**Supplementary Table 3.** Results of sensitivity analyses

|  |  |  |  |
| --- | --- | --- | --- |
| **Author, year** [reference] | **HR [95% CI] after study exclusion** | **P - value** | **Heterogeneity I2 (%)** |
| **Intravesical recurrence-free survival** |  |  |  |
| ***All studies*** | **1.44 [1.29, 1.61]** | **<0.001** | **35%** |
| Baboudjian *et al.* 2020 [11] | 1.43 [1.28 -1.60] | <0.001 | 27% |
| Chung *et al.* 2020 [13] | 1.45 [1.29, 1.63] | <0.001 | 39% |
| Ishikawa *et al.* 2010 [15] | 1.48 [1.32, 1.66] | <0.001 | 30% |
| Izol *et al.* 2021[16] | 1.41 [1.27, 1.58] | <0.001 | 16% |
| Lee HY *et al.* 2018 [17] | 1.48 [1.32, 1.67] | <0.001 | 32% |
| Lee JK *et al.* 2016 [18] | 1.44 [1.29, 1.60] | <0.001 | 38% |
| Liu *et al.* 2016 [19] | 1.43 [1.27, 1.60] | <0.001 | 38% |
| Luo *et al.* 2013 [20] | 1.45 [1.29, 1.62] | <0.001 | 39% |
| Ma *et al.* 2019 [21] | 1.45 [1.30, 1.62] | <0.001 | 39% |
| Sankin *et al.* 2016 [23] | 1.42 [1.27, 1.59] | <0.001 | 29% |
| Sharma *et al.* 2021 [24] | 1.47 [1.31, 1.66] | <0.001 | 41% |
| Sung *et al.* 2015 [25] | 1.42 [1.26, 1.60] | <0.001 | 38% |
| Yoo *et al.* 2017 [26] | 1.46 [1.30, 1.64] | <0.001 | 38% |
| **Cancer-specific survival** |  |  |  |
| ***All studies*** | **0.94 [0.75, 1.19]** | **0.63** | **29%** |
| Chung *et al.* 2020 [13] | 1.00 [0.78, 1.29] | 0.98 | 23% |
| Ishikawa *et al.* 2010 [15] | 1.02 [0.79, 1.31] | 0.89 | 0% |
| Lee HY *et al.* 2018 [17] | 0.84 [0.63, 1.11] | 0.21 | 16% |
| Luo *et al.* 2013 [20] | 0.90 [0.70, 1.16] | 0.43 | 34% |
| Ma *et al.* 2019 [21] | 0.91 [0.71, 1.17] | 0.46 | 33% |
| Nison *et al.* 2013 [22] | 0.96 [0.74, 1.23] | 0.72 | 40%s |
| Sankin *et al.* 2016 [23] | 0.97 [0.75, 1.25] | 0.82 | 38% |
| **Overall survival** |  |  |  |
| ***All studies*** | **0.94 [0.75, 1.17]** | **0.56** | **47%** |
| Boorjijan *et al.* 2005 [12] | 0.90 [0.72, 1.12] | 0.35 | 40% |
| Chung *et al.* 2020 [13] | 1.06 [0.84, 1.34] | 0.65 | 0% |
| Hendin *et al.* 1999 [14] | 0.93 [0.74, 1.16] | 0.50 | 55% |
| Lee HY *et al.* 2018 [17] | 0.87 [0.67, 1.14] | 0.32 | 53% |
| Ma *et al.* 2019 [21] | 0.91 [0.72, 1.14] | 0.41 | 52% |
| Sankin *et al.* 2016 [23] | 0.98 [0.77, 1.25] | 0.90 | 52% |
| Sharma *et al.* 2021 [24] | 0.92 [0.73, 1.16] | 0.48 | 55% |
| **Metastases-free survival** |  |  |  |
| ***All studies*** | 0.91 [0.74, 1.12] | 0.37 | 0% |
| Hendin *et al.* 1999 [14] | 0.87 [0.70, 1.08] | 0.21 | 0% |
| Lee HY *et al.* 2018 [17] | 0.85 [0.67, 1.09] | 0.21 | 4% |
| Luo *et al.* 2013 [20] | 0.99 [0.78, 1.25] | 0.91 | 0% |
| Nison *et al.* 2013 [22] | 0.94 [0.75, 1.19] | 0.62 | 17% |
| Sankin *et al.* 2016 [23] | 0.91 [0.74, 1.13] | 0.41 | 24% |

**Abbreviations: CI** = confidence interval; **HR** = hazard ratio