Supplementary table S1: Univariable analysis of different potential predictor variables for patients with progression-free survival (PFS) of < 12 months or> 12 months.

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| --- | --- | --- | --- |
| Variables | PFS <12 (n=45) | PFS >12 (n=69) | P-value |
| Age, years (median, range) | 64 (41-76) | 58 (34-77) | 0.04 |
| Gender  Male  Female | 34 (70.8%)  14 (29.2%) | 55 (75.3%)  18 (24.7%) | 0.67 |
| Non-Responder  Yes   No | 40 (83.3%)  8 (16.7%) | 35 (47.9%)  38 (52.1%) | <0.01 |
| Smoking status  Never  Former  Current  Unknown | 4 (8.3%)  10 (20.8%)  7 (14.6%)  27 (56.3%) | 11 (15.1%)  16 (21.9%)  17 (23.3%)  29 (39.7%) | 0.87 |
| Charlson Comorbidity Index  3  4  5  6  7  Unknown | -  2 (4.2%)  4 (8.3%)  4 (8.3%)  2 (4.2%)  36 (75.0%) | 2 (2.7%)  10 (13.7%)  6 (8.2%)  3 (4.1%)  -  52 (71.2%) | 0.10 |
| Karnofsky Performance Score  70  80  90  100  Unknown | 1 (2.1%)  3 (6.3%)  7 (14.6%)  1 (2.1%)  36 (75.0%) | 1 (1.4%)  2 (2.7%)  11 (15.1%)  7 (9.6%)  52 (71.2%) | 0.34 |
| Tumor presentation  Primary  Recurrence  Unknown | 33 (68.8%)  9 (18.8%)  612.5%)- | 57 (78.1%)  13 (17.8%)  3 (4.1%) | 0.81 |
| Clinical tumor stage  T1  T2  T3  T4  Unknown | -  12 (25.0%)  14 (29.2%)  21 (43.8%)  1 (2.1%) | 4 (5.5%)  14 (19.2%)  40 (54.8%)  15 (20.5%)  - | <0.01 |
| Extravesical extension at diagnostic imaging  Positive  Negative  Unknown | 23 (47.9%)  14 (29.2%)  11 (22.9%) | 21 (28.8%)  38 (52.1%)  14 (19.2%) | 0.01 |
| Lymphadenopathy at diagnostic imaging  Positive  Negative  Unknown | 26 (54.2%)  12 (25.0%)  10 (20.8%) | 26 (35.6%)  35 (47.9%)  12 (16.4%) | 0.01 |
| Hydronephrosis at diagnostic imaging  Positive  Negative  Unknown | 20 (41.7%)  19 (39.6%)  9 (18.8%) | 26 (35.6%)  33 (45.2%)  14 (19.2%) | 0.54 |
| Hemoglobin level, mmol/L (median, range) | 8.0 (5.5-9.5) | 8.3 (5.5-10.3) | 0.15 |
| Creatinine level , μmol/L (median, range) | 86 (53-209) | 80 (46-202) | 0.30 |
| Glomerular Filtration Rate (GFR), ml/min (median, range) | 74.5 (48-109) | 76.5 (35-124) | 0.65 |
| POC regimen  Cisplatin based  Carboplatin based | 28 (58.3%)  20 (41.7%) | 57 (78.1%)  16 (21.9%) | 0.03 |
| Recurrence after cystectomy  Yes  No | 37 (77.1%)  11 (22.9%) | 20 (27.4%)  53 (72.6%) | <0.01 |
| Last follow up status  Alive, no evidence of disease  Alive, with recurrent disease  Dead of non-disease  Dead of disease  Lost to follow up | 3 (6.3%)  5 (10.4%)  6 (12.5%)  30 (62.5%)  4 (8.3%) | 50 (68.5%)  4 (5.5%)  3 (4.1%)  14 (19.2%)  2 (2.7%) | <0.01 |
| Time to surgery, months (median, range) | 5 (3-10) | 5 (2-19) | 0.75 |
| Time from POC to surgery, months (median, range) | 3 (1-6) | 3 (2-9) | 0.28 |
| CR, complete response; NR, non-response; PR, partial response; POC, pre-operative chemotherapy | | | |

Supplementary table S2: Univariable analysis of different potential predictor variables for patients with an overall survival (OS) of < 12 months vs > 12 months.

