Supplementary Table 1. Comparison of the survival for each N classification in the same T category

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| T stage |  | N0 | N1 | N2 | N3a | N3b |
| χ2 | P | χ2 | P | χ2 | P | χ2 | P | χ2 | P |
| T1 | N0 |  |  | 92.572 | .000 | 52.345 | .000 | 64.530 | .000 | 33.209 | .000 |
|  | N1 | 92.572 | .000 |  |  | .204 | .652 | 10.732 | .001 | 8.602 | .003 |
|  | N2 | 52.345 | .000 | .204 | .652 |  |  | 6.078 | .014 | 7.547 | .006 |
|  | N3a | 64.530 | .000 | 10.732 | .001 | 6.078 | .014 |  |  | .844 | .358 |
|  | N3b | 33.209 | .000 | 8.602 | .003 | 7.547 | .006 | .844 | .358 |  |  |
| T2 | N0 |  |  | 25.557 | .000 | 45.016 | .000 | 51.500 | .000 | 79.780 | .000 |
|  | N1 | 25.557 | .000 |  |  | 3.689 | .045 | 11.660 | .001 | 36.723 | .000 |
|  | N2 | 45.016 | .000 | 3.689 | .045 |  |  | 3.177 | .055 | 23.927 | .000 |
|  | N3a | 51.500 | .000 | 11.660 | .001 | 3.177 | .055 |  |  | 11.477 | .001 |
|  | N3b | 79.780 | .000 | 36.723 | .000 | 23.927 | .000 | 11.477 | .001 |  |  |
| T3 | N0 |  |  | 130.836 | .000 | 323.125 | .000 | 689.153 | .000 | 564.545 | .000 |
|  | N1 | 130.836 | .000 |  |  | 35.706 | .000 | 194.492 | .000 | 219.734 | .000 |
|  | N2 | 323.125 | .000 | 35.706 | .000 |  |  | 64.871 | .000 | 113.420 | .000 |
|  | N3a | 689.153 | .000 | 194.492 | .000 | 64.871 | .000 |  |  | 27.299 | .000 |
|  | N3b | 564.545 | .000 | 219.734 | .000 | 113.420 | .000 | 27.299 | .000 |  |  |
| T4a | N0 |  |  | 38.851 | .000 | 110.338 | .000 | 213.015 | .000 | 256.033 | .000 |
|  | N1 | 38.851 | .000 |  |  | 12.889 | .000 | 58.801 | .000 | 99.205 | .000 |
|  | N2 | 110.338 | .000 | 12.889 | .000 |  |  | 21.510 | .000 | 59.556 | .000 |
|  | N3a | 213.015 | .000 | 58.801 | .000 | 21.510 | .000 |  |  | 15.865 | .000 |
|  | N3b | 256.033 | .000 | 99.205 | .000 | 59.556 | .000 | 15.865 | .000 |  |  |

Supplemental Table 2 Compared the OS of patients with T1N1’ and T1N2’ stages to the stages according to the eighth edition of the TNM staging system.

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Stage | Ia | Ib | IIa | IIb | IIIa | IIIb | IIIc | T1N1’ | T1N2’ |
| χ2 | P | χ2 | P | χ2 | P | χ2 | P | χ2 | P | χ2 | P | χ2 | P | χ2 | P | χ2 | P |
| Ia |  |  | 88.097 | .000 | 706.267 | .000 | 1681.612 | .000 | 3078.382 | .000 | 4125.434 | .000 | 3692.349 | .000 | 316.428 | .000 | 231.581 | .000 |
| Ib | 88.097 | .000 |  |  | 125.609 | .000 | 454.680 | .000 | 957.816 | .000 | 1467.736 | .000 | 1533.944 | .000 | 57.277 | .000 | 92.464 | .000 |
| IIa | 706.267 | .000 | 125.609 | .000 |  |  | 187.998 | .000 | 766.365 | .000 | 1388.257 | .000 | 1353.591 | .000 | 1.936 | .164 | 21.700 | .000 |
| IIb | 1681.612 | .000 | 454.680 | .000 | 187.998 | .000 |  |  | 192.084 | .000 | 593.036 | .000 | 670.901 | .000 | 99.903 | .000 | .473 | .492 |
| IIIa | 3078.382 | .000 | 957.816 | .000 | 766.365 | .000 | 192.084 | .000 |  |  | 147.621 | .000 | 268.287 | .000 | 319.109 | .000 | 6.594 | .010 |
| IIIb | 4125.434 | .000 | 1467.736 | .000 | 1388.257 | .000 | 593.036 | .000 | 147.621 | .000 |  |  | 55.519 | .000 | 585.672 | .000 | 28.421 | .000 |
| IIIc | 3692.349 | .000 | 1533.944 | .000 | 1353.591 | .000 | 670.901 | .000 | 268.287 | .000 | 55.519 | .000 |  |  | 683.122 | .000 | 54.473 | .000 |
| T1N1’ | 316.428 | .000 | 57.277 | .000 | 1.936 | .164 | 99.903 | .000 | 319.109 | .000 | 585.672 | .000 | 683.122 | .000 |  |  | 24.378 | .000 |
| T1N2’ | 231.581 | .000 | 92.464 | .000 | 21.700 | .000 | .473 | .492 | 6.594 | .010 | 28.421 | .000 | 54.473 | .000 | 24.378 | .000 |  |  |



Supplemental Figure 1: Compared the T1N1’ to the subgroups of stage IIA (A), and T1N2’ to subgroups of stage IIB (B).



Supplemental Figure 2. The survival curves of the FMUUH data set for gastric cancer patients. (A) The eighth edition TNM staging system; (B) The new TNM staging system.