A retrospective cross-sectional comparative study identifying the risk factors associated with recurrent venous thrombosis among oncology patients

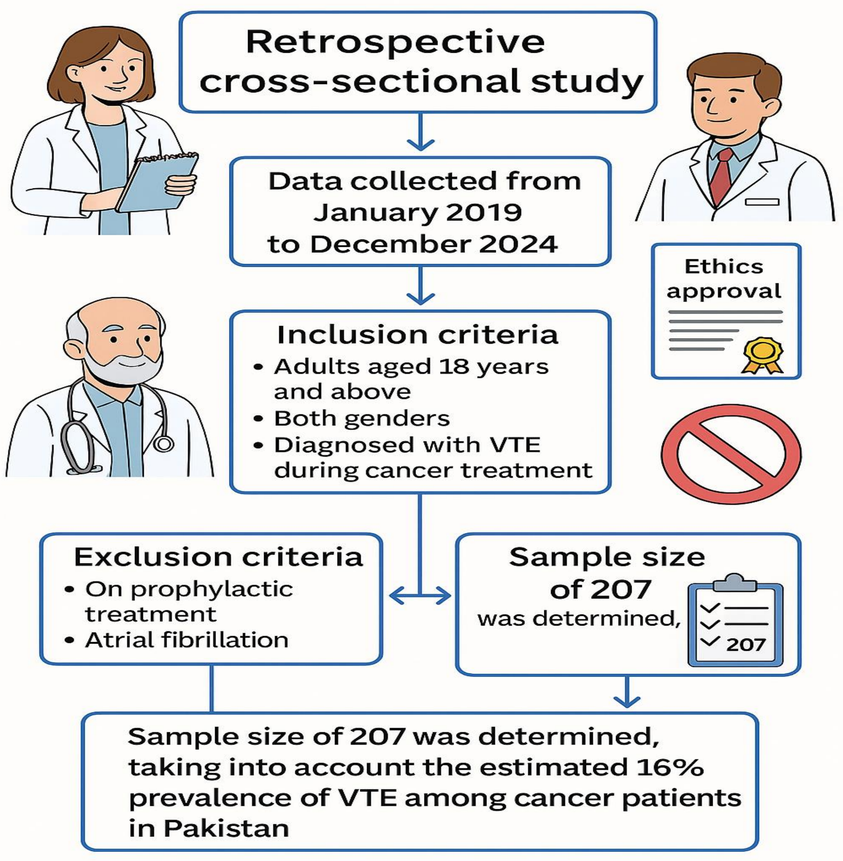
Sajjad Ullah[1], Omar Akhlaq Bhutta[2], Javeria Khalid[3], Abdul Wahab[3], Inayat Ur Rehman*[4]

- Shaukat Khanum Memorial Cancer Hospital and Research Centre, Department Pharmaceutical Services Peshawar, Pakistan [1,2,3]
- Department of Pharmaceutical Health Outcomes and Policy, University of Houston College of Pharmacy, Houston, TX, USA [3]
- Department of Pharmacy, Abdul Wali Khan University Mardan, Garden Campus, Mardan, Pakistan [1,*4]

OBJECTIVE

- The objective of this study was to evaluate the incidence of recurrence of VTE by comparison of subcutaneous (SC) and direct oral anticoagulants (DOCA), and risk factors associated with incidence of bleeding and recurrence of VTE while using different anticoagulant therapy in cancer patients.

