



Variation in the risk of venous thromboembolism in patients following colectomy: a population based cohort study from England

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No Conflict of Interests



Introduction



House of Commons
Health Committee

The Prevention of Venous Thromboembolism in Hospitalised Patients

Second Report of Session 2004–05



*National Institute for
Health and Clinical Excellence*

1.5.8 Offer VTE prophylaxis to patients undergoing gastrointestinal surgery who are assessed at increased risk

1.5.10 Extend prophylaxis to 28 days postoperatively for patients who have had major cancer surgery in the abdomen or pelvis



Non-malignant disease

Venous thromboembolism during active disease and remission in inflammatory bowel disease: a cohort study



Matthew J Grainge, Joe West, Timothy R Card

Clinical Gastroenterology and Hepatology 2014; ■:■-■

Diverticular Disease Is Associated With Increased Risk of Subsequent Arterial and Venous Thromboembolic Events

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Aim

- To determine absolute and relative rates of VTE following colectomy by indication, admission type (emergency or elective) and time after surgery.



Methods

- Data Sources
 - CPRD, HES, ONS
- Cohort
 - OPCS
- Outcome
 - VTE¹

¹ Lawrenson R, et al (2000) Validation of the diagnosis of venous thromboembolism in general practice database studies. *British Journal of Clinical Pharmacology* 49: 591-596.



Methods

- **Exposures**
 - Indication
 - Admission type
 - Comorbidity
- **Statistical Analysis**
 - Absolute rates
 - Cox regression

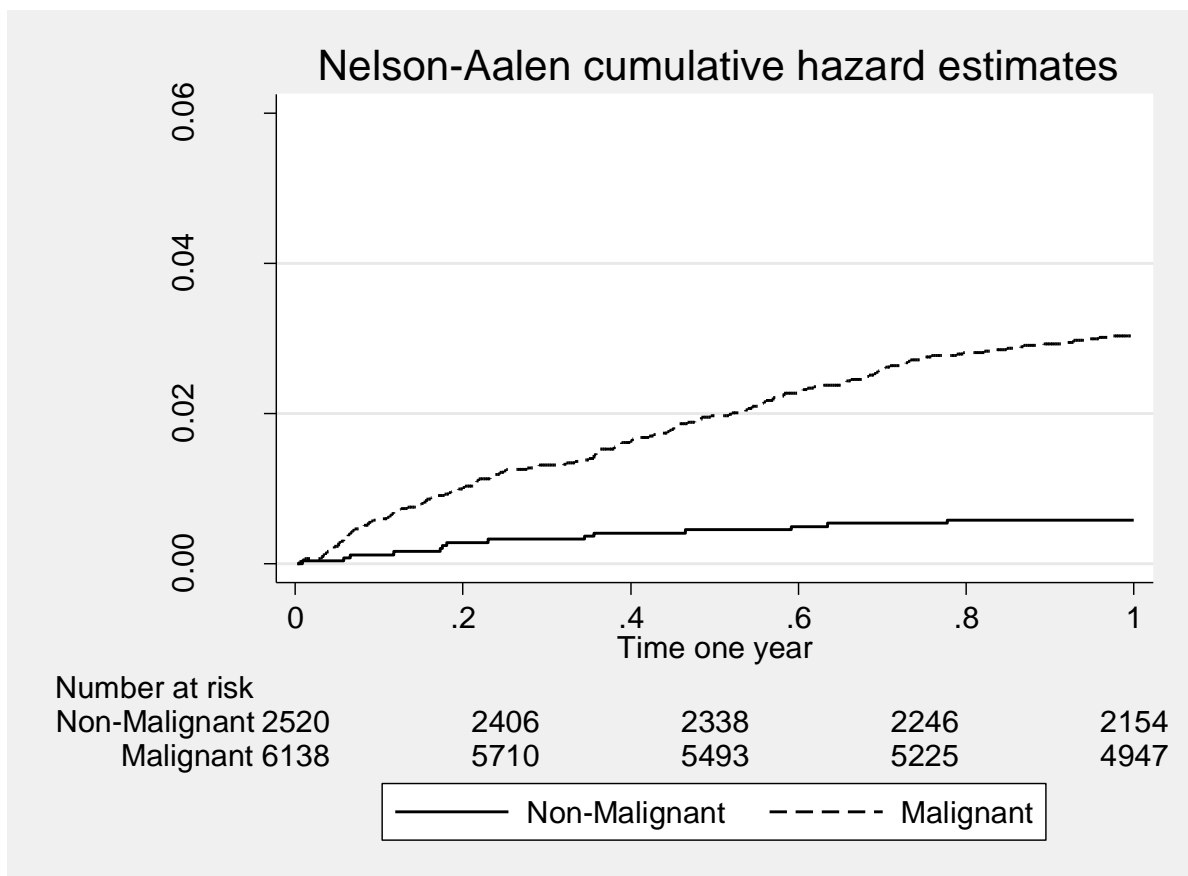


Result

- 12,618
- 50.4% Male
- Median age 72 years vs. 62 years
- 32% emergency
- 63% malignancy

