

Appendix S4: Results of secondary analyses

Table 1 shows the p-values for univariable analysis. There was little difference between the analyses. Some variables were significant predictors ($p < 0.05$) on secondary analysis that were not significant predictors on primary analysis, for example giving up smoking during the pregnancy, history of varicose veins and history of thrombosis, but this simply reflected the p-value moving to the other side of the 0.05 threshold, presumably due to a slightly larger sample size.

Table 1: Univariable analysis (p-values)

Variable	Primary analysis	Secondary with clinically diagnosed PE	Secondary with clinically ruled out PE	Secondary with subsegmental PE excluded
Age (continuous)	0.179	0.307	0.166	0.187
Age over 35	0.176	0.247	0.177	0.256
BMI (Continuous)	0.372	0.587	0.256	0.253
BMI 30 or more	0.942	0.631	0.775	0.781
Ex-smoker (Prior)	0.837	0.901	0.842	0.792
Ex-smoker (During)	0.082	0.082	0.035	0.080
Current Smoker	0.279	0.159	0.318	0.354
Pregnancies < 24 weeks (Continuous)	0.509	0.386	0.679	0.440
1 or more pregnancy < 24 weeks	0.980	0.937	0.776	0.883
Pregnancies > 24 weeks (Continuous)	0.017	0.014	0.014	0.017
1 or more pregnancy > 24 weeks	0.198	0.243	0.217	0.224
Previous pregnancy problems	0.442	0.888	0.252	0.493
Family History of VTE	0.205	0.125	0.324	0.160
History of Varicose Veins	0.045	0.084	0.033	0.056
History of IV Drug use	0.800	0.910	0.719	0.775
Known Thrombophilia	0.745	0.993	0.934	0.801
Surgery in previous 4 weeks	0.001	0.003	0.000	0.000
Injury in last 4 weeks	0.959	0.845	0.910	0.998
Previous VTE	0.073	0.092	0.025	0.081
Other previous medical problem	0.829	0.989	0.760	0.955
Other previous medical problem (VTE-related)	0.941	0.941	0.941	0.941

2nd Trimester	0.234	0.573	0.064	0.185
3rd Trimester	0.324	0.635	0.196	0.283
Post-Partum	0.101	0.105	0.168	0.142
Multiple Pregnancy	0.191	0.097	0.299	0.220
Long-haul travel during pregnancy	0.006	0.002	0.011	0.007
3 or more days Immobility/bed rest during pregnancy	0.887	0.988	0.970	0.995
Received thromboprophylaxis	0.000	0.000	0.000	0.000
Previous thrombotic event this pregnancy	0.226	0.085	0.157	0.203
Other problem with this pregnancy	0.006	0.095	0.003	0.006
Other problem with this pregnancy (VTE-related)	0.713	0.815	0.903	0.772
Presenting : Pleuritic chest pain	0.842	0.774	0.982	0.767
Presenting : Non-pleuritic chest pain	0.457	0.391	0.464	0.405
Presenting : Shortness of breath (Exertion)	0.520	0.895	0.796	0.317
Presenting : Shortness of breath (Rest)	0.142	0.135	0.104	0.239
Presenting : Haemoptysis	0.129	0.109	0.320	0.103
Presenting : Cough	0.988	0.913	0.772	0.940
Presenting : Syncope	0.218	0.090	0.189	0.291
Presenting : Palpitations	0.598	0.424	0.521	0.595
Presenting : Other	0.914	0.771	0.888	0.989
Temperature > 37.5	0.020	0.017	0.022	0.015
Temperature (Continuous)	0.003	0.002	0.001	0.003
Diastolic < 50 mmHg	0.221	0.195	0.162	0.202
Diastolic (Continuous)	0.256	0.503	0.210	0.265
Systolic < 90 mmHg	0.205	0.164	0.162	0.191
Systolic (Continuous)	0.322	0.137	0.480	0.350
O2 Saturation < 94%	0.000	0.001	0.000	0.000
O2 Saturation (Continuous)	0.000	0.001	0.000	0.000
Respiratory Rate > 24/min	0.919	0.956	0.722	0.798
Respiratory Rate (Continuous)	0.948	0.841	0.592	0.869

Heart rate >100/min (110/min 3 rd trimester)	0.556	0.618	0.615	0.524
Heart Rate (Continuous)	0.126	0.063	0.126	0.084
Clinical signs of DVT	0.199	0.104	0.418	0.274
PE related ECG abnormality	0.579	0.580	0.760	0.631
PE Related CXR abnormality	0.010	0.018	0.007	0.019
Other CXR abnormality	0.001	0.001	0.001	0.001
PE is most likely diagnosis OR equally likely (permissive)	0.156	0.156	0.156	0.156
PE is most likely diagnosis OR equally likely (strict)	0.000	0.000	0.000	0.000

Table 2 shows the AUROC estimates for the clinical decision rules. The results for secondary analyses were similar to the primary analysis.

Table 2: AUROC estimates for the clinical decision rules

Decision rule	Primary analysis	Secondary with clinically diagnosed PE	Secondary with clinically ruled out PE	Secondary with subsegmental PE excluded
Primary consensus	0.626	0.621	0.626	0.629
Sensitive consensus	0.620	0.599	0.629	0.622
Specific consensus	0.589	0.592	0.582	0.592
PERC	0.621	0.610	0.619	0.623
Simplified Revised Geneva	0.579	0.575	0.572	0.579
Well's (permissive)*	0.577	0.580	0.577	0.578
Well's (strict)*	0.732	0.716	0.728	0.731

Table 3 shows the results for D-dimer analysis using the hospital laboratory measurements. Inclusion of women with clinically diagnosed PE and exclusion of women with subsegmental PE resulted in small changes to sensitivity, while inclusion of women with clinically ruled out PE resulted in a small increase in specificity. None of the estimates in the secondary analysis differed in a meaningful way to the primary analysis.

Table 3: D-dimer (hospital) sensitivity and specificity

Threshold	Parameter	Primary analysis	Secondary with clinically diagnosed PE	Secondary with clinically ruled out PE	Secondary with subsegmental PE excluded
Standard	Sensitivity	0.884	0.878 0.7445 to 0.945	0.884	0.878 0.730 to 0.954

		0.741 to 0.956 38/43	43/49	0.741 to 0.956 38/43	36/41
	Specificity	0.088 0.047 to 0.156 11/125	0.088 0.047 to 0.156 11/125	0.092 0.052 to 0.156 13/141	0.088 0.047 to 0.156 11/125
Gestation specific	Sensitivity	0.698 0.537 to 0.823 30/43	0.694 0.544 to 0.813 34/49	0.698 0.537 to 0.823 30/43	0.707 0.543 to 0.833 29/41
	Specificity	0.328 0.248 to 0.419 41/125	0.328 0.248 to 0.419 41/125	0.355 0.277 to 0.440 50/141	0.328 0.248 to 0.419 41/125