METHODOLOGY



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RESULTS

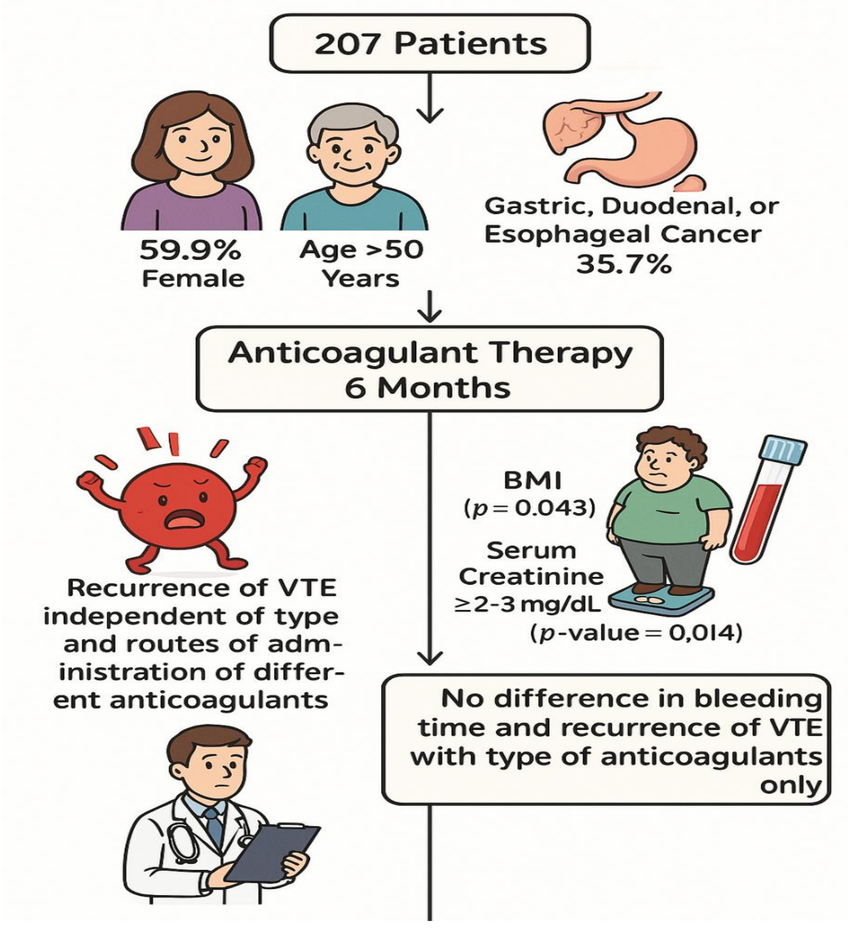


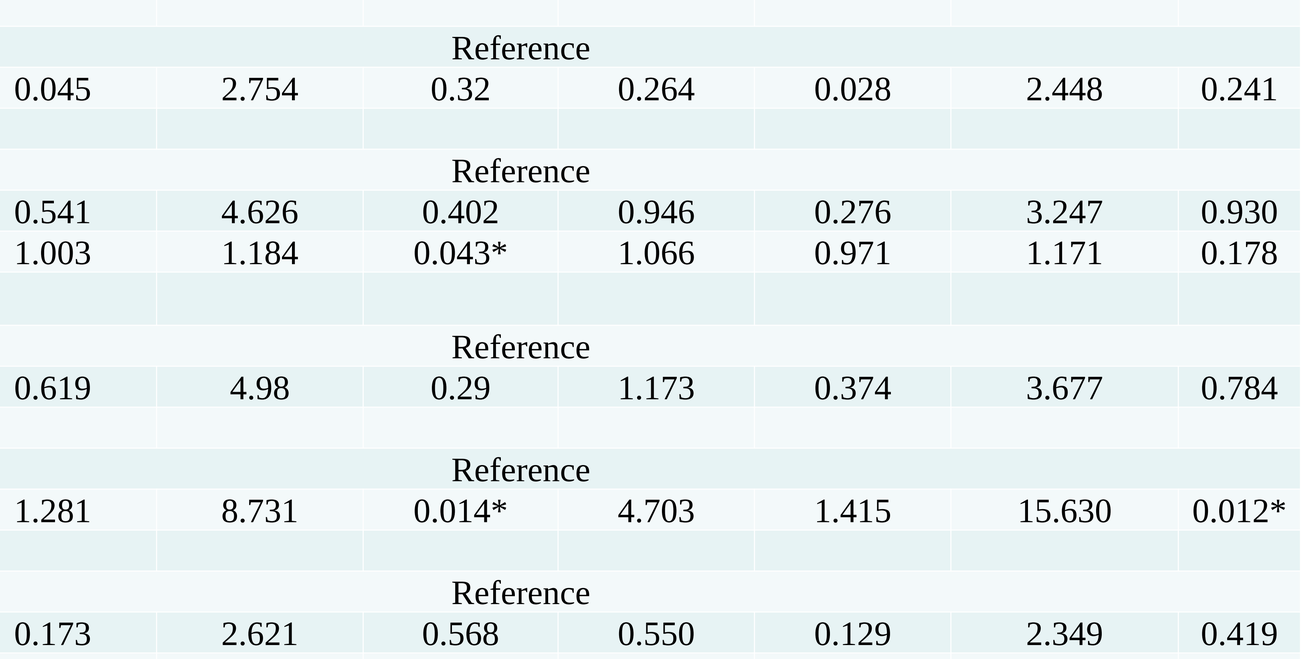
Table 1: Binary logistic regression analysis for risk factors/predictor identification associated with recurrence of VTE

