Supplementary Table 7a: Cancer specific counts of the gained edges in 13 cancer types.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Cancer type | Sample size(a) | Stage I | Stage II | Stage III | Stage IV |
| THCA | 59 | 25 | 6 | 9 | 3 |
| BLCA | 19 | 0 | 4 | 7 | 8 |
| BRCA | 110 | 18 | 60 | 21 | 2 |
| KIRC | 72 | 25 | 11 | 16 | 20 |
| KICH | 25 | 10 | 8 | 3 | 4 |
| LUAD | 58 | 26 | 9 | 12 | 2 |
| LUSC | 51 | 24 | 15 | 5 | 1 |
| LIHC | 40 | 15 | 7 | 8 | 0 |
| COAD | 26 | 3 | 13 | 4 | 5 |
| KIRP | 32 | 14 | 1 | 12 | 4 |
| STES | 43 | 5 | 16 | 7 | 3 |
| HNSC | 43 | 2 | 16 | 7 | 19 |

Distribution of patient samples harbouring the top gained edges across cancer stages.

(a)number of patient samples having significantly perturbed edges.

Supplementary Table 7b: Cancer specific counts of the lost edges in 13.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Cancer type | Sample size(a) | Stage I | Stage II | stage III | Stage IV |
| THCA | 59 | 25 | 6 | 9 | 3 |
| BLCA | 19 | 0 | 4 | 7 | 8 |
| BRCA | 110 | 18 | 60 | 21 | 2 |
| KIRC | 72 | 25 | 11 | 16 | 20 |
| KICH | 25 | 10 | 8 | 3 | 4 |
| LUAD | 49 | 26 | 9 | 12 | 2 |
| LUSC | 46 | 24 | 15 | 5 | 1 |
| LIHC | 38 | 14 | 9 | 9 | 1 |
| COAD | 26 | 3 | 13 | 4 | 5 |
| KIRP | 32 | 14 | 1 | 12 | 4 |
| STES | 43 | 5 | 16 | 7 | 3 |
| HNSC | 43 | 2 | 16 | 7 | 19 |

Distribution of patient samples harbouring the top lost edges across cancer stages.

(a)number of samples having the significantly perturbed edges