

Supplementary

Table S1 Association between different variables and OS in NSCLC patients

| Variable | Univariate | | | Multivariate | | |
|-------------------|--------------------|-------------|---------------|--------------|-------|-------------|
| | OS, median (years) | 95% CI | P | P | HR | 95% CI |
| OX40-tumors (20) | | | | | | |
| Negative | 2.553 (mean) | 2.220–2.886 | 0.097* | 0.025* | 0.378 | 0.161–0.886 |
| Positive | 3.097 (mean) | 2.203–3.992 | | | | |
| OX40-TILs (20) | | | | | | |
| Negative | 3.040 | 2.188–3.832 | 0.364 | | | |
| Positive | 1.720 | 0.428–3.052 | | | | |
| OX40L-tumors (20) | | | | | | |
| Negative | 3.040 | 2.317–3.763 | 0.027* | 0.741 | | |
| Positive | 1.080 | 0.301–1.859 | | | | |
| OX40L-TILs (20) | | | | | | |
| Negative | 3.230 | 2.884–3.576 | 0.221 | | | |
| Positive | 2.140 | 0.911–3.369 | | | | |
| PD-1-TILs (8) | | | | | | |
| Negative | 2.290 | 1.042–3.538 | 0.558 | | | |
| Positive | 2.970 | 1.358–4.582 | | | | |
| PD-L1-tumors (8) | | | | | | |
| Negative | 2.960 | 2.252–3.668 | 0.290 | | | |
| Positive | 1.290 | 0.621–1.959 | | | | |
| PD-L1- TILs (8) | | | | | | |
| Negative | 2.090 | 0.742–3.438 | 0.198 | | | |
| Positive | 3.090 | 2.524–3.656 | | | | |
| GAL-9-tumors (19) | | | | | | |
| Negative | 1.690 | 0.280–3.100 | 0.039* | 0.041* | 0.620 | 0.392–0.981 |
| Positive | 3.100 | 2.662–3.583 | | | | |
| GAL-9-TILs | | | | | | |
| Negative | 2.790 | 1.960–3.620 | 0.400 | | | |
| Positive | 1.080 | 0.000–2.278 | | | | |
| LAG-3-TILs (13) | | | | | | |
| Negative | 3.040 | 2.763–3.317 | 0.039* | 0.005* | 2.005 | 1.239–3.243 |
| Positive | 1.080 | 0.419–1.742 | | | | |
| MHC II-Tumor (15) | | | | | | |
| Negative | 2.090 | 0.827–3.353 | 0.083* | 0.763 | | |
| Positive | 3.030 | 2.660–3.400 | | | | |
| MHC II-TILs (15) | | | | | | |

Table S1 (*continued*)

Table S1 (continued)

| Variable | Univariate | | | Multivariate | | |
|-------------------|--------------------|-------------|---------------|--------------|-------|-------------|
| | OS, median (years) | 95% CI | P | P | HR | 95% CI |
| Negative | 1.390 | 0.629–2.151 | 0.014* | 0.024* | 0.585 | 0.367–0.932 |
| Positive | 3.230 | 2.617–3.843 | | | | |
| TIM-3-Tumors (25) | | | | | | |
| Negative | 2.790 | 1.970–3.610 | 0.615 | | | |
| Positive | 1.043 | 0.000–3.505 | | | | |
| TIM-3-TILs (25) | | | | | | |
| Negative | 2.960 | 2.268–3.652 | 0.034* | 0.510 | | |
| Positive | 1.080 | 0.228–1.932 | | | | |
| Age (years) | | | | | | |
| <70 | 2.290 | 1.101–3.479 | 0.461 | | | |
| ≥70 | 2.980 | 1.851–4.109 | | | | |
| Gender | | | | | | |
| Female | 3.399(mean) | 2.688–4.111 | 0.011* | 0.068 | | |
| Male | 2.404(mean) | 2.064–2.745 | | | | |
| Smoking status | | | | | | |
| Non-smoker | 1.290 | 0.006–2.574 | 0.292 | | | |
| Smoker | 2.960 | 1.915–4.005 | | | | |
| Stage | | | | | | |
| I-II | 3.280 | 2.865–3.695 | <0.001* | <0.001* | 3.437 | 2.205–5.356 |
| III-IV | 0.730 | 0.486–0.974 | | | | |
| Pathology | | | | | | |
| Non-AC | 2.050 | 0.871–3.229 | <u>0.052*</u> | 0.156 | | |
| AC | 3.230 | 2.520–3.735 | | | | |
| Grade | | | | | | |
| G1 | 1.390 | 0.000–2.792 | <u>0.041*</u> | 0.364 | | |
| G2-3 | 2.980 | 0.390–2.215 | | | | |
| TILs percentage | | | | | | |
| <30% | 2.310 | 0.643–3.977 | 0.568 | | | |
| ≥30% | 2.780 | 1.692–3.868 | | | | |
| Metastasis | | | | | | |
| Negative | 2.970 | 2.302–3.638 | <0.001* | 0.360 | | |
| Positive | 0.670 | 0.000–1.620 | | | | |

OX40, Tumor necrosis factor superfamily member 4; OX40L, OX40 ligand; PD-1, program death-1; PD-1, program death-1; PD-L1, program death-ligand 1; GAL-9, Galectin-9; LAG-3, Lymphocyte-activation gene-3; MHC II, Major histocompatibility complex class II; TIM-3, T-cell immunoglobulin and mucin domain-3; TILs, tumor-infiltrating lymphocytes; AC, adenocarcinoma; OS, overall survival; 95% CI, 95% confidence interval; HR, hazard ratio. *, Statistically significant P values.

