### Table S1 The specific distribution of pulmonary nodules

|         | RUL (n) | RML (n) | RLL (n) | LUL (n) | LLL (n) |
|---------|---------|---------|---------|---------|---------|
| S       | 10      | S$^4$   | 2       | S$^3$   | S$^{1+2}$ |
| S$^{1+2}$a | 2       | S$^6$+S$^8$a | 1      | S$^{1+2}$a+b | S$^6$+S$^8$a |
| S$^a$+S$^b$ | 1       | S$^b$   | 1       | S$^{1+2}$a+b+S$^c$ | S$^6$+S$^b$ |
| S$^a$+S$^b$ | 3       | S$^b$+S$^a$ | 1      | S$^{1+2}$b+c | S$^a$+S$^a$ |
| S$^b$+S$^c$ | 3       | S$^d$+S$^a$+S$^c$ | 1 | S$^{1+2}$a+S$^c$ | S$^b$ |
| S$^b$+S$^d$ | 1       | S$^c$+S$^b$ | 1      | S$^{1+2}$b | S$^a$+S$^a$ |
| S$^c$+S$^d$ | 16      | S$^c$   | 3       | S$^a$+S$^b$+S$^c$ | Total =32 |
| S$^a$+S$^b$ | 2       | S$^a$+S$^c$+S$^d$ | 2      | S$^b$+S$^a$ |
| S$^c$+S$^d$ | 2       | S$^b$+S$^a$+S$^c$ | 1      | S$^c$+S$^a$ |
| S$^b$+S$^a$ | 15      | S$^c$+S$^a$+S$^c$ | 4      | S$^c$+S$^a$ |
| S$^a$+S$^b$ | 11      | S$^a$+S$^c$+S$^d$ | 2      | S$^a$+S$^b$+S$^c$ |
| S$^b$+S$^c$ | 10      | S$^a$+S$^b$+S$^c$ | 2      | S$^a$+S$^b$+S$^c$ |
| Total =78 | | | | | |

RUL, right upper lung; RML, right middle lung; RLL, right lower lung; LUL, left upper lung; LLL, left lower lung.

### Table S2 Partition results of the chest group, lobar group, and symmetrical 3 sectors group

| Group                          | Inner | Middle | Outer | Total | $\lambda$ | P value |
|--------------------------------|-------|--------|-------|-------|-----------|---------|
| The chest group                | 0     | 48     | 161   | 209   | 7.234     | 0.124   |
| The lobar group                | 1     | 62     | 146   | 209   |           |         |
| The symmetrical 3 sectors group| 1     | 69     | 139   | 209   |           |         |

P values are reported by the likelihood ratio test.

### Table S3 The specific distribution of nodules is disturbed by mediastinum

| Group                          | LUL     | LLL     | RUL     | RML     | RLL     | Total   |
|--------------------------------|---------|---------|---------|---------|---------|---------|
| The chest group                | 58 (40%)| 27 (19%)| 48 (33%)| 1 (1%)  | 11 (7%) | 145 (100%)|
| The lobar group                | 47 (85%)| 4 (7%)  | 1 (2%)  | 1 (2%)  | 2 (4%)  | 55 (100%)|
| The symmetrical 3 sectors group| 3 (30%) | 3 (30%) | 1 (10%) | 1 (10%) | 2 (20%) | 10 (100%)|

RUL, right upper lung; RML, right middle lung; RLL, right lower lung; LUL, left upper lung; LLL, left lower lung.