**The incidence of venous thromboembolism is similar in outpatients with and without SARS-CoV-2 infection**

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| Challenge | The incidence of venous thromboembolic events and benefit of thromboprophylaxis in outpatients with Coronavirus disease 2019 (COVID-19) are not well established |
| Existing Evidence | Several studies demonstrate that hospitalized COVID-19 patients have a high rate of thromboembolic complications which are associated with increased mortality |
| Target Population | Symptomatic adult patients tested for SARS-CoV-2 infection |
| Intervention or Exposure | SARS-CoV-2 infection  |
| **Outcomes/Key Findings** | **Rates of venous thromboembolism in outpatients with COVID-19 were not significantly different from symptomatic SARS-CoV-2 negative patients** |
| **Resulting Action/Change** | **KP regional anticoagulation guidelines do not need to be modified to offer thromboprophylaxis to outpatients with SARS-CoV-2 infection, pending results from randomized trials.** |
| Additional Recommendations | Dissemination of the results to frontline physicians (e.g. hospitalists and primary care) to inform future practice/research. |
| Implementation Tools  | N/A |
| Implementation Measurement | Could evaluate proportions of patients empirically started on these agents before/after these findings are disseminated. |

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| Reference | Characteristics of subjects by SARS-CoV-2 and VTE status (N=220,588)

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|  | SARS-CoV-2 positive patients |  | SARS-CoV-2 negative patients |
|  | No VTEN=25,906N (%) | VTEN=198N (%) |  | No VTEN=193,476N (%) | VTEN=1,008N (%) |
| Age, years |  |  |  |  |  |
| 18-29 | 5925 (23) | 14 (7) |  | 34180 (18) | 28 (3) |
| 30-39 | 5670 (22) | 19 (10) |  | 41102 (21) | 47 (5) |
| 40-49 | 5451 (21) | 38 (19) |  | 36432 (19) | 89 (9) |
| 50-59 | 4682 (18) | 48 (24) |  | 33676 (17) | 152 (15) |
| 60-69 | 2655 (10) | 40 (20) |  | 25593 (13) | 245 (24) |
| 70-79 | 984 (4) | 26 (13) |  | 14382 (7) | 234 (23) |
| 80+ | 539 (2) | 13 (7) |  | 8111 (4) | 213 (21) |
| Median (IQR) | 42 (31-55) | 56 (45-67) |  | 46 (34-60) | 68 (56-78) |
| Sex |  |  |  |  |  |
| Female | 13649 (53) | 79 (40) |  | 116837 (60) | 510 (51) |
| Male | 12257 (47) | 119 (60) |  | 76639 (40) | 498 (49) |
| Race/ethnicity |  |  |  |  |  |
| Asian | 3176 (12) | 30 (15) |  | 32310 (17) | 116 (12) |
| Black | 1767 (7) | 25 (13) |  | 13857 (7) | 105 (10) |
| Hispanic | 13116 (51) | 88 (44) |  | 46857 (24) | 127 (13) |
| White | 5667 (22) | 45 (23) |  | 84398 (44) | 615 (61) |
| Missing/other | 2180 (8) | 10 (5) |  | 16054 (8) | 45 (4) |
| Body mass index |  |  |  |  |  |
| Underweight  | 163 (1) | 1 (0) |  | 2616 (1) | 24 (2) |
| Healthy weight | 4588 (18) | 23 (12) |  | 55413 (29) | 256 (25) |
| Overweight | 7963 (31) | 56 (28) |  | 62134 (32) | 303 (30) |
| Obese | 12086 (47) | 110 (56) |  | 69244 (36) | 417 (41) |
| Unknown | 1106 (4) | 8 (4) |  | 4069 (2) | 8 (1) |
| Median (IQR) | 30 (26-34) | 31 (28-36) |  | 28 (24-32) | 29 (24-34) |
| Comorbidities |  |  |  |  |  |
| Hypertension | 2563 (10) | 98 (49) |  | 25151 (13) | 611 (61) |
| Diabetes | 2672 (10) | 71 (36) |  | 18493 (10) | 322 (32) |
| Chronic kidney disease | 901 (3) | 28 (14) |  | 11056 (6) | 273 (27) |
| COPD or asthma | 2254 (9) | 38 (19) |  | 28058 (15) | 300 (30) |
| Congestive heart failure | 364 (1) | 22 (11) |  | 6128 (3) | 256 (25) |
| Liver cirrhosis  | 69 (0) | 3 (2) |  | 1029 (1) | 38 (4) |
| Malignancy | 397 (2) | 15 (8) |  | 8592 (4) | 298 (30) |
| Charlson Comorbidity Index |  |  |  |  |  |
| 0 | 18428 (71) | 96 (48) |  | 122256 (63) | 264 (26) |
| 1-2 | 5698 (22) | 66 (33) |  | 48548 (25) | 271 (27) |
| 3-4 | 986 (4) | 16 (8) |  | 11429 (6) | 193 (19) |
| 5+ | 794 (3) | 20 (10) |  | 11243 (6) | 280 (28) |
| Median (IQR) | 0 (0-1) | 1 (0-2) |  | 0 (0-1) | 2 (0-5) |
| Smoking status |  |  |  |  |  |
| Ever | 6597 (25) | 58 (29) |  | 66075 (34) | 491 (49) |
| Never | 18367 (71) | 131 (66) |  | 124209 (64) | 510 (51) |
| Unknown | 942 (4) | 9 (5) |  | 3192 (2) | 7 (1) |
| Test month |  |  |  |  |  |
| February-April | 2068 (8) | 46 (23) |  | 28428 (15) | 201 (20) |
| May | 979 (4) | 9 (5) |  | 32579 (17) | 235 (23) |
| June | 3354 (13) | 25 (13) |  | 28577 (15) | 165 (16) |
| July | 12185 (47) | 70 (35) |  | 61153 (32) | 217 (22) |
| August  | 7320 (28) | 48 (24) |  | 42739 (22) | 190 (19) |
| Lab test setting |  |  |  |  |  |
| Outpatient | 22209 (86) | 95 (48) |  | 168780 (87) | 190 (19) |
| Emergency department | 2420 (9) | 22 (11) |  | 12997 (7) | 107 (11) |
| Inpatient  | 1277 (5) | 81 (41) |  | 11699 (6) | 711 (71) |
| Highest level of care during follow-up |  |  |  |  |  |
| Outpatient/emergency department | 23092 (89) | 28 (14) |  | 172713 (89) | 114 (11) |
| Inpatient | 2252 (9) | 82 (41) |  | 18479 (10) | 645 (64) |
| Intensive care unit | 562 (2) | 88 (44) |  | 2284 (1) | 249 (25) |

