

Retrospective Analysis of the Efficacy of Oral Venous Thromboembolism Prophylaxis for Patients Undergoing Minimally Invasive Direct Anterior Approach in Total Hip Arthroplasty

Dyllan Brett Geldenhuys (MMed (Orth), MBBCh) **Jurek Rafal Tomasz Pietrzak** (FC Orth (SA), MMed (Orth), MBBCh), **Nabila Goga** (FC Orth (SA), MMed (Orth), MBChB), **Josip Nenad Cakic** (PhD, FCS (Orth) SA, MMed (Orth), MD)
South Africa



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Faculty Disclosure Information

- No financial disclosures



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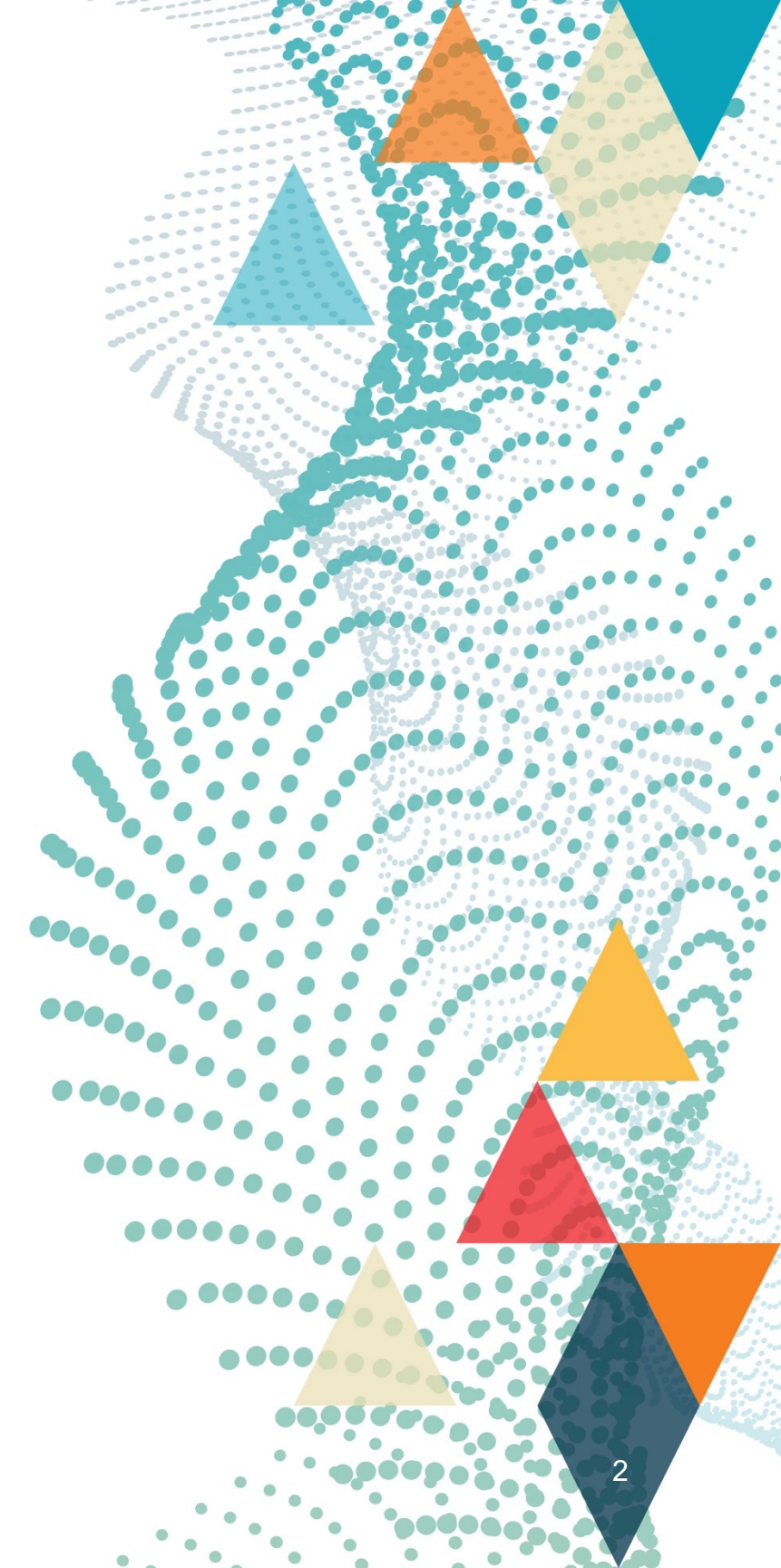


