**Supplemental eFigure1.** Identification of patients with muscle-invasive bladder cancer treated with cystectomy and peri-operative chemotherapy in Ontario 1994-2013.

All Confirmed Cystectomy Patients

N=5582

Excluded Histology (N=658)

Squamous N=233

Adenocarcinoma N=113

Small cell carcinoma N=23

TCC in situ N=180

Missing N=104

Squamous in situ N=N/R

NOS in situ N=N/R

Urothelial Carcinoma

N=4924

Excluded non-muscle invasive patients\* N=674

Stage 0 N=241

Stage 1 N=433

Muscle-Invasive

Urothelial Carcinoma

N=4250

Excluded NACT began >6 mos before surgery N=45

Study Population

N=4205

Patients not treated with peri-operative chemotherapy

N=3121

Patients treated with peri-operative chemotherapy

N=1084

**\*Note**: Stage 0/1 patients that were treated with pre-operative RT and/or NACT (n=85) and/or had nodal involvement (n=17) were not excluded from the muscle-invasive study population.

**N/R:** Note due to small cell size

**NOS:** Not otherwise specified

**Supplemental eTable 1.** List of ICD codes used to identify venous thromboembolism

|  |  |
| --- | --- |
| **ICD code** | **ICD Code Description** |
| **ICD9** | |
| 4151 | PULMON EMBOLISM/INFARCT |
| 4511 | FEMORAL VEIN PHLEBITIS |
| 4518 | ILIAC THROMBOPHLEBITIS |
| 4538 | VENOUS THROMBOSIS, NEC |
| 4539 | VENOUS THROMBOSIS, NOS |
| **ICD10** | |
| I269 | PULMONARY EMBOLISM WITHOUT MENTION OF ACUTE COR PULMONALE |
| I801 | PHLEBITIS AND THROMBOPHLEBITIS OF FEMORAL VEIN |
| I802 | PHLEBITIS AND THROMBOPHLEBITIS OF OTHER DEEP VESSELS OF LOWER EXTREMITIES |
| I822 | EMBOLISM AND THROMBOSIS OF VENA CAVA |
| I823 | EMBOLISM AND THROMBOSIS OF RENAL VEIN |
| I828 | EMBOLISM AND THROMBOSIS OF OTHER SPECIFIED VEINS |
| I829 | EMBOLISM AND THROMBOSIS OF UNSPECIFIED VEIN |

**Supplemental eFigure2.** Temporal trends of venous thromboembolism in 4205 patients with muscle-invasive bladder cancer treated with radical cystectomy in Ontario from 1994-2013.

**Supplemental eFigure 3.** Timing of first VTE event in patients with muscle-invasive bladder cancer treated with cystectomy in Ontario from 1994-2013.

**Supplemental eFigure 4.** Timing of first VTE event in patients treated with adjuvant chemotherapy for muscle invasive bladder cancer in Ontario from 1994-2013.

\*Patients who had a previous VTE event during the 6 months preceding cystectomy were excluded.

**Supplemental eTable 2.** Factors associated with VTE within 90 and 120 days of starting adjuvant chemotherapy among 7721 patients with bladder cancer treated with cystectomy and adjuvant chemotherapy in Ontario 1994-2013.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | **VTE within 90 days of ACT start date** | | | **VTE within 120 days of ACT start date** | | |
|  | **% with VTE** | **Multivariable2**  **analysis** |  | **% with VTE** | **Multivariable2**  **analysis** |  |
| **Characteristic** |  | **OR (95%CI)** | **P value** |  | **OR (95%CI)** | **P value** |
| ***Patient-related*** |  |  |  |  |  |  |
| Year of Surgery |  |  | 0.787 |  |  | 0.491 |
| Unit = 1 Year | - | 1.01 (0.94-1.09) |  | - | 1.02 (0.96-1.10) |  |
| Age, years |  |  | 0.938 |  |  | 0.859 |
| Unit = 1 Year | - | 1.00 (0.96-1.04) |  | - | 1.00 (0.96-1.03) |  |
| Sex |  |  | 0.387 |  |  | 0.208 |
| Female | 3% | 0.65 (0.24-1.73) |  | 3% | 0.54 (0.20-1.41) |  |
| Male | 4% | Ref |  | 5% | Ref |  |
| Charlson comorbidity score |  |  | 0.189 |  |  | 0.238 |
| 0 | 4% | Ref |  | 4% | Ref |  |
| 1+ | 6% | 1.67 (0.78-3.59) |  | 6% | 1.55 (0.75-3.19) |  |
| ***Pathology-related*** |  |  |  |  |  |  |
| Tstage3 |  |  | 0.104 |  |  | 0.135 |
| <T3 | 1% | Ref |  | 2% | Ref |  |
| T3-T4 | 5% | 3.32 (0.78-14.09) |  | 5% | 2.49 (0.75-8.26) |  |
| Nstage |  |  | 0.641 |  |  | 0.455 |
| Node negative | 3% | Ref |  | 4% | Ref |  |
| Node positive | 4% | 1.42 (0.56-3.56) |  | 5% | 1.39 (0.59-3.28) |  |
| NX | 6% | 1.85 (0.48-7.11) |  | 7% | 2.20 (0.64-7.54) |  |

1 42 patients who had a previous VTE event within up to the 6 months preceding surgery were excluded

2 Logistic regression was used

3 T stage data missing for <6 patients.