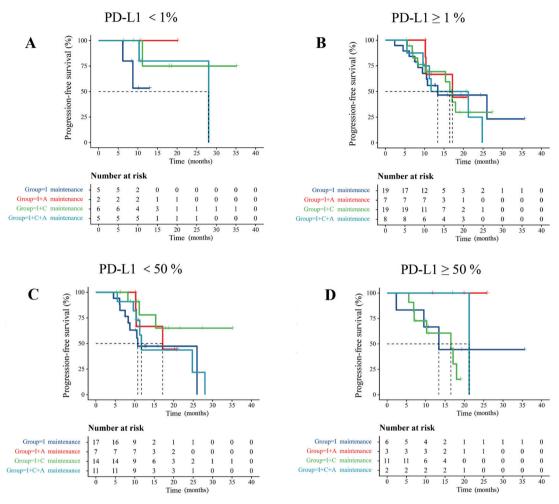


Figure S1 Median time from the beginning of maintenance in four groups. I, immune-checkpoint inhibitors; C, chemotherapy; A, antiangiogenesis drugs.

| Subgroup            | HR (95% CI)      | р     | Favours I+A  | Favours I | HR (95% CI)      | р    | Favours I+A | Favours I+C±A |
|---------------------|------------------|-------|--------------|-----------|------------------|------|-------------|---------------|
| Age                 |                  |       | 1            |           |                  |      |             | 1             |
| > 65y               | 0.66 (0.25-1.70) | 0.4   |              |           | 1.15 (0.42-3.19) | 0.77 | H           | ÷ <b>•</b>    |
| ≤65y                | 0.36 (0.12-1.02) | 0.05  |              |           | 0.56 (0.21-1.51) | 0.29 | H           |               |
| Sex                 |                  |       |              |           |                  |      |             | i i           |
| Male                | 0.41 (0.20-0.86) | 0.02  |              |           | 0.90 (0.41-2.00) | 0.8  | H           |               |
| Female              | 0.56 (0.06-5.36) | 0.62  |              |           | 0.52 (0.10-2.88) | 0.51 |             | 1             |
| Smoking             |                  |       |              |           |                  |      |             |               |
| Yes                 | 0.48 (0.19-1.17) | 0.1   |              |           | 1.15 (0.42-3.13) | 0.77 | H           |               |
| No                  | 0.32 (0.10-0.99) | 0.05  |              |           | 0.56 (0.19-1.60) | 0.32 | H           |               |
| ECOG                |                  |       |              |           |                  |      |             |               |
| 0                   | 0.29 (0.03-3.05) | 0.28  |              |           | 0.49 (0.07-3.62) | 0.53 |             |               |
| 1                   | 0.49 (0.23-1.06) | 0.07  |              | 1         | 0.92 (0.43-1.99) | 0.83 |             | i.            |
| Stage               |                  |       |              |           |                  |      |             |               |
| IIIB                | 0.14 (0.04-0.43) | 0.02  | H <b>H</b> i |           | 0.54 (0.08-3.52) | 0.49 |             | 1             |
| IV                  | 0.62 (0.25-1.55) | 0.29  |              |           | 0.97 (0.44-2.13) | 0.94 | ·           |               |
| Cycles of induction |                  |       |              |           |                  |      |             |               |
| 2-4 cycles          | 0.18 (0.05-0.65) | 0.005 | -            |           | 0.46 (0.14-1.49) | 0.21 | H           |               |
| 5-6 cycles          | 0.76 (0.31-1.85) | 0.55  | ·            |           | 1.32 (0.51-3.39) | 0.53 |             | - <b>-</b>    |
| Histologic features |                  |       |              |           |                  |      |             | -             |
| Adenocarcinoma      | 1.15 (0.25-5.24) | 0.85  | F            |           | 1.10 (0.46-2.67) | 0.83 | F           |               |
| Squamous carcinoma  | 0.31 (0.12-0.80) | 0.04  |              |           | NA               |      |             |               |
| PD-L1 expression    |                  |       |              |           |                  |      |             |               |
| < 1 %               | 0.21 (0.01-4.04) | 0.3   | · •          |           | 0.30 (0.01-11.5) | 0.52 | H           |               |
| ≧ 1 %               | 0.74 (0.22-2.45) | 0.64  |              |           | 0.72 (0.23-2.20) | 0.6  |             | 1             |
| < 50 %              | 0.62 (0.19-2.03) | 0.44  | H            |           | 1.19 (0.31-4.61) | 0.79 | H           | -             |
| ≧ 50 %              | 0.20 (0.02-2.13) | 0.18  |              |           | 0.22 (0.05-1.07) | 0.06 | H-          |               |
|                     |                  |       | · · · · · ·  |           |                  |      | · · · · ·   | · · ·         |

**Figure S2** Forest plot HR in PFS of I+A maintenance versus I maintenance and I+A maintenance versus I+A±C in different subgroups. ECOG, Eastern Cooperative Oncology Group; PD-L1, programmed cell death-ligand 1; HR, hazard ratio; CI, confidence interval; I, immune-checkpoint inhibitors; C, chemotherapy; A, anti-angiogenesis drugs; NA, not available; PFS, progression-free survival.



**Figure S3** Progression-free survival in four groups, based on PD-L1 expression. (A) PD-L1 <1%; (B) PD-L1 ≥1%; (C) PD-L1 <50%; (D) PD-L1 ≥50%. I, immune-checkpoint inhibitors; C, chemotherapy; A, anti-angiogenesis drugs; PD-L1, programmed cell death-ligand 1.

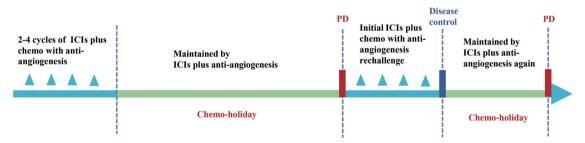


Figure S4 Schematic diagram of chemo-holiday regimen. ICIs, immune checkpoint inhibitors; PD, progressive disease.