**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 | pTispTapT1pT2pT3pT4 | 1 (1.5)25 (37.9)20 (30.3)9 (13.6)6 (9.1)5 (7.6) | G1G2G3 | NANANA |
| Kim et al16 /Korea(2016) | Bladder Cancer | pTapT1pT2pT3pT4 | 16 (21.9)31 (42.5)6 (8.2)8 (11.0)12 (16.4) | G1G2G3ND | 17 (23.3)34 (46.6)19 (26.0)3 (4.1) |
| Casadio et al17 /Italy(2013) | Bladder Cancer | pTa-T1pT2-T3 | 36 (70.6)4 (7.8) | G1G2G3 | 22 (43.1)21 (41.2)NA |
| Ellinger et al18 /Germany(2012) | Bladder Cancer | pT0pTispTapT1pT2pT3pT4LNMDM | 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) | G1G2G3 | 15 (17.9)38 (45.2)30 (35.7) |
| Hauser et al19 /Germany(2012) | Non-muscle-invasive bladder cancer | pT0pTispTapT1pT2pT3pT4LNM | 1 (1.3)3 (4.0)48 (64.0)22 (0.0)0 (0.0)0 (0.0)0 (0.0)0 (0.0) | G1G2G3 | 17 (22.7)40 (53.3)18 (24.0) |
| Muscle-invasive bladder cancer | pT0pTispTapT1pT2pT3pT4LNM | 0 (0.0)0 (0.0)0 (0.0)0 (0.0)15 (75.0)4 (20.0)1 (5.0)6 (30.0) | G1G2G3 | 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 | pT0pT1pT2pT3pT4 | 1 (3.1)9 (28.1)5 (15.6)12 (37.5)5 (15.6) | G1G2G3 | 0 (0.0)7 (21.9)25 (78.1) |
| Urothelial cell carcinoma plus incidental prostate cancer | pT0pT1pT2pT3pT4 | 0 (0.0)2 (20.0)1 (10.0)4 (40.0)3 (30.0) | G1G2G3 | 0 (0.0)1 (10.0)9 (90.0) |
| Squamous cell carcinoma | pT0pT1pT2pT3pT4 | 0 (0.0)0 (0.0)0 (0.0)3 (100.0)0 (0.0) | G1G2G3 | 0 (0.0)2 (66.7)1 (33.3) |
| Chang et al21 /Taiwan(2007) | Bladder Cancer | pTapT1pT2pT3ND | 17 (36.9)16 (34.8)9 (19.6)1 (2.2)3 (6.5) | G1G2G3ND | 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 | 0aIIIIIIIV | 8 (6.0)68 (51.5)50 (37.9)4 (3.0)2 (1.5) | G1G2G3 | NANANA |
| 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.