Predictors of Venous Thromboembolism in Ventral Hernia Repair

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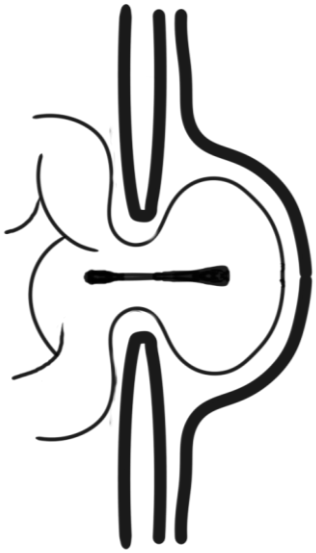
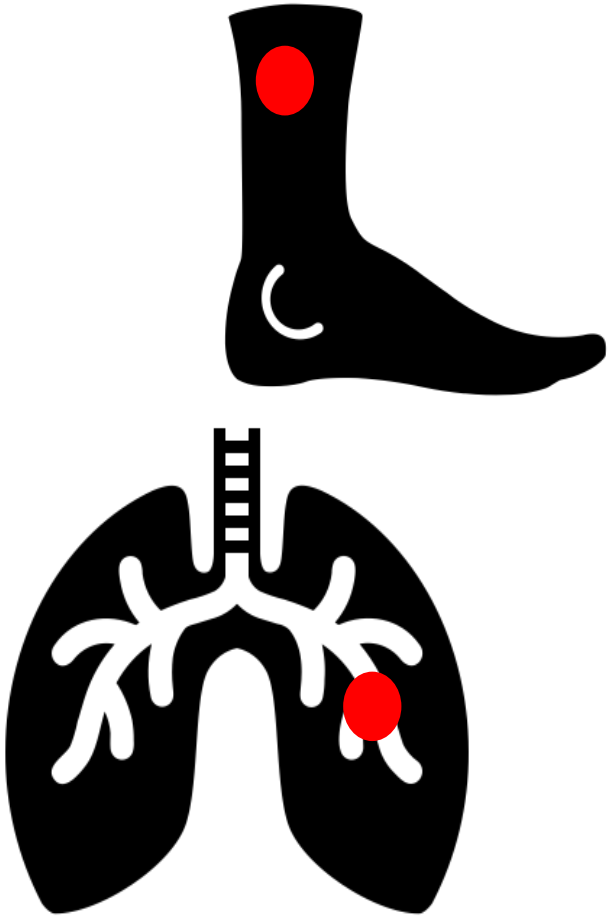
Disclosures

Background





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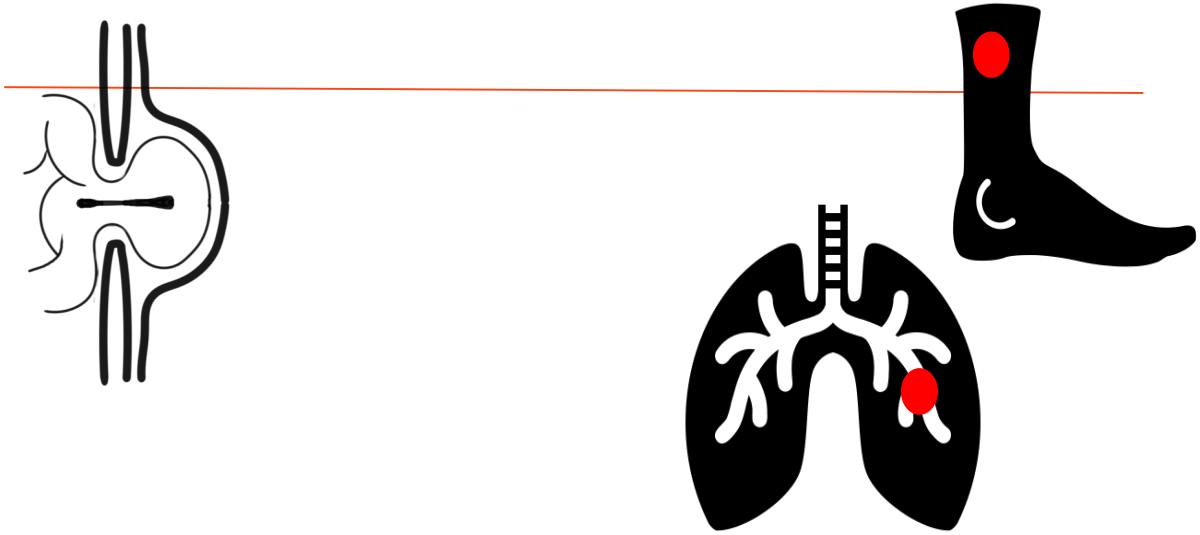
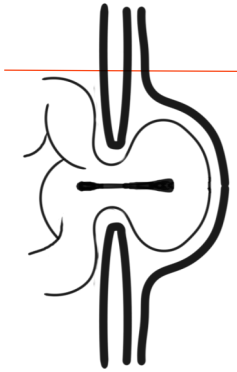
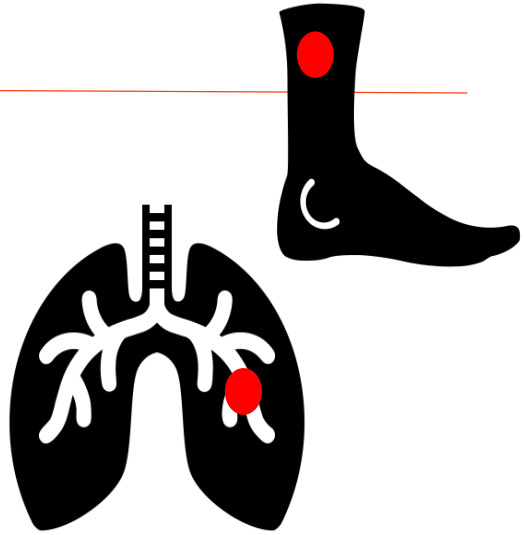


