

Supplemental Digital Content 3: Results from sensitivity analysis restricting the preoperative period to 30-days prior to index date

Table 1: Annual proportions of preoperative laboratory investigations for overall cohort and by procedure category

	Ophthalmologic surgery	Low-risk surgery	Overall
Any blood work			
2008	23.9% (23.7-24.1)	16.5% (16.3-16.7)	20.8% (20.7-21.0)
2009	23.8% (23.6-24.0)	17.2% (17.0-17.5)	21.0% (20.8-21.1)
2010	23.0% (22.8-23.2)	17.4% (17.2-17.6)	20.6% (20.5-20.8)
2011	20.2% (20.0-20.4)	17.4% (17.1-17.6)	19.0% (18.8-19.1)
2012	18.7% (18.5-18.9)	16.9% (16.6-17.1)	17.9% (17.8-18.1)
All years	22.0% (21.9-22.1)	17.1% (17.0-17.2)	19.9% (19.8-20.0)
CBC			
2008	17.6% (17.5-17.8)	13.3% (13.1-13.5)	15.8% (15.7-16.0)
2009	17.2% (17.0-17.4)	13.8% (13.6-14.0)	15.7% (15.6-15.9)
2010	16.6% (16.4-16.7)	14.1% (13.9-14.3)	15.5% (15.4-15.7)
2011	13.9% (13.7-14.1)	14.3% (14.1-14.5)	14.1% (14.0-14.2)
2012	13.0% (12.9-13.2)	13.8% (13.6-14.1)	13.4% (13.3-13.5)
All years	15.8% (0.0-0.0)	13.9% (0.0-0.0)	15.0% (14.9-15.0)
PT			
2008	6.0% (5.9-6.1)	3.8% (3.7-3.9)	5.1% (5.0-5.1)
2009	6.3% (6.2-6.4)	3.7% (3.6-3.8)	5.2% (5.1-5.3)
2010	5.8% (5.7-5.9)	4.0% (3.9-4.1)	5.0% (4.9-5.1)
2011	5.2% (5.1-5.3)	4.0% (3.8-4.1)	4.7% (4.6-4.7)
2012	4.6% (4.5-4.7)	4.1% (4.0-4.2)	4.4% (4.3-4.4)
All years	5.6% (5.5-5.7)	3.9% (3.8-3.9)	4.9% (4.8-4.9)
PTT			
2008	0.3% (0.3-0.3)	0.5% (0.5-0.6)	0.4% (0.4-0.4)
2009	0.3% (0.3-0.4)	0.5% (0.5-0.6)	0.4% (0.4-0.4)
2010	0.2% (0.1-0.2)	0.5% (0.5-0.6)	0.3% (0.3-0.3)
2011	0.1% (0.1-0.1)	0.5% (0.5-0.6)	0.3% (0.3-0.3)
2012	0.1% (0.1-0.1)	0.5% (0.5-0.6)	0.3% (0.3-0.3)
All years	0.2% (0.2-0.2)	0.5% (0.5-0.5)	0.3% (0.3-0.4)
Basic metabolic panel			
2008	19.0% (18.8-19.2)	12.5% (12.3-12.7)	16.3% (16.1-16.4)
2009	18.8% (18.6-19.0)	13.4% (13.2-13.6)	16.4% (16.3-16.6)
2010	18.1% (17.9-18.3)	13.5% (13.3-13.7)	16.2% (16.0-16.3)
2011	15.4% (15.2-15.6)	13.7% (13.5-13.9)	14.7% (14.5-14.8)
2012	14.4% (14.2-14.6)	13.3% (13.1-13.5)	13.9% (13.8-14.0)
All years	17.2% (17.1-17.3)	13.3% (13.2-13.3)	15.5% (15.5-15.6)

Values given as proportions (binomial proportion 95% confidence intervals).

CBC = complete blood count; PT = prothrombin time; PTT = partial thromboplastin time.

Table 2: Regression results

Characteristic	AOR (95% CI)	p-value
Female	1.02 (1.01-1.03)	<0.0001
Age		
18-25	1 [reference]	
26-35	1.32 (1.26-1.39)	<0.0001
36-45	1.64 (1.56-1.71)	<0.0001
46-55	1.79 (1.72-1.87)	<0.0001
56-65	1.97 (1.89-2.06)	<0.0001
66-75	2.24 (2.14-2.33)	<0.0001
76-85	2.52 (2.41-2.63)	<0.0001
≥ 85	2.61 (2.49-2.73)	<0.0001
Residence		
Urban	1 [reference]	
Rural	0.76 (0.74-0.78)	<0.0001
Suburban	1.02 (1.01-1.04)	0.001
Missing	0.66 (0.62-0.70)	<0.0001
Neighbourhood income quintile		
Q1 (lowest)	1 [reference]	
Q2	1.01 (0.99-1.02)	0.34
Q3	1.00 (0.99-1.02)	0.51
Q4	1.01 (1.00-1.03)	0.10
Q5 (highest)	1.00 (0.99-1.02)	0.52
Comorbidities		
Coronary artery disease	0.90 (0.87-0.93)	<0.0001
Atrial fibrillation/flutter	2.88 (2.80-2.97)	<0.0001
Other cardiac arrhythmia	0.87 (0.83-0.92)	<0.0001
Cardiac valvular disease	0.81 (0.76-0.87)	<0.0001
Cerebrovascular disease	1.18 (1.13-1.24)	<0.0001
Peripheral vascular disease	0.95 (0.90-1.00)	0.048
Venous thromboembolism	2.26 (2.07-2.48)	<0.0001
Heart failure	1.67 (1.64-1.70)	<0.0001
Myocardial infarction	0.95 (0.90-0.99)	0.029
Chronic renal disease	1.06 (1.02-1.11)	0.002
Liver disease	1.60 (1.47-1.75)	<0.0001
Anemia	1.33 (1.29-1.36)	<0.0001
Gastrointestinal bleeds	1.11 (1.07-1.16)	<0.0001
Other blood diseases	1.21 (1.14-1.28)	<0.0001
Asthma	1.02 (1.00-1.03)	0.008
COPD	1.04 (1.03-1.06)	<0.0001
Cardiac risk factors		
Diabetes	1.42 (1.40-1.43)	<0.0001
Hypertension	1.23 (1.22-1.24)	<0.0001
Hyperlipidemia	1.08 (1.06-1.10)	<0.0001
Prior cardiac procedures		
Aortic valve replacement	1.50 (1.42-1.59)	<0.0001

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Mitral valve replacement	2.50 (2.27-2.76)	<0.0001
Coronary revascularization	0.97 (0.95-0.99)	0.012
Device implantation	1.77 (1.72-1.83)	<0.0001
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Procedure		
Low-risk surgery	1 [reference]	
Ophthalmologic surgery	1.11 (1.10-1.13)	<0.0001
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Preoperative consultations		
Outpatient anesthesia	0.96 (0.94-0.97)	<0.0001
Medical	1.53 (1.50-1.56)	<0.0001
Teaching hospital status	1.05 (0.95-1.17)	0.36
Hospital procedure volume		
Low procedure volume	1.02 (0.99-1.04)	0.12
High procedure volume	1.05 (1.00-1.11)	0.046
Median odds ratio	2.44	
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AOR = adjusted odds ratio; CI = confidence interval; COPD = chronic obstructive pulmonary disorder