

**Supplementary Table S1. Characteristics of Stage IV NP lymphoma patients**

| No. | Age/Sex | Pathology            | EBER | Other involved sites   | Survival<br>(Months) |
|-----|---------|----------------------|------|--|----------------------|
| 1   | 62/M    | Mantle cell lymphoma | -    | *GI tract, *bone marrow, mediastinum, retroperitoneum, spleen, mesentery,                  | 6.2                  |
| 2   | 50/F    | DLBCL                | +    | Tonsil, neck LN, mediastinum, lung, stomach, retroperitoneum, pelvic and *inguinal regions | 34.3                 |
| 3   | 56/F    | PTLD                 | +    | Left thigh, lung, abdomen  | 0.8                  |
| 4   | 88/F    | DLBCL                | +    | Lung, pelvic, *inguinal region, left deltoid   | 91.9                 |
| 5   | 50/M    | DLBCL                | NA   | Inguinal region, submandibular, paraaortic, retroperitoneum, left external iliac chain     | 12.1                 |
| 6   | 17/M    | DLBCL                | -    | Axillary, mediastinum, retroperitoneal, inguinal LN, bone marrow                           | 161.4                |
| 7   | 72/F    | DLBCL                | +    | NA   | 50.8                 |
| 8   | 81/M    | NKTCL                | NA   | Lung, abdomen  | 0.9                  |

Abbreviations: DLBCL: diffuse large B cell lymphoma; EBER: Epstein–Barr virus-encoded small RNAs; LN: lymph nodes; NA: not available; NP: nasopharynx; NKTCL: NK/T cell lymphoma; PTLD: post-transplant lymphoproliferative disorder

\* Biopsy-proven pathology

**Supplementary Table S2. IHC and subtypes of NP DLBCL patients**

| No. | CD10 | BCL-6 | MUM1 | Subtype | Survival<br>(Months) | CNS involvement | EBER |
|-----|------|-------|------|---------|----------------------|-----------------|------|
| 1   | -    | +     | +    | Non-GCB | 34.3                 | -               | +    |
| 2   | -    | +     | +    | Non-GCB | 20.6                 | -               | -    |
| 3   | -    | +     | +    | Non-GCB | 36.8                 | -               | -    |
| 4   | -    | +     | +    | Non-GCB | 50.3                 | -               | +    |
| 5   | -    | +     | +    | Non-GCB | 63.7                 | -               | -    |
| 6   | -    | +     | NA   | NA      | 91.9                 | -               | +    |
| 7   | -    | +     | NA   | NA      | 73.1                 | -               | -    |
| 8   | -    | -     | NA   | Non-GCB | 0.7                  | -               | +    |
| 9   | -    | +     | NA   | NA      | 2.1                  | -               | -    |
| 10  | +    | +     | NA   | GCB     | 12.1                 | -               | NA   |
| 11  | -    | +     | +    | Non-GCB | 23.0                 | -               | -    |
| 12  | NA   | NA    | NA   | NA      | 161.4                | -               | -    |
| 13  | -    | +     | NA   | NA      | 56.0                 | -               | -    |
| 14  | NA   | NA    | NA   | NA      | 50.8                 | -               | +    |
| 15  | NA   | NA    | NA   | NA      | 174.5                | -               | -    |
| 16  | -    | +     | NA   | NA      | 13.0                 | -               | -    |
| 17  | NA   | NA    | NA   | NA      | 149.3                | -               | -    |

Abbreviations: DLBCL: diffuse large B cell lymphoma; GCB: germinal center B-cell; EBER: Epstein-Barr virus-encoded small RNAs; NA: not available