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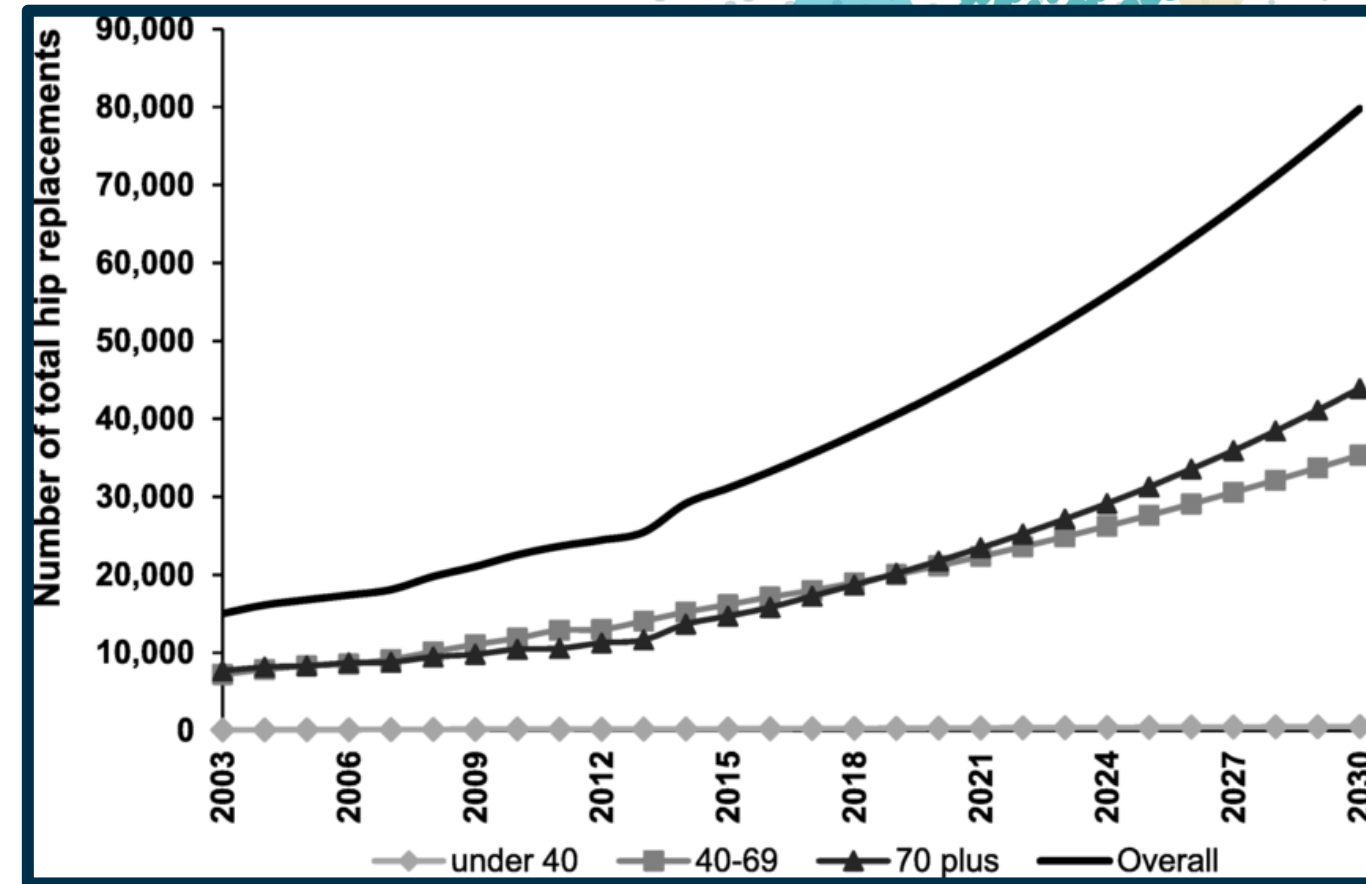


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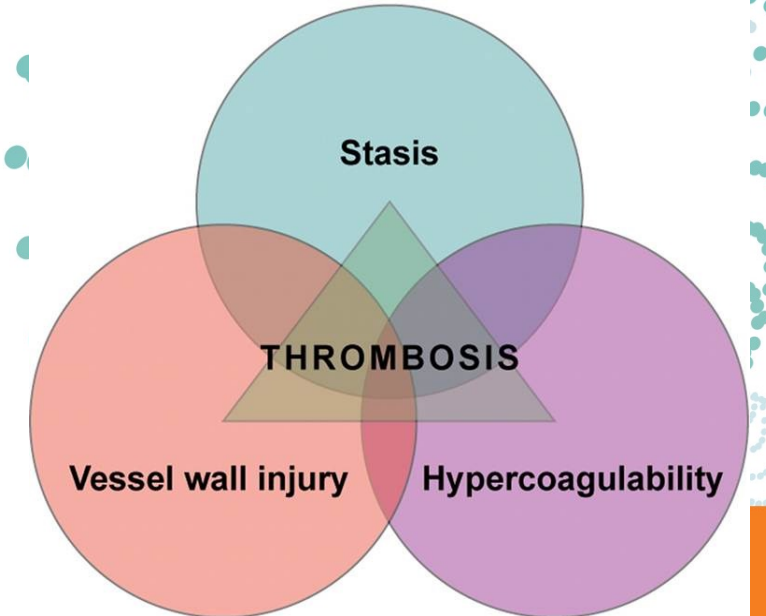
Introduction

- THA- Highly successful and cost-effective surgical procedure
- Reported survivorship of 98% at 10 years and 90% at 20 years
- Global demand for THA continuing to ↑↑
- The number of THA in USA is predicted ↑ 4 million by 2030.