Study	Database	N	VTE rate	VTE Risk Factors
Andriyashkin. 2022	Single center	240	7.9 %	CS, OR time, BMI
Helm. 2019	ACS NSQIP	46095	0.5 %	Age, OR time, bleeding disorders, transfusion
Kraft. 2019	Single surgeon	175	2.3 %	CS, elevated peak inspiratory pressure

Objective





Predictors

ACHQC℠
ABDOMINAL CORE HEALTH QUALITY COLLABORATIVE

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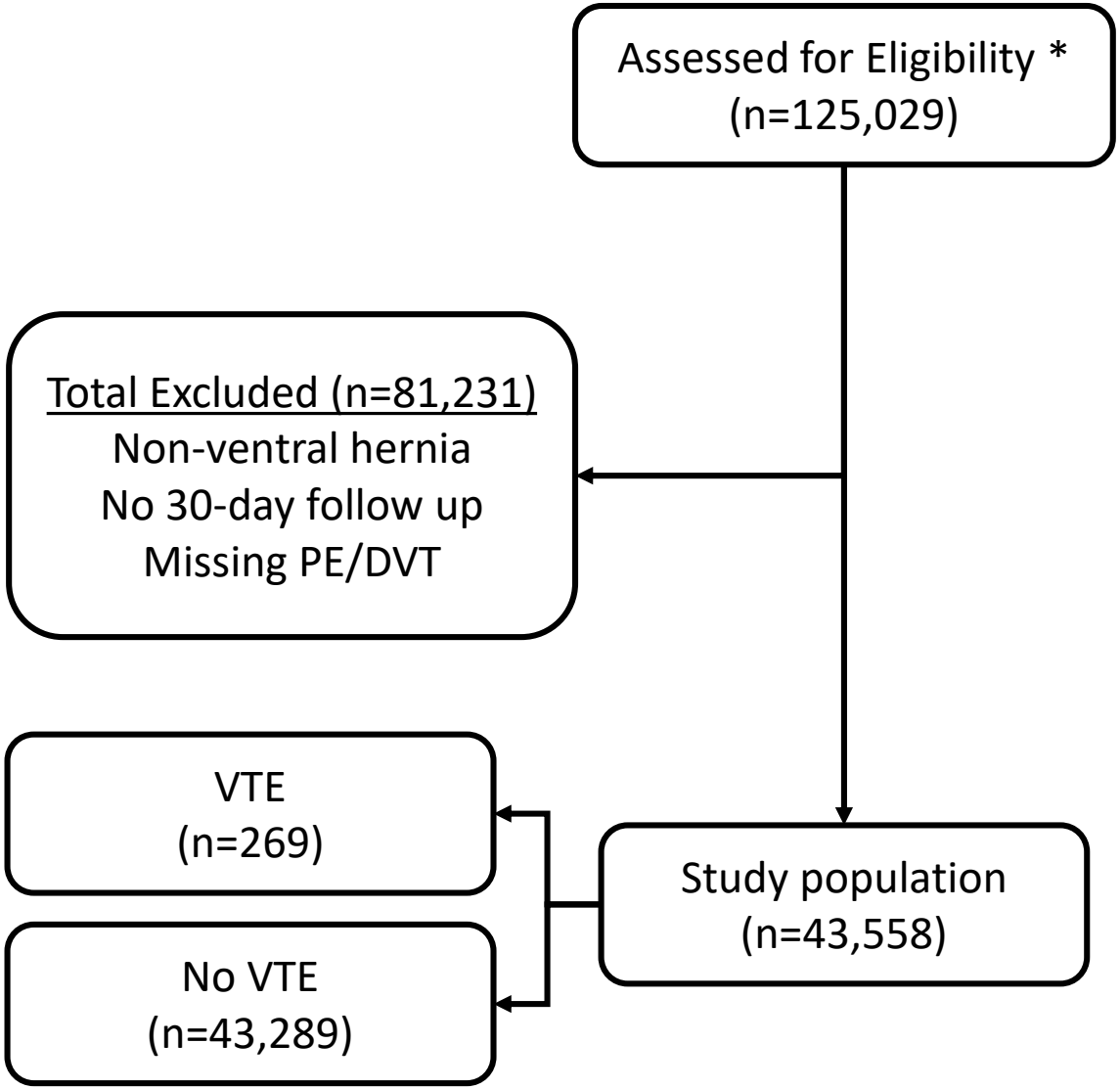
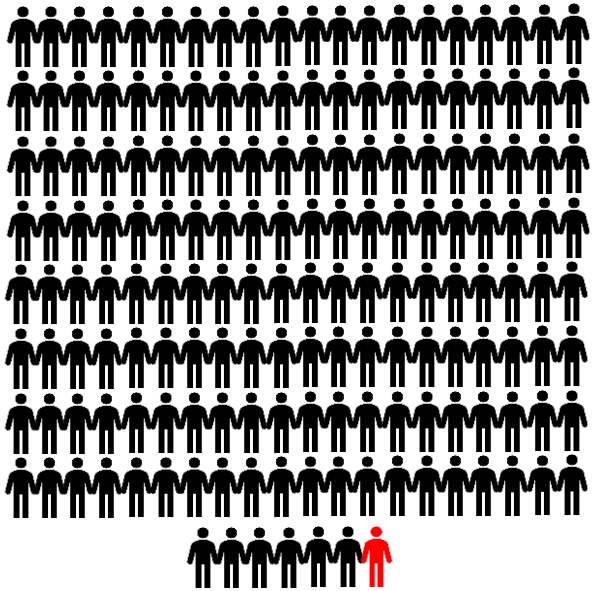
Methods

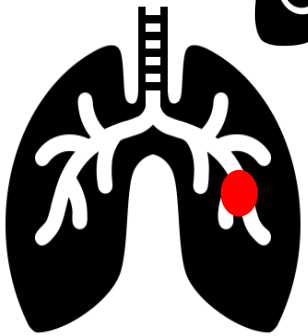

Assessed for Eligibility *
(n=125,029)
Total Excluded (n=81,231)
Non-ventral hernia
No 30-day follow up
Missing PE/DVT
Study population
(n=43,558)
VTE
(n=269)
No VTE
(n=43,289)

Results

0.6% of VHR developed VTE within 30-days



39% deep venous thrombosis

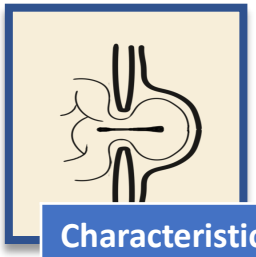


12% both DVT & PE

49% pulmonary embolism

Results

Characteristic	VTE	No VTE
Age	63	57
BMI	34	31
ASA >=3	80%	49%
Academic	87%	65%
COPD	12%	6%
Anticoagulants	14%	6%
HTN	60%	47%
DM	25%	17%

