

**Additional file 3. Correlations between Ki67 IHC and IHC of other biomarkers**

|      |  | BX             |    |    | RX             |    |   |           |
|------|--|----------------|----|----|----------------|----|---|-----------|
| Ki67 |  | Maspin neg pos |    |    | Maspin neg pos |    |   |           |
|      |  | neg            | 11 | 5  | P < 0.001      | 12 | 2 | P = 0.008 |
| Ki67 |  | pos            | 1  | 21 |                | 2  | 6 |           |
|      |  | PTEN neg pos   |    |    | PTEN neg pos   |    |   |           |
| Ki67 |  | neg            | 10 | 6  | P = 0.018      | 11 | 2 | P = 0.046 |
|      |  | pos            | 5  | 19 |                | 2  | 4 |           |
| Ki67 |  | P53 neg pos    |    |    | P53 neg pos    |    |   |           |
|      |  | neg            | 15 | 4  | P = 1.000      | 11 | 6 | P = 0.667 |
| Ki67 |  | pos            | 20 | 4  |                | 4  | 4 |           |
| Ki67 |  | P16 neg pos    |    |    | P16 neg pos    |    |   |           |
|      |  | neg            | 10 | 7  | P = 0.050      | 8  | 7 | P = 0.086 |
| Ki67 |  | pos            | 6  | 18 |                | 1  | 7 |           |
| Ki67 |  | BMI1 neg pos   |    |    | BMI1 neg pos   |    |   |           |
|      |  | neg            | 17 | 0  | P = 0.001      | 11 | 2 | P = 0.505 |
| Ki67 |  | pos            | 12 | 11 |                | 8  | 0 |           |

Abbreviations: IHC, immunohistochemistry; neg, negative; pos, positive.