

S Table 1. Power analysis of COX Regression in Validation cohort

| Variables | Power | Sample | Reg. | S.D. | Event | R-squared | One-side | Beta |
|----------------|---------------|-----------|----------------|---------------|---------------|---------------|----------------|---------------|
| | | | | | | | | |
| | | | | | | | | |
| Size | 0.8689 | 28 | 0.6307 | 1.1790 | 0.5350 | 0.0760 | 0.0500 | 0.1311 |
| Surgery | 0.7191 | 28 | -0.9213 | 0.6120 | 0.5350 | 0.2720 | 0.10000 | 0.2809 |
| SEER Stage | 0.5477 | 28 | 0.6960 | 0.5670 | 0.5350 | 0.1580 | 0.10000 | 0.4523 |
| Primary Site | 0.2387 | 28 | -0.1791 | 0.9370 | 0.5350 | 0.2270 | 0.10000 | 0.7613 |
| Classification | 0.4162 | 28 | 0.9497 | 0.3150 | 0.5350 | 0.1460 | 0.10000 | 0.5838 |
| Age | 0.4409 | 28 | 0.7957 | 0.3900 | 0.5350 | 0.1100 | 0.10000 | 0.5591 |

B: This value is the log (base e) of the hazard ratio; Alpha: The probability of obtaining a false positive with the statistical test.

S Table 2. Sample size of COX Regression in Validation cohort

| Variables | Power | Sample | Reg. | S.D. | Event | R-squared | One-side | Beta |
|----------------|--------|--------|---------|--------|-----------|-----------|----------|-------------------|
| | | | | | | | | |
| | (N) | (B) | (SD) | (P) | Other X's | | | (R ²) |
| Surgery | 0.8048 | 37 | -0.9213 | 0.6120 | 0.5350 | 0.2720 | 0.10000 | 0.1952 |
| SEER Stage | 0.8034 | 65 | 0.6960 | 0.5670 | 0.5350 | 0.1580 | 0.10000 | 0.1966 |
| Primary Site | 0.8007 | 388 | -0.1791 | 0.9370 | 0.5350 | 0.2270 | 0.10000 | 0.1993 |
| Classification | 0.8020 | 111 | 0.9497 | 0.3150 | 0.5350 | 0.1460 | 0.10000 | 0.1980 |
| Age | 0.8020 | 99 | 0.7957 | 0.3900 | 0.5350 | 0.1100 | 0.10000 | 0.1980 |