Table S2 Association between different variables and RFS in NSCLC patients

| Variable | Univariate | | | Multivariate | | |
|-------------------|---------------------|-------------|--------------|--------------|-------|-------------|
| | RFS, median (years) | 95% CI | P | P | HR | 95% CI |
| OX40-tumors (20) | | | | | | |
| Negative | 2.316 (mean) | 1.970–2.662 | 0.075 | 0.045 | 0.470 | 0.170–0.978 |
| Positive | 3.051 (mean) | 2.139–3.971 | | | | |
| OX40-TILs (20) | | | | | | |
| Negative | 2.700 | 0.928–3.252 | 0.219 | | | |
| Positive | 1.410 | 1.062–1.778 | | | | |
| OX40L-tumors (20) | | | | | | |
| Negative | 1.910 | 0.979–2.841 | 0.066 | 0.829 | | |
| Positive | 0.890 | 0.184–1.596 | | | | |
| OX40L-TILs (20) | | | | | | |
| Negative | 3.190 | 2.278–3.585 | 0.077 | 0.034 | 1.722 | 1.043–2.842 |
| Positive | 1.420 | 0.867–1.973 | | | | |
| PD-1-TILs (8) | | | | | | |
| Negative | 1.760 | 1.276–2.244 | 0.881 | | | |
| Positive | 1.470 | 0.584–2.356 | | | | |
| PD-L1-tumors (8) | | | | | | |
| Negative | 1.850 | 0.769–2.931 | 0.054 | 0.490 | | |
| Positive | 0.970 | 0.769–1.231 | | | | |
| PD-L1- TILs (8) | | | | | | |
| Negative | 1.480 | 0.710–2.250 | 0.530 | | | |
| Positive | 1.760 | 0.039–3.481 | | | | |
| GAL-9-tumors (19) | | | | | | |
| Negative | 1.210 | 0.491–1.929 | 0.083 | 0.064 | | |
| Positive | 2.720 | 1.402–4.038 | | | | |
| GAL-9-TILs | | | | | | |
| Negative | 1.800 | 0.832–2.768 | 0.036 | 0.023 | 2.358 | 1.127–4.933 |
| Positive | 0.670 | 0.086–1.254 | | | | |
| LAG-3-TILs (13) | | | | | | |
| Negative | 1.910 | 0.762–3.058 | 0.025 | 0.199 | | |
| Positive | 0.870 | 0.267–1.473 | | | | |
| MHC II-Tumor (15) | | | | | | |
| Negative | 1.470 | 0.847–2.093 | 0.642 | | | |
| Positive | 1.910 | 0.545–3.275 | | | | |
| MHC II-TILs (15) | | | | | | |

Table S2 (continued)

Table S2 (continued)

| Variable | Univariate | | | Multivariate | | |
|-------------------|---------------------|-------------|--------|--------------|-------|-------------|
| | RFS, median (years) | 95% CI | P | P | HR | 95% CI |
| Negative | 1.050 | 0.556–1.544 | 0.028 | 0.095 | | |
| Positive | 2.980 | 1.638–4.332 | | | | |
| TIM-3-Tumors (25) | | | | | | |
| Negative | 1.760 | 1.246–2.274 | 0.622 | | | |
| Positive | 0.760 | 0.497–1.023 | | | | |
| TIM-3-TILs (25) | | | | | | |
| Negative | 1.800 | 1.230–2.370 | 0.048 | 0.768 | | |
| Positive | 0.870 | 0.212–1.528 | | | | |
| Age (years) | | | | | | |
| <70 | 1.510 | 0.916–2.104 | 0.313 | | | |
| ≥70 | 2.140 | 0.000–4.283 | | | | |
| Gender | | | | | | |
| Female | 3.210 | 2.304–3.765 | 0.084 | 0.551 | | |
| Male | 1.470 | 0.950–1.990 | | | | |
| Smoking status | | | | | | |
| Non-smoker | 0.670 | 0.000–2.110 | 0.312 | | | |
| Smoker | 1.760 | 1.240–2.280 | | | | |
| Stage | | | | | | |
| I-II | 3.090 | 2.556–3.624 | <0.001 | <0.001 | 3.564 | 2.308–5.504 |
| III-IV | 0.660 | 0.494–0.862 | | | | |
| Pathology | | | | | | |
| Non-AC | 1.420 | 0.853–1.987 | 0.087 | 0.202 | | |
| AC | 2.720 | 1.341–4.099 | | | | |
| Grade | | | | | | |
| G1 | 1.080 | 0.802–1.358 | 0.049 | 0.374 | | |
| G2–3 | 1.820 | 0.612–3.028 | | | | |
| TILs percentage | | | | | | |
| <30% | 1.900 | 0.111–3.689 | 0.715 | | | |
| ≥30% | 1.690 | 1.291–2.089 | | | | |
| Metastasis | | | | | | |
| Negative | 1.820 | 0.882–2.758 | <0.001 | 0.274 | | |
| Positive | 0.470 | 0.034–0.906 | | | | |

OX40, Tumor necrosis factor superfamily member 4; OX40L, OX40 ligand; PD-1, program death-1; PD-1, program death-1; PD-L1, program death-ligand 1; GAL-9, Galectin-9; LAG-3, Lymphocyte-activation gene-3; MHC II, Major histocompatibility complex class II; TIM-3, T-cell immunoglobulin and mucin domain-3; TILs, tumor-infiltrating lymphocytes; AC, adenocarcinoma; RFS, recurrence-free survival; 95% CI, 95% confidence interval; HR, hazard ratio. *, Statistically significant P values.