Supplementary Figures

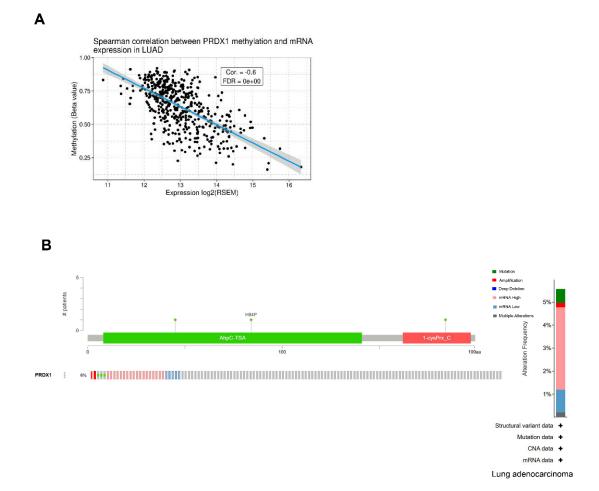
| Characteristics Total | (N) OR (95% CI) | P value | Characteristics | Total (N | I) OR (95% CI) | P value |
|--|---|------------------------------------|---|---|---|-------------------------|
| Pathologic T stage (T2&T3&T4 vs. T1) 53 | | 0.038 | Pathologic T stage (T2&T3&T4 vs. | , | | 0.098 |
| Pathologic M stage (M1 vs. M0) 39 | | 0.273 | Pathologic M stage (M1 vs. M0 | <u>^</u> | 1.085 (0.480 - 2.455) | - 0.844 |
| athologic N stage (N1&N2&N3 vs. N0)52 | | 0.007 | Pathologic N stage (N1&N2&N3 vs. | | 1.536 (1.064 - 2.218) | → 0.022 |
| Gender (Male vs. Female) 53 | | 0.243 | Gender (Male vs. Female) | 539 | 1.119 (0.798 – 1.570) | 0.515 |
| Age (> 65 vs. <= 65) 52 | 0 0.898 (0.637 – 1.267) | 0.542 | Age (> 65 vs. <= 65) | 520 | 0.831 (0.589 – 1.173) | 0.293 |
| Smoker (Yes vs. No) 52 | 25 0.957 (0.590 – 1.552) | 0.859 | Smoker (Yes vs. No) | 525 | 0.548 (0.333 - 0.900) | 0.018 |
| , , | | | | | | |
| Association between PRDX3 expres ogistic regression in the TCGA data | | in LUAD by | Association between PRDX4 e logistic regression in the TCG/ | | | n LUAD |
| Characteristics Total | | P value | Characteristics | Total (N | | P valu |
| athologic T stage (T2&T3&T4 vs. T1) 53 | | 0.003 | Pathologic T stage (T2&T3&T4 vs. | T1) 536 | 2.031 (1.405 - 2.934) | -< 0.00 |
| Pathologic M stage (M1 vs. M0) 39 | | - 0.086 | Pathologic M stage (M1 vs. M0 | 390 | 0.934 (0.415 – 2.102) | 0.86 |
| athologic N stage (N1&N2&N3 vs. N0)52 | | 0.239 | Pathologic N stage (N1&N2&N3 vs. | N0)523 | 1.351 (0.937 – 1.947) | 0.10 |
| Gender (Male vs. Female) 53 | · · · · | 0.042 | Gender (Male vs. Female) | 539 | 1.510 (1.075 – 2.123) | 0.01 |
| Age (> 65 vs. <= 65) 52 | 0 1.132 (0.802 – 1.596) | 0.481 | Age (> 65 vs. <= 65) | 520 | 0.912 (0.646 – 1.286) | 0.598 |
| Smoker (Yes vs. No) 52 | 25 1.255 (0.772 – 2.039) | 0.359 | Smoker (Yes vs. No) | 525 | 1.017 (0.627 – 1.650) 🛏 🛏 | 0.94 |
| | 1 2 3 4 | 5 | F | | | |
| Association between PRDX5 expres | | in LUAD by | Association between PRDX6 logistic regression in the TCG | | | in LUAD |
| Association between PRDX5 expres | abase. | s in LUAD by | Association between PRDX6 | | ise. | in LUAD P valu |
| Association between PRDX5 expree ogistic regression in the TCGA data Characteristics Tota | abase. I (N) OR (95% CI) | | Association between PRDX6 | A databa Total (N | ase. I) OR (95% CI) | |
| Association between PRDX5 expre- ogistic regression in the TCGA data Characteristics Tota | abase. (N) OR (95% Cl) 66 1.011 (0.705 – 1.450) | P value | Association between PRDX6 logistic regression in the TCG Characteristics | A databa Total (N T1) 536 | ase. I) OR (95% CI) | P valu |
| Association between PRDX5 expre: ogistic regression in the TCGA data Characteristics Tota athologic T stage (T2&T3&T4 vs. T1) 53 Pathologic M stage (M1 vs. M0) 35 | abase. (N) OR (95% Cl) 16 1.011 (0.705 – 1.450) +1→ 10 1.807 (0.779 – 4.195) | P value 0.952 | Association between PRDX6 logistic regression in the TCG Characteristics Pathologic T stage (T2&T3&T4 vs. | A databa Total (N T1) 536) 390 | ase. I) OR (95% CI) 1.297 (0.903 – 1.862) ♥◄ | P valu 0.15 0.024 |
| Association between PRDX5 expre: ogistic regression in the TCGA data Characteristics Tota athologic T stage (T2&T3&T4 vs. T1) 53 Pathologic M stage (M1 vs. M0) 35 | abase. (N) OR (95% Cl) 16 1.011 (0.705 – 1.450) H→ 1.807 (0.779 – 4.195) → 1.189 (0.825 – 1.712) → | P value 0.952 → 0.168 | Association between PRDX6 logistic regression in the TCG Characteristics Pathologic T stage (T2&T3&T4 vs. Pathologic M stage (M1 vs. M0 | A databa Total (N T1) 536) 390 N0)523 | ase. I) OR (95% CI) 1.297 (0.903 – 1.862) • • • 2.949 (1.151 – 7.553) | P valu 0.15 |
| Pathologic T stage (T2&T3&T4 vs. T1) 53 Pathologic M stage (M1 vs. M0) 39 Pathologic N stage (N1&N2&N3 vs. N0)52 | abase. (N) OR (95% Cl) 6 1.011 (0.705 − 1.450) + + + 0 1.807 (0.779 − 4.195) + - 3 1.189 (0.825 − 1.712) + - 9 0.782 (0.557 − 1.098) + + | P value 0.952 0.168 0.353 | Association between PRDX6 - logistic regression in the TCG Characteristics Pathologic T stage (T2&T3&T4 vs. Pathologic M stage (M1 vs. M0 Pathologic N stage (N1&N2&N3 vs. | A databa Total (N T1) 536) 390 . N0)523 539 | ISE. I) OR (95% CI) 1.297 (0.903 – 1.862) ■ → 2.949 (1.151 – 7.553) ↓ → → 1.189 (0.825 – 1.712) ↓ → | P valu 0.159 |

