**Incidence and risk factors for venous thromboembolism in the Cancer-VTE Registry stomach cancer subcohort**

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**Online Resource 1**. Univariable and multivariable analysis of factors correlated with VTE prevalence at baseline

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Factor** |  | **N** | **Events,****n (%)** | **Univariable** | **Multivariable** |
|  |  |  |  | OR | 95% CI | p value | OR | 95% CI | p value |
| Sex | Male | 1,287 | 60 (4.7) | Ref | - | - | Ref | - | - |
| Female | 609 | 71 (11.7) | 2.70 | 1.89–3.86 | < 0.001 | 2.55 | 1.64–3.95 | < 0.001 |
| Age, years | < 65 | 483 | 11 (2.3) | Ref | - | - | Ref | - | - |
| ≥ 65 | 1,413 | 120 (8.5) | 3.98 | 2.13–7.45 | < 0.001 | 3.35 | 1.51–7.47 | 0.003 |
| BMI | ≥ 25 | 364 | 17 (4.7) | 0.61 | 0.36–1.04 | 0.069 | 0.58 | 0.31–1.10 | 0.094 |
| 18.5 to < 25 | 1,282 | 95 (7.4) | Ref | - | - | Ref | - | - |
| < 18.5 | 249 | 19 (7.6) | 1.03 | 0.62–1.72 | 0.904 | 0.73 | 0.39–1.37 | 0.326 |
| CrCL, mL/min | > 50 | 1,486 | 87 (5.9) | Ref | - | - | Ref | - | - |
| ≤ 50 | 364 | 38 (10.4) | 1.87 | 1.26–2.80 | 0.002 | 0.67 | 0.41–1.12 | 0.126 |
| Bed rest for 4 days or more | No | 1,872 | 128 (6.8) | Ref | - | - | Ref | - | - |
| Yes | 24 | 3 (12.5) | 1.95 | 0.57–6.61 | 0.286 | 0.38 | 0.05–2.84 | 0.347 |
| History of VTE | No | 1,878 | 121 (6.4) | Ref | - | - | Ref | - | - |
| Yes | 18 | 10 (55.6) | 18.15 | 7.04–46.83 | < 0.001 | 24.97 | 7.52–82.88 | < 0.001 |
| Clinical stage | II/III | 1,517 | 81 (5.3) | Ref | - | - | Ref | - | - |
| IV | 379 | 50 (13.2) | 2.70 | 1.86–3.91 | < 0.001 | 1.50 | 0.92–2.43 | 0.106 |
| ECOG PS | 0 | 1,396 | 75 (5.4) | Ref | - | - | Ref | - | - |
| 1 | 420 | 40 (9.5) | 1.85 | 1.24–2.77 | 0.003 | 1.05 | 0.64–1.72 | 0.859 |
| 2 | 80 | 16 (20.0) | 4.40 | 2.43–7.99 | < 0.001 | 1.77 | 0.87–3.60 | 0.116 |
| Occurrence of tumor | Primary | 1,852 | 128 (6.9) | Ref | - | - | Ref | - | - |
| Recurrence | 44 | 3 (6.8) | 0.99 | 0.30–3.23 | 0.981 | 0.33 | 0.06–1.83 | 0.204 |
| Lymph node metastasis | No | 635 | 27 (4.3) | Ref | - | - | - | - | - |
| Yes | 1,261 | 104 (8.2) | 2.02 | 1.31–3.13 | 0.002 | - | - | - |
| Distant metastasis | No | 1,529 | 80 (5.2) | Ref | - | - | - | - | - |
| Yes | 367 | 51 (13.9) | 2.92 | 2.02–4.24 | < 0.001 | - | - | - |
| Predominant histological type | Intestinala/othersb | 1,432 | 104 (7.3) | Ref | - | - | Ref | - | - |
| Diffusec | 461 | 27 (5.9) | 0.79 | 0.51–1.23 | 0.302 | 0.88 | 0.51–1.52 | 0.655 |
| Platelet count, 109/L | < 350 | 1,523 | 97 (6.4) | Ref | - | - | Ref | - | - |
| ≥ 350 | 327 | 28 (8.6) | 1.38 | 0.89–2.14 | 0.153 | 1.30 | 0.74–2.29 | 0.362 |
| Hb, g/dL | ≥ 10 | 1,461 | 82 (5.6) | Ref | - | - | Ref | - | - |
| < 10 | 389 | 43 (11.1) | 2.09 | 1.42–3.08 | < 0.001 | 0.81 | 0.48–1.35 | 0.421 |
| WBC count, 109/L | ≤ 11 | 1,787 | 121 (6.8) | Ref | - | - | Ref | - | - |
| > 11 | 63 | 4 (6.3) | 0.93 | 0.33–2.61 | 0.896 | 0.63 | 0.20–2.05 | 0.446 |
| D-dimer, μg/mL | ≤ 1.2 | 1,196 | 17 (1.4) | Ref | - | - | Ref | - | - |
| > 1.2 | 450 | 104 (23.1) | 20.84 | 12.31–35.28 | < 0.001 | 18.92 | 10.42–34.36 | < 0.001 |