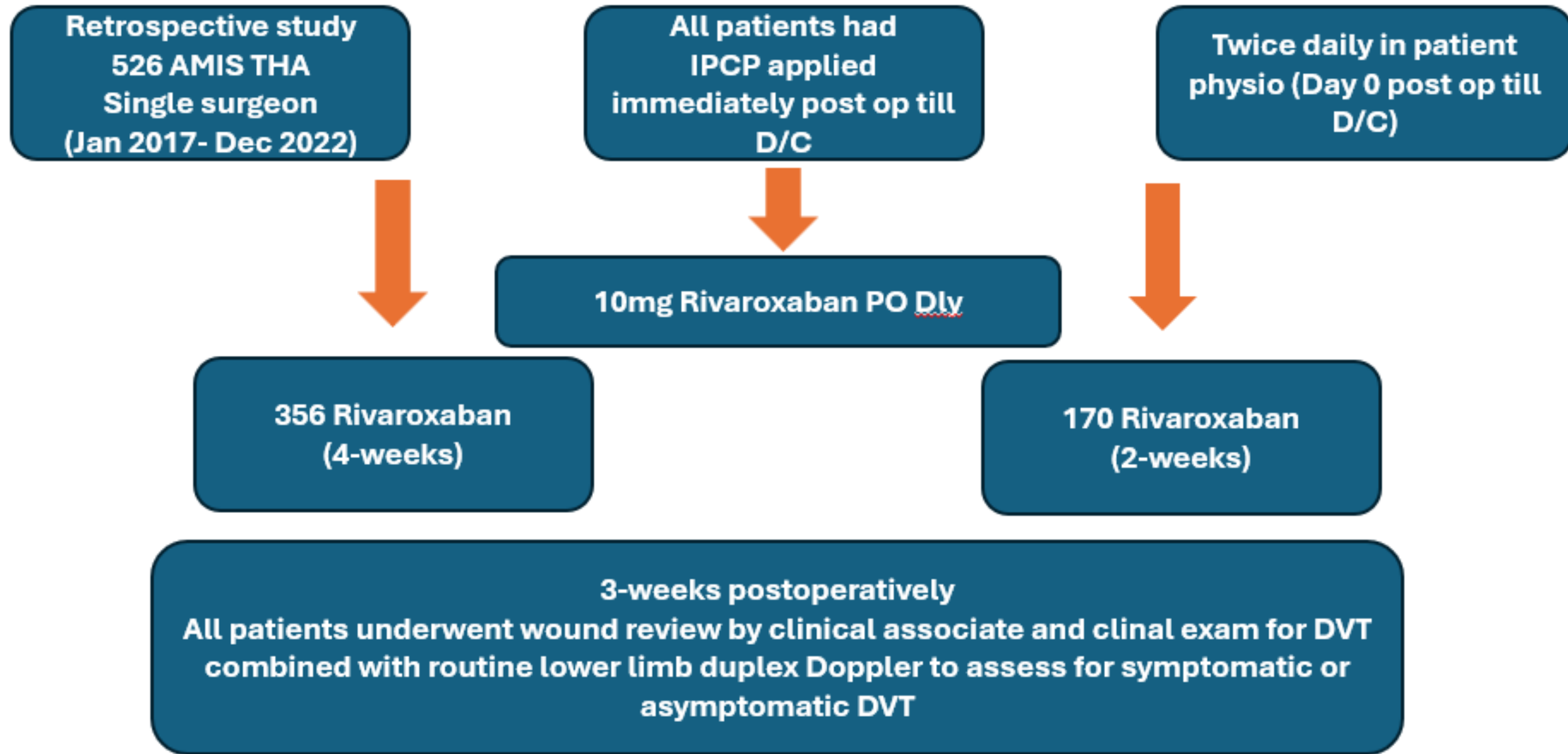


Global Impact of VTE

- With the global **↑** demand there is a parallel **↑** in complications
- VTE manifesting as DVT or PE is a devastating complication following THA
- Worldwide 10 million VTE episode diagnosed annually
- Incidence of VTE - 40-60% in THA patients without prophylaxis
- VTE incidence in THA **↓** to 1.3-10% in those who receive prophylaxis
- VTE events and complications - **↑** Morbidity, Mortality and Economic burden
- Costing \$7-10 billion in USA healthcare costs annually



Materials and methods



Results: Demographic data

Total	526
Age (Mean)	59.5 ± 13.4
Gender (M/F)	223/ 303
BMI (Mean)	28.02 ± 5.58
Co-morbidities	
0	49.1%
1	41.1%
2	8.9%
≥3	0.9%



