Supplementary Materials: Survival Impact of Aggressive Treatment and PD-L1 Expression in Oligometastatic NSCLC

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Table 1. Treatment type and demographic characteristics of patients.

| Demographic characteristics | Treatment | Aggressive at both sites (Group A) n=29 (%) | Primary site only (Group B1) n=4 (%) | Metastatic site only (Group B2) n=19 (%) | Palliative (Group B3) n=15 (%) |
|-----------------------------|-----------|-----------------------------------------------|-------------------------------------|-----------------------------------------|-------------------------------|
| Sex                         | Male      | 15 (52)                                       | 0 (0)                               | 13 (68)                                 | 10 (67)                       |
| Smoking history             | Positive  | 29 (100)                                      | 3 (75)                              | 19 (100)                                | 14 (93)                       |
| Age at diagnosis            | <65       | 23 (79)                                       | 3 (75)                              | 13 (8)                                  | 6 (40)                        |
|                             | ≥65       | 6 (21)                                        | 1 (25)                              | 6 (32)                                  | 9 (60)                        |
| ECOG Score                  | 0         | 10 (35)                                       | 1 (25)                              | 3 (16)                                  | 3 (20)                        |
|                             | 1         | 12 (41)                                       | 2 (50)                              | 8 (42)                                  | 6 (40)                        |
|                             | 2         | 1 (4)                                         | 0 (0)                               | 4 (21)                                  | 0 (0)                         |
|                             | 3         | 0 (0)                                         | 0 (0)                               | 0 (0)                                   | 0 (0)                         |
|                             | 4         | 0 (0)                                         | 0 (0)                               | 0 (0)                                   | 0 (0)                         |
|                             | N/A       | 6 (21)                                        | 1 (25)                              | 4 (21)                                  | 6 (40)                        |

ECOG: Eastern Cooperative Oncology Group; N/A: not applicable.
**Table S2.** Survival of patients with aggressive or non-aggressive treatment classified by "Modified" Tumor Stage.

| 8th IASLC Classification | Aggressive at Both Primary and Metastatic Sites \(n = 29\) (%) | Non-Aggressive Treatments \(n = 38\) (%) | \(p\)-value |
|---------------------------|-------------------------------------------------|-------------------------------------|-------------|
| Stage I, \(n = 18\)     | 9 (31)                                          | 9 (24)                              | 0.316       |
| OS (m)                   | 42                                              | 16                                  | 0.669       |
| PFS (m)                  | 12                                              | 12                                  |             |
| Stage II, \(n = 13\)    | 7 (24)                                          | 6 (16)                              | 0.024       |
| OS (m)                   | 34                                              | 6                                   | 0.016       |
| PFS (m)                  | Not reached                                     | 6                                   |             |
| Stage III, \(n = 36\)   | 13 (45)                                         | 23 (60)                             | 0.001       |
| OS (m)                   | 22                                              | 4                                   | 0.003       |
| PFS (m)                  | 19                                              | 3                                   |             |

“Modified” Tumor Stage: refers to the combined stage T and N of the IASLC staging eighth edition; OS: overall survival; PFS: progression-free survival; (m): months.

**Table 3.** PD-L1 status and tumor site of subgroup of 39 patients.

| PD-L1 Status       | Lung Primary \(n\) (%) | Metastasis \(n\) (%) |
|--------------------|-------------------------|----------------------|
| Positive (≥25%)    | 12 (55)                 | 8 (30)               |
| Negative (<25%)    | 10 (45)                 | 19 (70)              |
| Insufficient tissue| 17                      | 12                   |

**Table 4.** PD-L1 concordance between primary and metastatic tissues in 10 patients.

| Patient | Age | Sex | Progression-Free Survival (months) | Overall Survival (months) | PD-L1 (Primary Site) | PD-L1 (Metastasis) | Concordance |
|---------|-----|-----|-----------------------------------|---------------------------|----------------------|-------------------|-------------|
| 1       | 73  | F   | 55                                | 55                        | -                    | +                 | No          |
| 2       | 54  | F   | 19                                | 52                        | +                    | -                 | No          |
| 3       | 54  | M   | 4                                 | 4                         | +                    | +                 | Yes         |
| 4       | 47  | M   | 5.6                               | 32                        | -                    | -                 | Yes         |
| 5       | 47  | F   | 43                                | 68                        | -                    | -                 | Yes         |
| 6       | 46  | F   | 3.7                               | 20                        | -                    | -                 | Yes         |
| 7       | 46  | F   | 6                                 | 15                        | +                    | +                 | Yes         |
| 8       | 69  | M   | 17.5                              | 20                        | -                    | -                 | Yes         |
| 9       | 56  | M   | 7.2                               | 16                        | -                    | -                 | Yes         |
| 10      | 59  | M   | 32                                | 36                        | +                    | +                 | Yes         |
| Median  | 54  | -   | 12.4                              | 26                        | -                    | -                 | 80% (8/10)  |
Figure S1. Overall survival based on the number of brain metastasis.

| Number of Brain Metastasis | n (%) | Median OS (months) | OS 1 year (%) | OS 2 year (%) |
|----------------------------|-------|-------------------|---------------|---------------|
| 1                          | 37 (74) | 17                | 65            | 29            |
| 2                          | 9 (18)  | 8                 | 44            | 44            |
| 3                          | 4 (8)   | 3                 | 25            | 0             |

p-value = 0.121
Figure S2. Overall survival comparison between four different therapeutic approaches.
**Figure S3.** Overall survival of 39 patients stratified by treatment of primary site and PD-L1 status. Kaplan-Meier overall survival analysis of patients with PD-L1 status available comparing PD-L1 status and treatment approach at primary site.
**Figure S4.** Overall survival of 39 patients stratified by treatment of metastatic site and PD-L1 status. Kaplan-Meier overall survival analysis of patients with PD-L1 status available comparing PD-L1 status and treatment approach at metastatic site.

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