### Supplementary Table S2: Prognosis Model for all cases

Multivariate analysis for Overall Survival (OS) and Event-Free Survival (EFS)

| Variables                      | Hazard Ratio<sup>1</sup> | 95% CI       | p-value |
|--------------------------------|--------------------------|--------------|---------|
| **a. OS**                      |                          |              |         |
| High Grade (no/yes)            | 29.6                     | (6.75-129.870) | 0.000007 |
| Biopsy (no/yes)                | 2.67                     | (0.693-10.023) | 0.155   |
| **b. EFS**                     |                          |              |         |
| High Grade (no/yes)            | 14.06                    | (4.715-41.916) | 0.00002 |
| Biopsy (no/yes)                | 3.76                     | (1.559-9.044)  | 0.003   |
| Total Resection (no/yes)       | 0.53                     | (0.116-2.403)  | 0.408   |

<sup>1</sup>for "yes" category. NB: The total resection variable could not be included for the OS because of problem of singular matrix decomposition for estimating model parameters.