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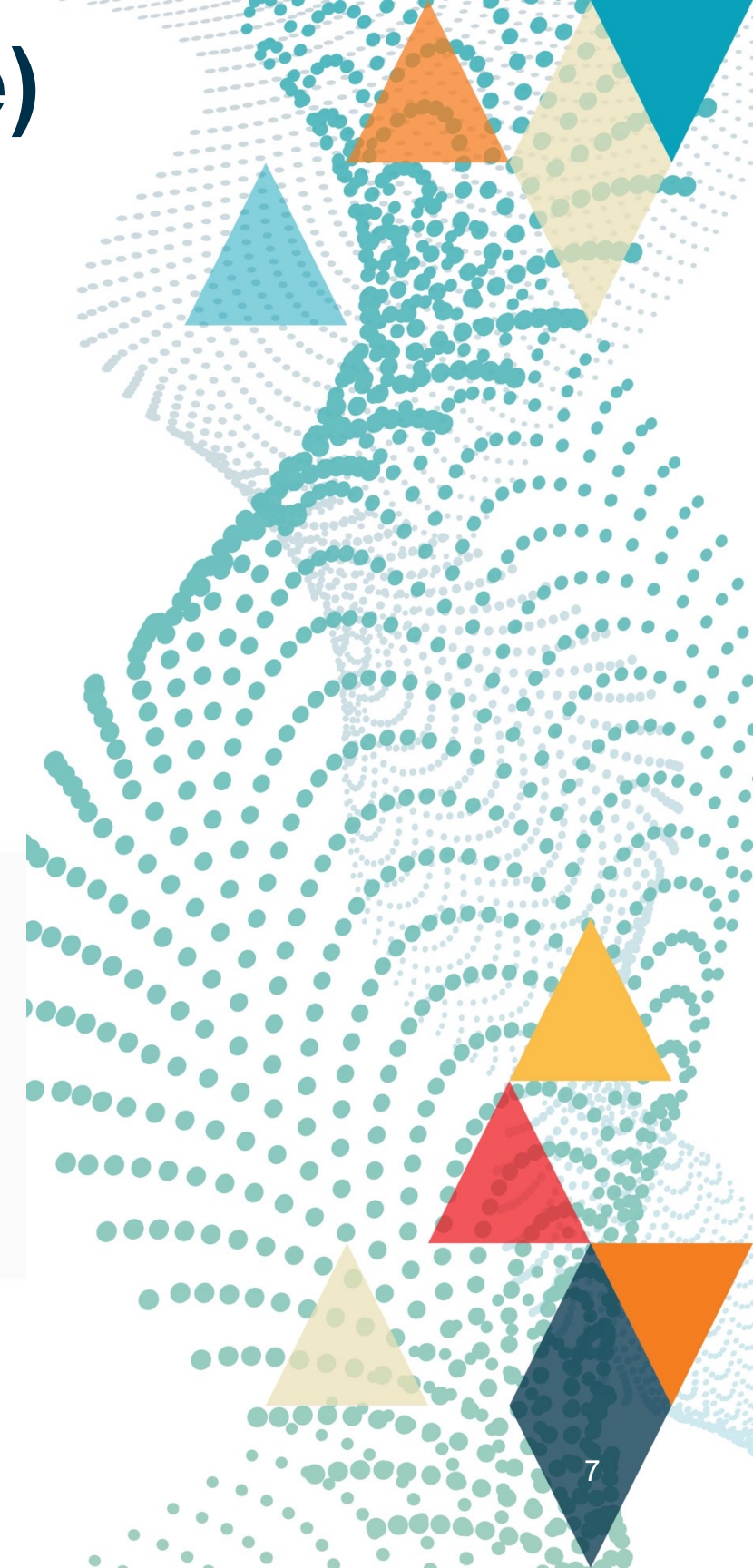