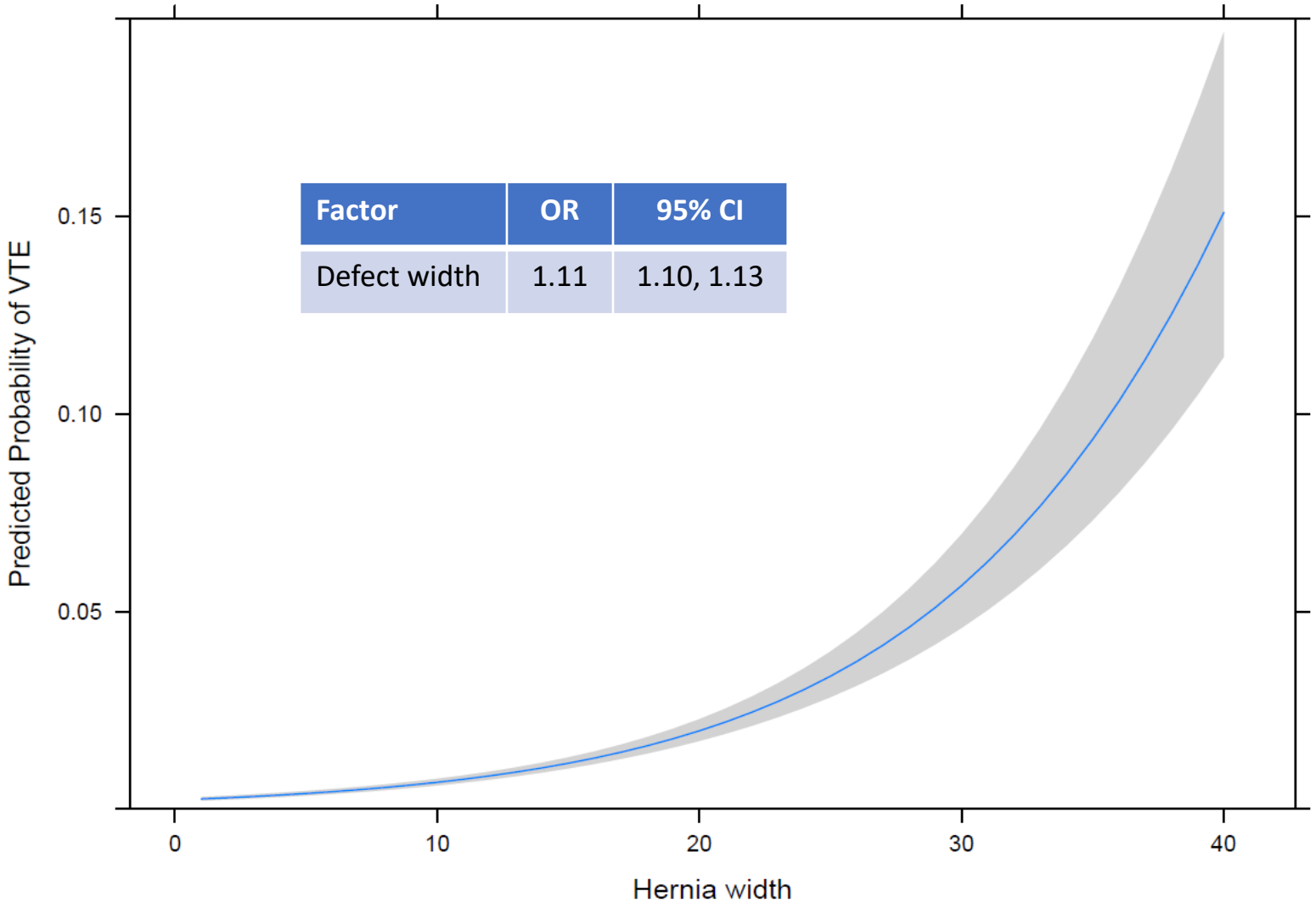


Characteristic	VTE	No VTE
Defect width	15	4
Defect length	20	5
Incisional	88%	62%
Recurrent	57%	26%
Stoma	13%	6%
History of CST	13%	6%
History of SSI	22%	10%
Prior mesh	48%	18%

Characteristic	VTE	No VTE
Non-clean wound	31%	12%
OR time > 2hr	86%	45%
Open approach	80%	63%
Mesh used	95%	84%
SubQ flaps	27%	16%
Myofascial release	75%	35%
EBL	100	10

Results – Multivariable regression

Factor	OR	95% CI
Defect width	1.11	1.10, 1.13



Conclusions

VTE is an uncommon (0.6%) in VHR

Defect width is the most predictive risk factor of VTE