Adjustment factors for VTE risk at baseline were sex, age, BMI, CrCL, bed rest for 4 days or more, history of VTE, clinical stage, ECOG PS, occurrence of tumor, predominant histological type, platelet count, Hb, WBC count, and D-dimer at baseline.

aComposite of papillary adenocarcinoma, tubular adenocarcinoma (well and moderately differentiated), and poorly differentiated adenocarcinoma (solid type).

bComposite of special type and others.

cComposite of poorly differentiated adenocarcinoma (non-solid type), signet-ring cell carcinoma, and mucinous adenocarcinoma.

*BMI* body mass index, *CI* confidence interval, *CrCL* creatinine clearance, *ECOG PS* Eastern Cooperative Oncology Group performance status, *Hb* hemoglobin, *OR* odds ratio, *Ref* reference, *VTE* venous thromboembolism, *WBC* white blood cell

**Online Resource 2**. Event components during the follow-up period.

|  |  |  |  |
| --- | --- | --- | --- |
|  | **All (N= 1,896)** | **With VTE at baseline** **(N = 131)** | **Without VTE at baseline****(N = 1,765)** |
|  | n | Incidence rate, %(95% CI) | *n* | Incidence rate, %(95% CI) | *n* | Incidence rate, %(95% CI) |
| Symptomatic PE | 0 | 0.0(0.0–0.2) | 0 | 0.0(0.0–2.8) | 0 | 0.0(0.0–0.2) |
| Symptomatic DVT | 6 | 0.3(0.1–0.7) | 0 | 0.0(0.0–2.8) | 6 | 0.3(0.1–0.7) |
| Asymptomatic PE | 6 | 0.3(0.1–0.7) | 0 | 0.0(0.0–2.8) | 6 | 0.3(0.1–0.7) |
| Asymptomatic DVT | 15 | 0.8(0.4–1.3) | 3 | 2.3(0.5–6.5) | 12 | 0.7(0.4–1.2) |
| Major bleeding | 12 | 0.6(0.3–1.1) | 5 | 3.8(1.3–8.7) | 7 | 0.4(0.2–0.8) |
| Clinically relevant non-major bleeding | 18 | 0.9(0.6–1.5) | 5 | 3.8(1.3–8.7) | 13 | 0.7(0.4–1.3) |
| Cerebral infarction | 11 | 0.6(0.3–1.0) | 0 | 0.0(0.0–2.8) | 11 | 0.6(0.3–1.1) |
| TIA | 2 | 0.1(0.0–0.4) | 0 | 0.0(0.0–2.8) | 2 | 0.1(0.0–0.4) |
| SEE | 0 | 0.0(0.0–0.2) | 0 | 0.0(0.0–2.8) | 0 | 0.0(0.0–0.2) |

*CI* confidence interval, *DVT* deep vein thrombosis, *PE* pulmonary embolism, *SEE* systemic embolic event, *TIA* transient ischemic attack, *VTE* venous thromboembolism

**(a)**

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**(b)**

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**Online Resource 3** Cumulative incidence of events (time-to-event analysis). (a) bleeding events, and (b) cerebral infarction/TIA/SEE.