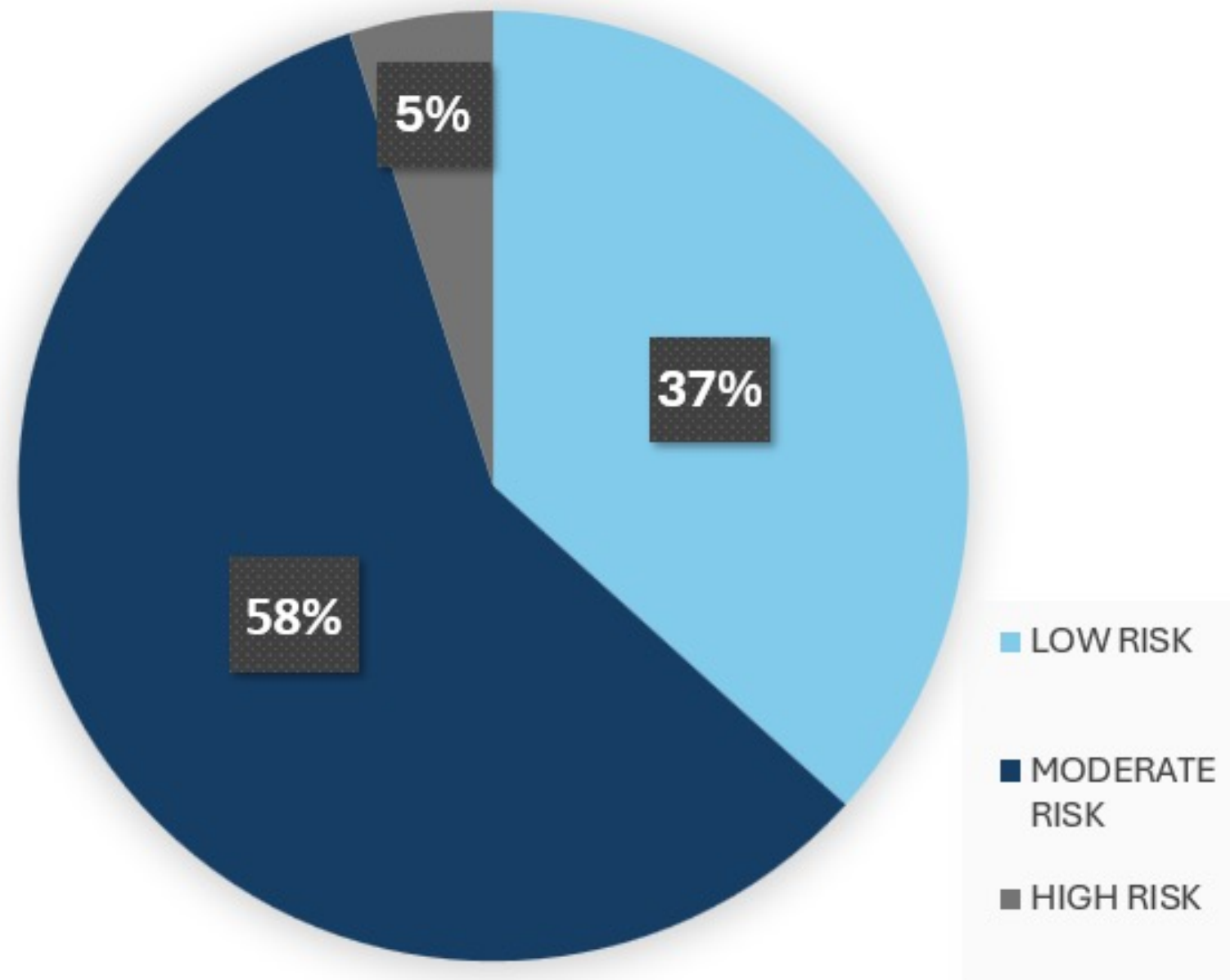
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