**Supplementary Table 1** Characteristics of bladder cancer patients from each study included in the meta-analysis

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Authors** | **Histology** | **Staging**  **N (%)** | | **Grading**  **N (%)** | |
| Brisuda et al15 /Czech(2016) | Bladder Cancer | pTis  pTa  pT1  pT2  pT3  pT4 | 1 (1.5)  25 (37.9)  20 (30.3)  9 (13.6)  6 (9.1)  5 (7.6) | G1  G2  G3 | NA  NA  NA |
| Kim et al16 /Korea(2016) | Bladder Cancer | pTa  pT1  pT2  pT3  pT4 | 16 (21.9)  31 (42.5)  6 (8.2)  8 (11.0)  12 (16.4) | G1  G2  G3  ND | 17 (23.3)  34 (46.6)  19 (26.0)  3 (4.1) |
| Casadio et al17 /Italy(2013) | Bladder Cancer | pTa-T1  pT2-T3 | 36 (70.6)  4 (7.8) | G1  G2  G3 | 22 (43.1)  21 (41.2)  NA |
| Ellinger et al18 /Germany(2012) | Bladder Cancer | pT0  pTis  pTa  pT1  pT2  pT3  pT4  LNM  DM | 1 (1.2)  3 (3.6)  45 (53.6)  18 (21.4)  12 (14.3)  3 (3.6)  1 (1.2)  1 (1.2)  0 (0.0) | G1  G2  G3 | 15 (17.9)  38 (45.2)  30 (35.7) |
| Hauser et al19 /Germany(2012) | Non-muscle-invasive bladder cancer | pT0  pTis  pTa  pT1  pT2  pT3  pT4  LNM | 1 (1.3)  3 (4.0)  48 (64.0)  22 (0.0)  0 (0.0)  0 (0.0)  0 (0.0)  0 (0.0) | G1  G2  G3 | 17 (22.7)  40 (53.3)  18 (24.0) |
| Muscle-invasive bladder cancer | pT0  pTis  pTa  pT1  pT2  pT3  pT4  LNM | 0 (0.0)  0 (0.0)  0 (0.0)  0 (0.0)  15 (75.0)  4 (20.0)  1 (5.0)  6 (30.0) | G1  G2  G3 | 0 (0.0)  2 (10.0)  18 (90.0) |
| TURB w/o bladder cancer | NA | NA | NA | NA |
| Ellinger et al20 /Germany(2008) | Urothelial cell carcinoma | pT0  pT1  pT2  pT3  pT4 | 1 (3.1)  9 (28.1)  5 (15.6)  12 (37.5)  5 (15.6) | G1  G2  G3 | 0 (0.0)  7 (21.9)  25 (78.1) |
| Urothelial cell carcinoma plus incidental prostate cancer | pT0  pT1  pT2  pT3  pT4 | 0 (0.0)  2 (20.0)  1 (10.0)  4 (40.0)  3 (30.0) | G1  G2  G3 | 0 (0.0)  1 (10.0)  9 (90.0) |
| Squamous cell carcinoma | pT0  pT1  pT2  pT3  pT4 | 0 (0.0)  0 (0.0)  0 (0.0)  3 (100.0)  0 (0.0) | G1  G2  G3 | 0 (0.0)  2 (66.7)  1 (33.3) |
| Chang et al21 /Taiwan(2007) | Bladder Cancer | pTa  pT1  pT2  pT3  ND | 17 (36.9)  16 (34.8)  9 (19.6)  1 (2.2)  3 (6.5) | G1  G2  G3  ND | 15 (32.6)  14 (30.4)  14 (30.4)  3 (6.6) |
| Szarvas et al22 /Hungary(2007) | Bladder Cancer | NA | NA | NA | NA |
| Yu et al23 /China(2007) | Bladder Cancer | 0a  I  II  III  IV | 8 (6.0)  68 (51.5)  50 (37.9)  4 (3.0)  2 (1.5) | G1  G2  G3 | NA  NA  NA |
| Chan et al24 /HongKong(2003) | Bladder Cancer | NA | NA | NA | NA |
| Valenzuela et al25 /Spain(2002) | Bladder Cancer | NA | NA | NA | NA |

Abbreviations: NA, not available; ND, not determined; N, number; LNM, lymph node metastasis; DM, distant metastasis.