Supplementary Figure 1: Association between PRDX1-6 expression and clinical characteristics in LUAD. (A-F) Correlation between PRDX1-6 expression and clinical characteristics in LUAD analyzed by logistic regression in the TCGA database.

| Characteristics | Total(N) | HR(95% CI) Univariate analysis | | P value Univariate analysis |
|--------------------|----------|---------------------------------------|--|-----------------------------|
| Pathologic T stage | 527 | | | |
| T1 | 176 | Reference | i | |
| T2 | 285 | 1.507 (1.059 - 2.146) | r | 0.023 |
| T3&T4 | 66 | 3.095 (1.967 - 4.868) | | < 0.001 |
| Pathologic N stage | 514 | | I. I | |
| N0 | 345 | Reference | 1 | |
| N1 | 96 | 2.293 (1.632 - 3.221) | | < 0.001 |
| N2&N3 | 73 | 2.993 (2.057 - 4.354) | | < 0.001 |
| Pathologic M stage | 381 | | I | |
| MO | 356 | Reference | I | |
| M1 | 25 | 2.176 (1.272 - 3.722) | ا | 0.005 |
| Gender | 530 | . , | I | |
| Female | 283 | Reference | I | |
| Male | 247 | 1.087 (0.816 - 1.448) | 4 | 0.569 |
| Age | 520 | | I | |
| <= 65 | 257 | Reference | 1 | |
| > 65 | 263 | 1.216 (0.910 - 1.625) | | 0.186 |
| Smoker | 516 | | | |
| No | 74 | Reference | | |
| Yes | 442 | 0.942 (0.625 - 1.420) | ⊷ | 0.775 |
| PRDX1 | 530 | , , , , , , , , , , , , , , , , , , , | 1 | |
| Low | 266 | Reference | | |
| High | 264 | 1.352 (1.009 - 1.812) | F••• | 0.043 |
| PRDX2 | 530 | | i | |
| Low | 265 | Reference | I | |
| High | 265 | 1.170 (0.878 - 1.559) | 4 ∎ | 0.284 |
| PRDX3 | 530 | | 1 | |
| Low | 267 | Reference | 1 | |
| High | 263 | 1.463 (1.093 - 1.957) | k | 0.01 |
| PRDX4 | 530 | , | I | |
| Low | 264 | Reference | I | |
| High | 266 | 1.218 (0.912 - 1.625) | 4 - | 0.181 |
| PRDX5 | 530 | | 1 | |
| Low | 262 | Reference | I | |
| High | 268 | 1.093 (0.820 - 1.457) | | 0.543 |
| PRDX6 | 530 | | | 0.010 |
| Low | 265 | Reference | 1 | |
| High | 265 | 1.604 (1.198 - 2.147) | ↓ , ⊢ • | 0.001 |
| - ingri | 200 | 1.004 (1.100 2.147) | | 0.001 |

Supplementary Figure 2: Independent prognostic risk factors for OS in patients with LUAD. (A) Independent prognostic risk factors for OS in patients with LUAD identified by univariate regression analysis of TCGA-LUAD dataset.

Α



Supplementary Figure 3: Methylation analysis and mutant landscape of PRDX1. (A)Correlation between PRDX1 expression and methylation analyzed in GSCA database.(B) Main mutation sites of PRDX1 genome alterations and mutant landscape ofPRDX1 identified in cBioportal website.