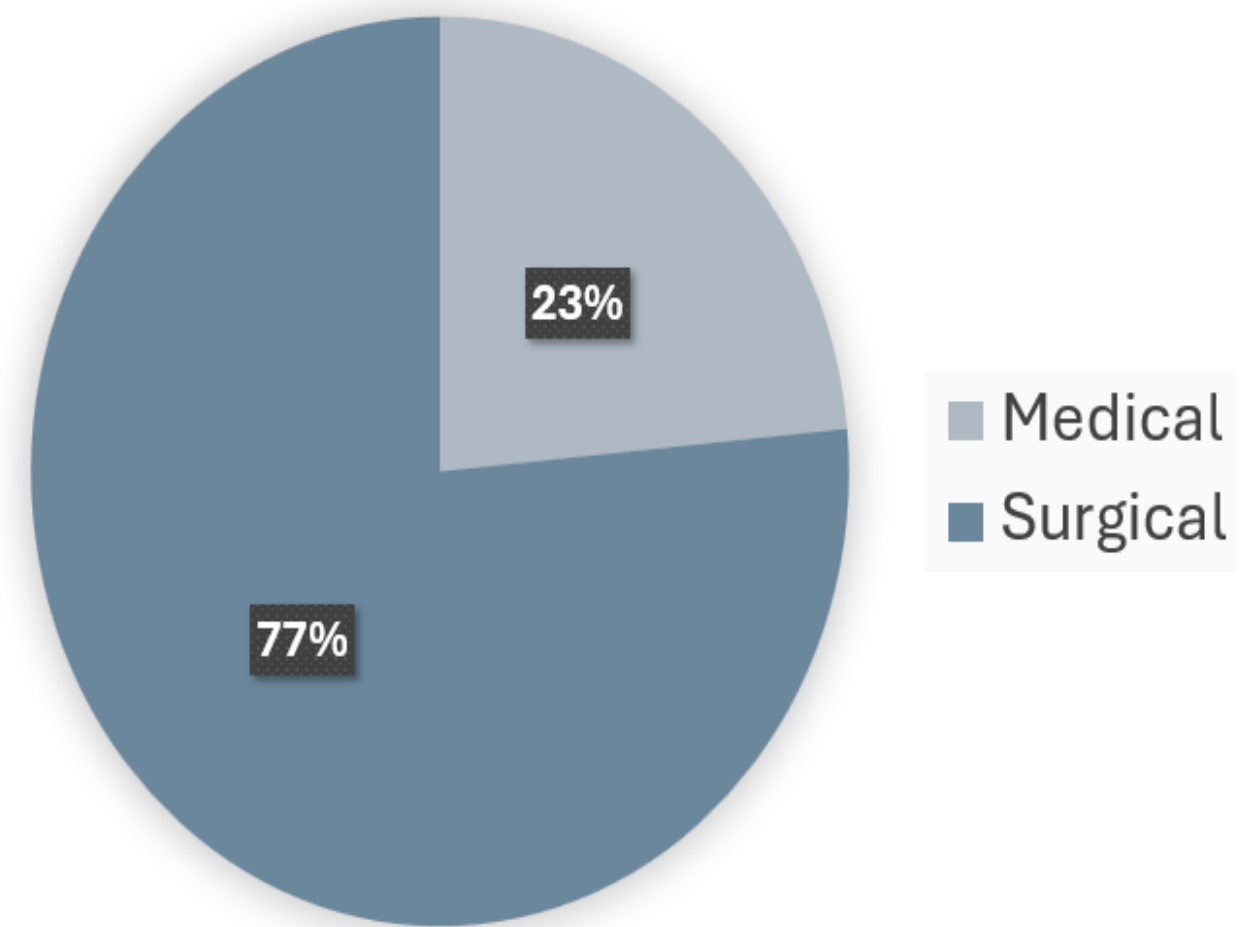
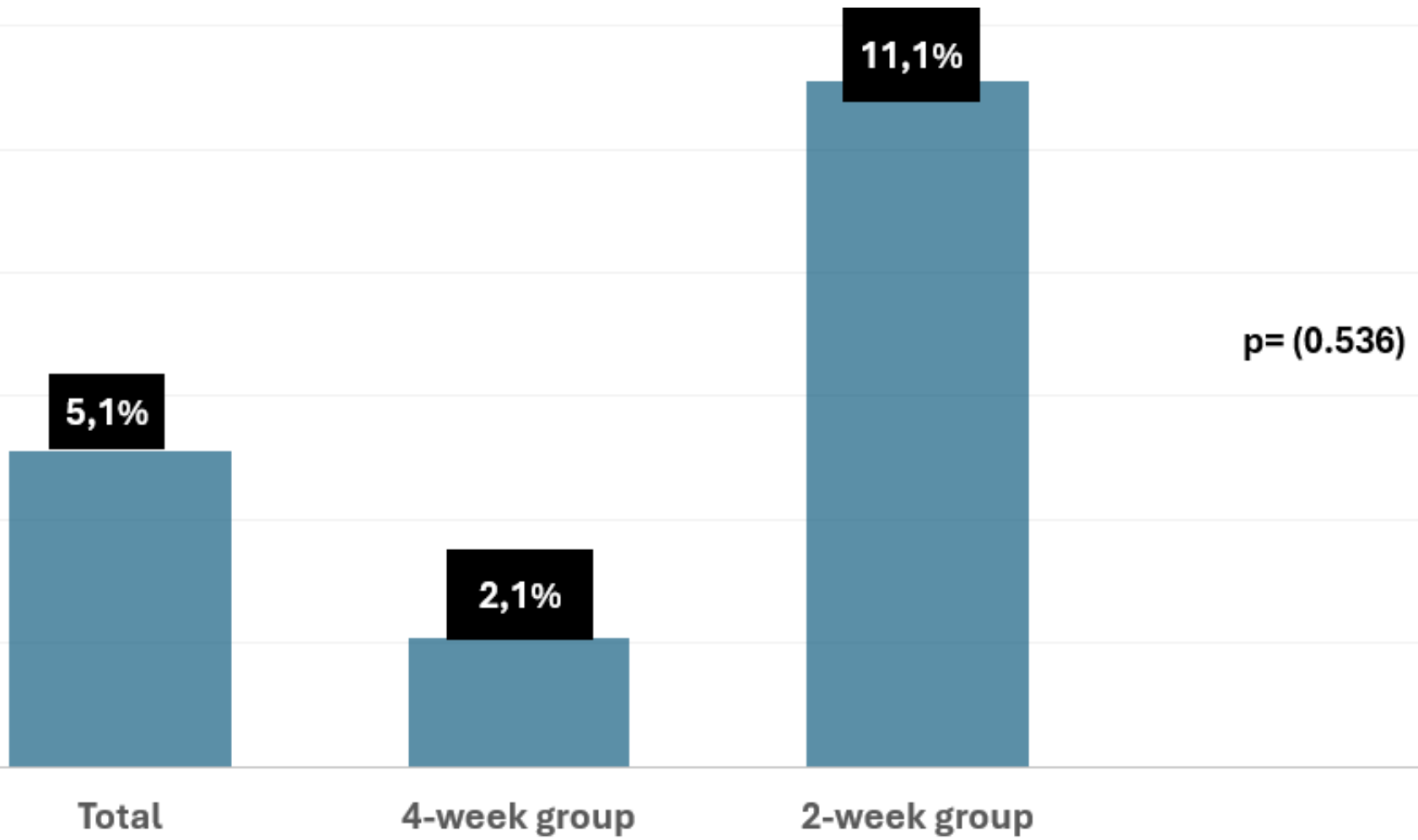