Variable	Recurrence of VTE		Univariate Analysis			P-value	Multivariate Analysis			
	No	Yes	OR	Lower	Upper		OR	Lower	Upper	P-value
	n (%)	n (%)								
Age										
<50 years	71 (38.4)	9 (40.9)				Reference				
> 50 years	114 (61.6)	13 (53.1)	0.818	0.366	2.213	0.818	0.527	0.176	1.580	0.253
Smoking/ Tobacco Use										
No	163 (88.1)	21 (95.5)				Reference				
Yes	22 (11.9)	1 (4.5)	0.353	0.045	2.754	0.32	0.264	0.028	2.448	0.241
Family History										
No	156 (84.3)	17 (77.3)				Reference				
Yes	29 (15.7)	5 (22.7)	1.582	0.541	4.626	0.402	0.946	0.276	3.247	0.930
BMI			1.09	1.003	1.184	0.043*	1.066	0.971	1.171	0.178
Anticoagulant Route										
Oral	123 (66.5)	16 (72.7)				Reference				
Subcutaneous	62 (33.5)	6 (27.3)	1.756	0.619	4.98	0.29	1.173	0.374	3.677	0.784
Serum Creatinine										
0.6-1.2mg/dl	158 (85.4)	14 (63.6)				Reference				
>1.2 mg/dl	25 (13.5)	6 (27.3)	3.344	1.281	8.731	0.014*	4.703	1.415	15.630	0.012*
Duration of anticoagulant										
3 months	58 (31.4)	5 (22.7)				Reference				
6 months	69 (37.3)	4 (18.2)	0.672	0.173	2.621	0.568	0.550	0.129	2.349	0.419
> 6 months	58 (31.4)	13 (59.1)	2.6	0.871	7.762	0.087	1.864	0.571	6.090	0.302

Table-2: Comparative analysis of anticoagulants patients received

Variable	Recurrence of VTE				P-value
	No (n=185)		Yes (n=22)		
	n	%	n	%	
Anticoagulants Type					
Enoxaparin	122	65.9	17	77.3	
Rivaroxaban	52	28.1	5	22.7	0.389
Apixaban	11	5.9	0	0.0	
Route of Administration					
Oral	63	34.1	5	22.7	0.285
Subcutaneous	122	65.9	17	77.3	

Figure 1: Cumulative incidence of bleeding by anticoagulant type



CONCLUSION

- Our study findings showed, no significant difference between oral versus subcutaneous anticoagulants for recurrence of VTE in cancer patients
- Consequently, anticoagulant therapy is essential and should take into consideration the potential of clinical benefit and economic costs for the management of VTE in patients with cancer.

References

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