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| --- | --- | --- | --- |
| Variables | OS <12 (n=29) | OS >12 (n=94) | P-value |
| Age, years (median, range) | 63 (41-73) | 60 (34-77) | 0.44 |
| Gender  Male  Female | 20 (69.0%)  9 (31.0%) | 71 (75.5%)  23 (24.5%) | 0.48 |
| Non-Responder  Yes  No | 25 (86.2%)  4 (13.8%) | 52 (55.3%)  42 (44.7%) | <0.01 |
| Smoking status  Never  Former  Current  Unknown | 3 (10.3%)  7 (24.1%)  4 (13.8%)  15 (51.7%) | 12 (12.8%)  21 (22.3%)  20 (21.3%)  41 (43.6%) | 0.93 |
| Charlson Comorbidity Index  3  4  5  6  7  Unknown | -  1 (3.4%)  2 (6.9%)  3 (10.3%)  1 (3.4%)  22 (75.9) | 2 (2.1%)  12 (12.8%)  8 (8.5%)  5 (5.3%)  1 (1.1%)  66 (70.2%) | 0.31 |
| Karnofsky Performance Score  70  80  90  100  Unknown | -  2 (6.9%)  4 (13.8%)  1 (3.4%)  22 (75.9%) | 2 (2.1%)  3 (3.2%)  14 (14.9%)  9 (9.6%)  66 (70.2%) | 0.54 |
| Tumor presentation  Primary  Recurrence  Unknown | 21 (72.4%)  5 (17.2%)  3 (10.3%) | 70 (74.5%)  18 (19.1%)  6 (6.4%) | 1.00 |
| Clinical tumor stage  T1  T2  T3  T4  Unknown | -  9 (31.0%)  8 (27.6%)  12 (41.4%  - | 4 (4.3%)  18 (19.1%)  46 48.9%)  25 (26.6%)  1 (1.1%) | 0.09 |
| Extravesical extension at diagnostic imaging  Positive  Negative  Unknown | 11 (37.9%)  11 (37.9%)  7 (24.1%) | 34 (36.2)  42 (44.7%)  18 (19.1%) | 0.81 |
| Lymphadenopathy at diagnostic imaging  Positive  Negative  Unknown | 20 (69.0%)  3 (10.3%)  6 (20.7%) | 32 (34.0%)  46 (48.9%)  16 (17.0%) | <0.01 |
| Hydronephrosis at diagnostic imaging  Positive  Negative  Unknown | 11 (37.9%)  13 (44.8%)  5 (17.2%) | 35 (37.2%)  41 (43.6%)  18 (19.1%) | 1.00 |
| Hemoglobin level, mmol/L (median, range) | 7.7 (5.5-9.5) | 8.3 (5.5-10.3) | 0.03 |
| Creatinine level , μmol/L (median, range) | 79 (53-138) | 82 (46-209) | 0.78 |
| Glomerular Filtration Rate (GFR), ml/min (median, range) | 74.5 (48-109) | 78 (35-124) | 0.68 |
| POC regimen  Cisplatin based  Carboplatin based | 19 (65.5%)  10 (34.5% | 68 (72.3%)  26 (27.7%) | 0.49 |
| Recurrence after cystectomy  Yes  No | 11 (37.9%)  18 (62.1%) | 39 (41.5%)  55 (58.5%) | 0.06 |
| Last follow up status  Alive, no evidence of disease  Alive, with recurrent disease  Dead of non-disease  Dead of disease  Lost to follow up | 2 (6.9%)  -  6 (20.7%)  18 (62.1%)  3 (10.3%) | 53 (56.4%)  9 (9.6%)  3 (3.2%)  26 (27.7%)  3 (3.2%) | <0.01 |
| Time to surgery, months (median, range) | 5 (3-7) | 5 (2-19) | 0.40 |
| Time from POC to surgery, months (median, range) | 3 (1-5) | 3 (2-9) | 0.68 |
| CR, complete response; NR, non-response; PR, partial response; POC, pre-operative chemotherapy | | | |