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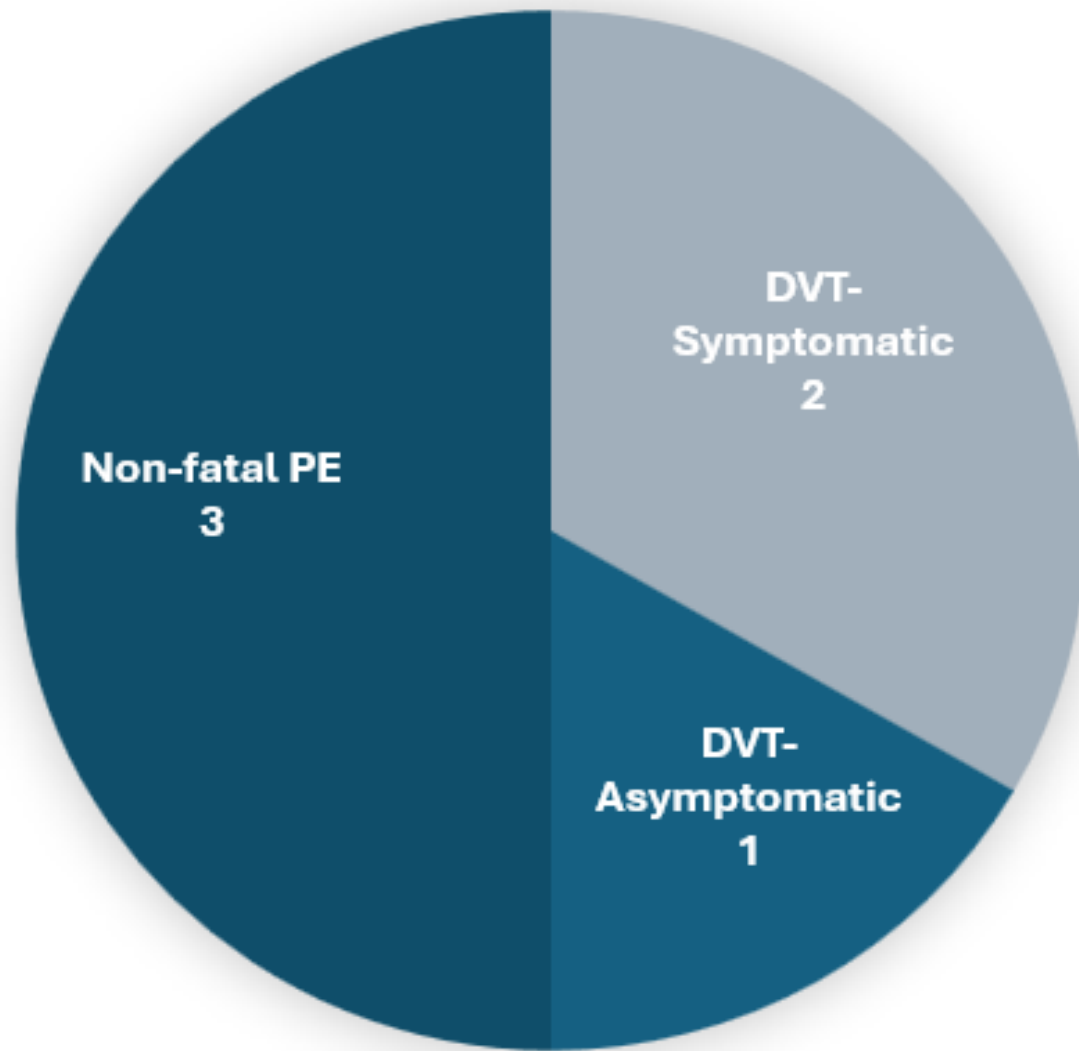
Results: VTE Risk (Caprini Score)