VTE=venous thromboembolism; IQR=Interquartile range; COPD=chronic obstructive pulmonary disease

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| 30-day VTE incidence and time to anticoagulation by diagnosis location and SARS-CoV-2 status N=220,588 |
|  | Incidence of VTE, N (per 1,000 subjects) | Days from SARS-CoV-2 testing to anticoagulation initiation, Median (IQR) |
|  | SARS-CoV-2 positiveN=26,104 | SARS-CoV-2 negativeN=194,484 | p-valuea |  SARS-CoV-2 positiveN=198 | p-valueb |
| All VTE events | 198 (7.59) | 1,008 (5.18) | <0.001 | 7 (1-16)11 (4-21)7 (1-14)5 (1-13)11 (1-25) |  |
| Outpatient events | 47 (1.80) | 434 (2.23) | 0.16 |  |
| Hospital-assoc. | 151 (5.78) | 574 (2.95) | <0.001 | 0.10 |
| Inpatient | 125 (4.79) | 352 (1.81) | <0.001 |  |
| Post-hospital  | 26 (0.96) | 222 (1.14) | 0.51 | 0.67 |
| VTE=venous thromboembolism; IQR=interquartile rangea Chi-square test |
| b Kruskal-Wallis test comparing outpatient VTE with hospital-associated VTE and the subset of post-hospital VTE  |

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