  | 3     | 4.3* (2.8, 5.9) | 1.8* (1.1, 2.5) | 2     | -1.5   |          |          |      |       | 1.2* (0.7, 1.7) |          |
|           |      |       |          |          |      |       |          |          |      |       |          |          |
| United    |      |       |          |          |      |       |          |          |      |       |          |          |
| Kingdom   | ASIR | 2     | -1.6 (-4.3, 1.1) |          | 2     | 2.0* (1.8, 2.2) |          |          |      |       | 1.4* (1.0, 1.8) |          |
|           |      |       |          |          |      |       |          |          |      |       |          |          |
| Kingdom   | <40  | 2     | 0.9 (-2.1, 4.0) |          | 0.9 (-2.1, 4.0) |          |          |      |       |          |          |
|           |      |       |          |          |      |       |          |          |      |       |          |          |
| United    | 40–49| 2000–201 | -1.1* (-2.1, |          |      |       |          |          |      |       | -1.1* (-2.1, |          |
| Country   | Age Range | 2000–200 | 2006–201 |
|-----------|-----------|----------|----------|
| United Kingdom | 50–59 | 6 | 1.8* (0.5, 3.1) | 2 | 0.1 (−1.2, 1.4) | 1.0* (0.2, 1.7) |
| United Kingdom | 60–69 | 2 | −3.4 (−8.0, 1.4) | 5 | 4.0 (−1.0, 9.2) | 2 | 2.3* (1.6, 2.9) | 1.7* (0.6, 2.9) |
| United Kingdom | 70–79 | 2 | 0.9* (0.5, 1.3) | 0.9* (0.5, 1.3) |
| United Kingdom | >80 | 2 | 4.1* (3.5, 4.7) | 4.1* (3.5, 4.7) |
| Australia | ASIR | 2 | 1.6* (1.1, 2.1) | 1.6* (1.1, 2.1) |
| Australia | <40 | 2 | 1.7 (−1.1, 4.6) | 1.7 (−1.1, 4.6) |
| Australia | 40–49 | 2 | −0.4 (−1.8, 1.0) | −0.4 (−1.8, 1.0) |
| Australia | 50–59 | 2 | 1.0 (−0.1, 2.1) | 1.0 (−0.1, 2.1) |
| Country | Age Group | Period | AAPC | ASIR |
|---------|-----------|--------|------|------|
| Australia | 60–69 | 2000–201 | 1.7* (1.0, 2.4) | 1.7* (1.0, 2.4) |
| Australia | 70–79 | 2000–201 | 1.7* (1.3, 2.1) | 1.7* (1.3, 2.1) |
| Australia | >80 | 2000–201 | 3.2* (2.2, 4.1) | 3.2* (2.2, 4.1) |

AAPC: Average annual percent change; APC: Annual percent change; ASIR: Age-standardized incidence rate; USA: The United States of America. *The APC or AAPC is significantly different from zero ($P < 0.05$). ASIR was calculated by using world Segi’s standard population.