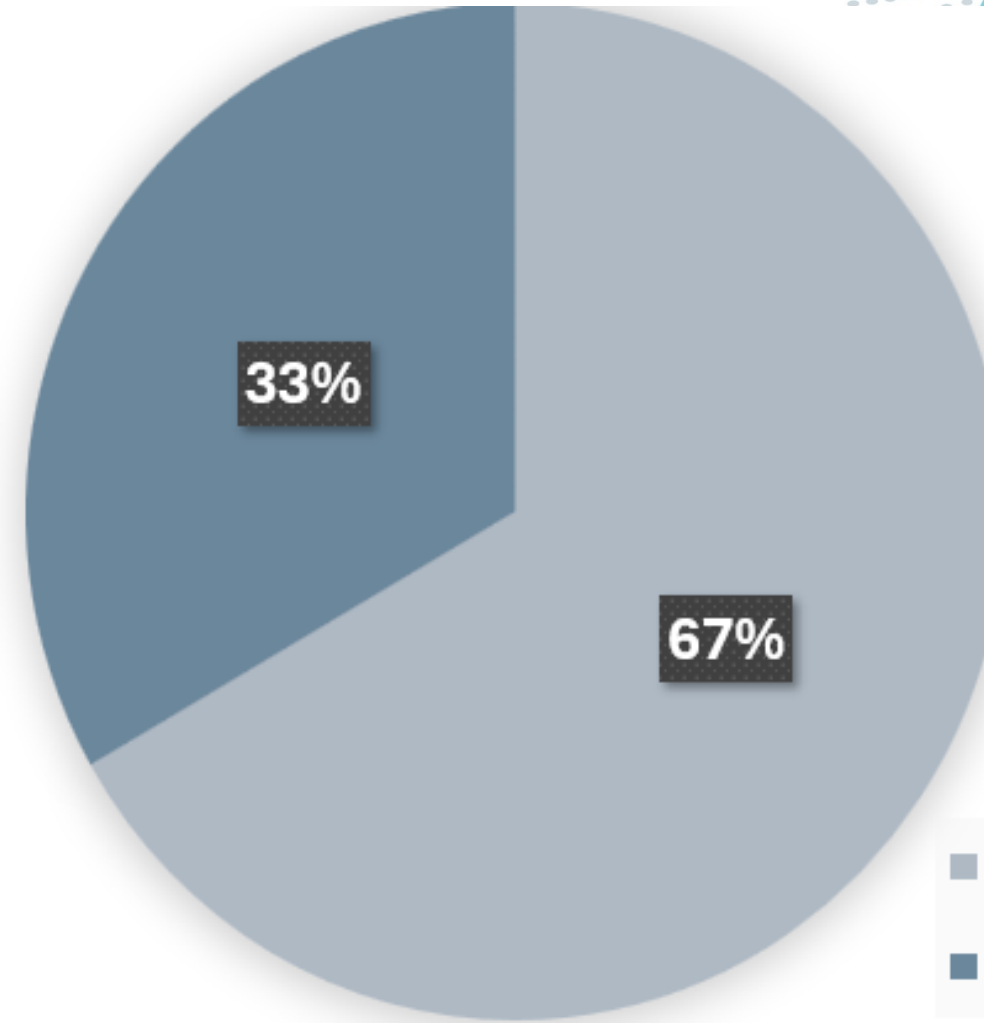
Complication Rate



VTE Incidence



Total VTE Incidence- (1.2%) (n=6)



Two-week group (p=0.04)

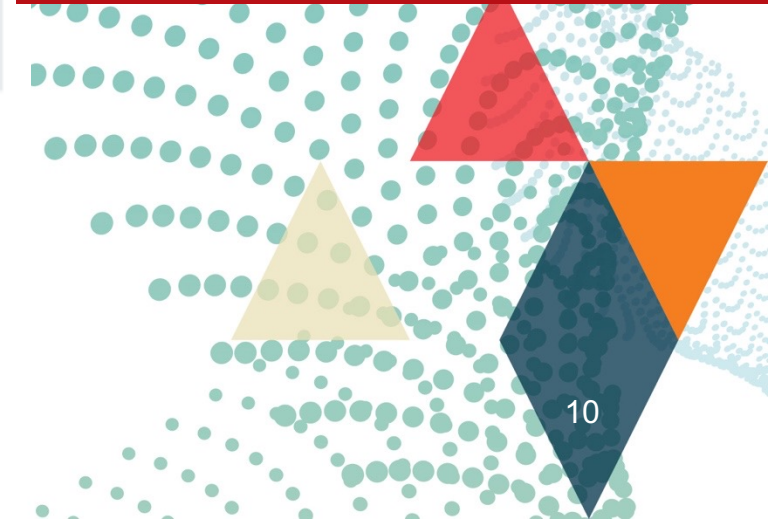
- DVT-Symptomatic
- DVT-Asymptomatic

VTE Cases

Case	Gender	Age	BMI	Caprini Score	Prosthesis (Cemented/ Uncemented)	VTE- Prophylaxis	Complication
1	Female	82	30.71	High risk	Cemented	2-weeks	Symptomatic DVT
2	Male	66	28.31	High risk	Uncemented	2-weeks	Asymptomatic DVT
3	Female	75	32.16	Moderate risk	Cemented	2-weeks	Symptomatic DVT
4	Male	74	36.05	High risk	Cemented	2-weeks	PE Non-fatal
5	Male	54	31.42	High risk	Uncemented	2-weeks	PE Non-fatal
6	Female	60	30.35	High risk	Cemented	2-weeks	PE Non-fatal



- All patients > 50 years of age
- All moderate/high risk Caprini score
- 83% BMI > 30
- 66% had cemented prosthesis



Surgical complication rate

	Total	4-week group	2-week group	P-value
Wound ooze	1	0	1	0.40
Wound dehiscence	12	6	6	0.53
PJI	3	0	3	0.56
Re-admission (<4-weeks)	7	2	5	0.13
Re-operation (<4-weeks)	3	2	1	0.50

Overall surgical complication rate: 3.8% (p=0.48)



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Conclusion

- Four-weeks of rivaroxaban has superior efficacy at reducing the incidence of VTE compared to a two-week regimen.
- Extended duration prophylaxis is not associated with a significant increase in the rate of wound complications or bleeding risk.
- Our findings underscore the potential benefits of a prolonged VTE prophylaxis protocol for optimising postoperative VTE prevention, especially in obese and high-risk patients undergoing AMIS THA.

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