The Gray test was used to calculate *p* values. Lightly shaded areas represent 95% CIs.

aIncluded major bleeding and clinically relevant non-major bleeding events.

*CI* confidence interval, *HR* hazard ratio, *SEE* systemic embolic event, *TIA* transient ischemic attack, *VTE* venous thromboembolism.

**Online Resource 4**. Univariable analysis of risk factors for composite VTE during the follow-up period

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Factor** |  | **N** | **Events,****n (%)** | **Univariable** |
|  |  |  |  | HR | 95% CI | p value |
| Sex | Male | 1,287 | 14 (1.1) | Ref | - | - |
| Female | 609 | 12 (2.0) | 1.84 | 0.85–3.97 | 0.123 |
| Age, years | < 65 | 483 | 8 (1.7) | Ref | - | - |
| ≥ 65 | 1,413 | 18 (1.3) | 0.77 | 0.34–1.78 | 0.545 |
| CrCL, mL/min | > 50 | 1,486 | 19 (1.3) | Ref | - | - |
| ≤ 50 | 364 | 2 (0.5) | 0.44 | 0.10–1.89 | 0.270 |
| Bed rest for 4 days or more | No | 1,872 | 26 (1.4) | Ref | - | - |
| Yes | 24 | 0 (0.0) | <0.01 | <0.01–<0.01 | <0.001 |
| History of VTE | No | 1,878 | 25 (1.3) | Ref | - | - |
| Yes | 18 | 1 (5.6) | 4.28 | 0.55–33.00 | 0.164 |
| ECOG PS | 0 | 1,396 | 17 (1.2) | Ref | - | - |
| 1 | 420 | 7 (1.7) | 1.37 | 0.57–3.29 | 0.480 |
| 2 | 80 | 2 (2.5) | 2.19 | 0.51–9.44 | 0.294 |
| Occurrence of tumor | Primary | 1,852 | 24 (1.3) | Ref | - | - |
| Recurrence | 44 | 2 (4.5) | 3.52 | 0.83–14.97 | 0.088 |
| Lymph node metastasis | No | 635 | 11 (1.7) | Ref | - | - |
| Yes | 1,261 | 15 (1.2) | 0.69 | 0.32–1.51 | 0.354 |
| Distant metastasis | No | 1,529 | 18 (1.2) | Ref | - | - |
| Yes | 367 | 8 (2.2) | 1.86 | 0.81–4.28 | 0.143 |
| Platelet count, 109/L | < 350 | 1,523 | 19 (1.2) | Ref | - | - |
| ≥ 350 | 327 | 2 (0.6) | 0.49 | 0.11–2.10 | 0.336 |
| Hb, g/dL | ≥ 10 | 1,461 | 17 (1.2) | Ref | - | - |
| < 10 | 389 | 4 (1.0) | 0.89 | 0.30–2.65 | 0.836 |
| WBC count, 109/L | ≤ 11 | 1,787 | 20 (1.1) | Ref | - | - |
| > 11 | 63 | 1 (1.6) | 1.46 | 0.20–10.93 | 0.711 |
| D-dimer, μg/mL | ≤ 1.2 | 1,196 | 14 (1.2) | Ref | - | - |
| > 1.2 | 450 | 10 (2.2) | 1.95 | 0.87–4.39 | 0.106 |

Variables presented in this table were not used in the multivariate analysis of risk factors for composite VTE during the follow-up period.

*CI* confidence interval, *CrCL* creatinine clearance, *ECOG PS* Eastern Cooperative Oncology Group performance status, *Hb* hemoglobin, *HR* hazard ratio, *Ref* reference, *VTE* venous thromboembolism, *WBC* white blood cell