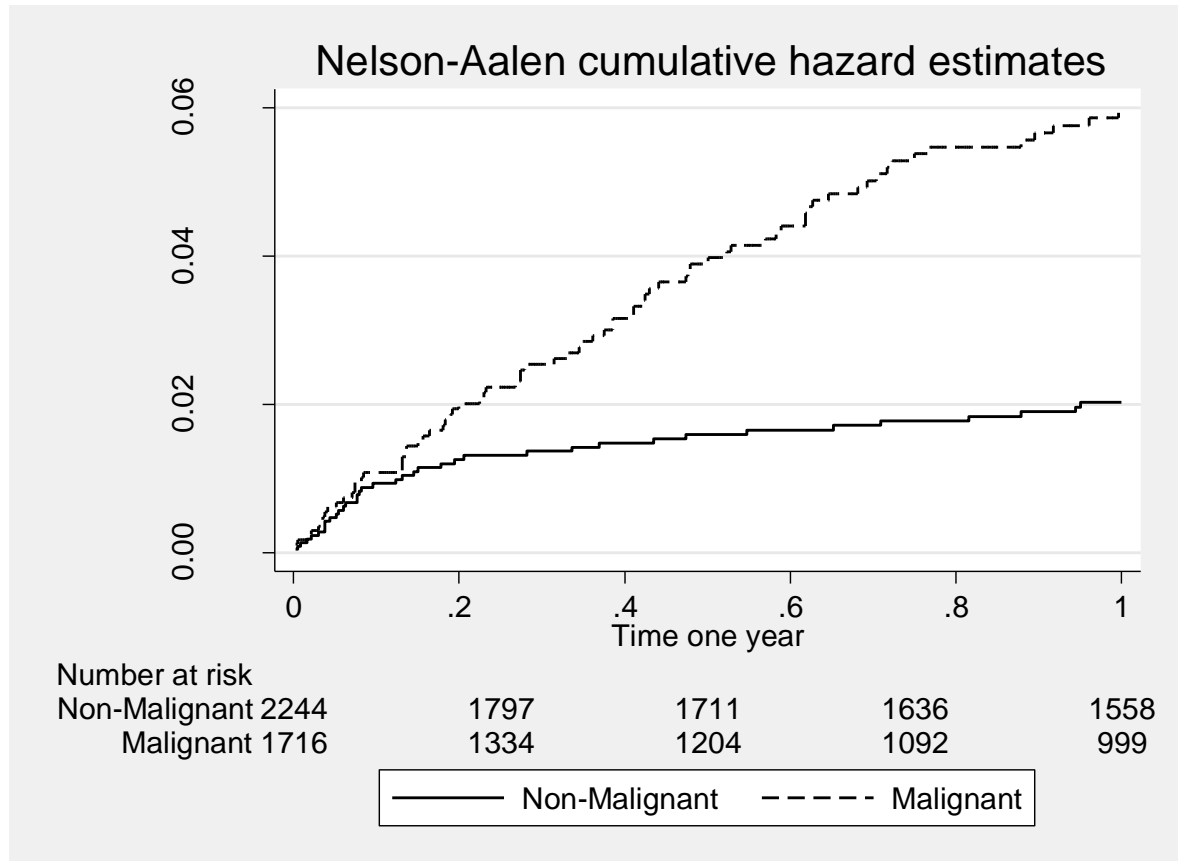


Risk of VTE in year following elective colectomy





Risk of VTE in year following emergency colectomy





Risk of VTE in first month following colectomy

		First month following Surgery						
		Events	Person time	Rate (per 1000 person years)	95% CI		HR*	95% CI
Elective	Non-malignant	2	0.2	10.07	2.52	40.28	1	
	Malignant	32	0.51	63.17	44.67	89.33	6.08	1.37-26.99
Emergency	Non-malignant	18	0.17	107.13	67.5	170.04	1	
	Malignant	16	0.13	121.46	74.4	198.25	1.11	0.54-2.27



Limitations

- No data on VTE prophylaxis in hospital
 - ENDORSE ~ 50% received prophylaxis
 - Sensitivity analysis



Summary

- Risk of VTE increased following colectomy
- Risk is greatest in the first month
- Following emergency colectomy the rate of VTE is similar regardless of indication



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Nottingham University Hospitals **NHS**
NHS Trust

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*National Institute for
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