

Appendix 1⁵

The Wells score for assessment of suspected DVT

Wells score	
Criteria	score (points)
1. Active cancer (treatment within last six months or palliative)	1
2. Calf swelling >3 cm compared to other calf (measured 10 cm below tibial tuberosity)	1
3. Collateral superficial veins (non-varicose)	1
4. Pitting oedema (confined to symptomatic leg)	1
5. Swelling of entire leg	1
6. Localized pain along distribution of deep venous system	1
7. Paralysis, paresis, or recent cast immobilization of lower extremities	1
8. Recently bedridden >3 days, or major surgery requiring regional or general anesthetic in past twelve weeks	1
9. Previously documented DVT	1
10. Alternative diagnosis at least as likely	subtract 2
Interpretation:	
Score of 2 or higher	Deep vein thrombosis is likely.
Score of less than 2	Deep vein thrombosis is unlikely

N.B. The Wells score for DVT is not validated for use in patients with DVT in sites other than the lower limb, nor pregnant women. These patients would require imaging as the initial step in investigation.

Using the Wells score to diagnose pulmonary embolism ².

- Clinical signs and symptoms of deep vein thrombosis (minimum of leg swelling and pain with palpation of the deep veins) = 3 points.
- An alternative diagnosis is less likely than pulmonary embolism = 3 points.
- Heart rate greater than 100 beats per minute = 1.5 points.
- Immobilization or surgery in the previous 4 weeks = 1.5 points.
- Previous deep vein thrombosis or pulmonary embolism = 1.5 points.
- Haemoptysis = 1 point.
- Cancer (receiving treatment, treated in the last 6 months, or palliative) = 1 point.

The clinical probability of pulmonary embolism is:

- High if they score greater than 6 points.
- Intermediate if they score 2–6 points.
- Low if they score less than 2 points.

Action to be taken:

If the person has a high or intermediate clinical probability of pulmonary embolism, admit them immediately to hospital.

If the person has a low clinical probability of pulmonary embolism, do an immediate D-dimer test.

If the D-dimer test is positive, admit the person to hospital for further investigations and treatment.

If the D-dimer test is negative, pulmonary embolism is very unlikely.

If there is still a strong clinical suspicion of pulmonary embolism, admit the person.

Identify and treat the cause of their symptoms, possibly by admitting to hospital anyway.

If the person is not admitted to hospital, advise them to seek immediate medical assistance if they develop worsening symptoms.

Appendix 2²

The revised Geneva score for assessment of suspected PE

Revised Geneva Score	
Parameter	Score (points)
Age 65 years or over	1
Previous DVT or PE	3
Surgery or fracture within one month	2
Active malignant condition	2
Unilateral lower limb pain	3
Haemoptysis	2
Heart Rate 75 to 94 beats per minute	3
Heart Rate 95 or more beats per minute	5
Pain on deep palpation of lower limb and unilateral oedema	4
The score obtained relates to probability of PE:	
0-3 points indicates low probability (8%)	
4-10 points indicates intermediate probability (28%)	
11 points or more indicates high probability (74%)	

Appendix 3: Assessing the risk of travel-related DVT^{3,4}

Short journeys require no prophylactic treatment, regardless of risk factors. SIGN and www.cks.nhs.uk define “short” as less than **four** hours, while the 2010 British Committee for Standards in Haematology guidance uses less than **three** hours as the diagnosis of “short”. These differences of opinion are mentioned here, and the remainder of this appendix uses the **three hour** rule, for simplicity. The information points in the module have also been altered to align them with the three hour rule.

For continuous journeys, the risk of travel-related deep vein thrombosis (DVT) can be classed as:

- **Low risk** if the person has:
 - No history of DVT or pulmonary embolism (PE), *and*
 - Not undergone surgery in the previous four weeks, *and*
 - No other risk factors to indicate moderate or high risk.
- **Moderate risk** if the person:
 - Has a previous history of DVT or PE and flying < eight hours. However, people with a recent DVT (or PE) who are on anticoagulant treatment are considered to be at low risk.
 - Has undergone surgery under general anaesthesia lasting more than 30 minutes in the previous two months but not in the last four weeks.
 - Is pregnant or postpartum.
 - Has clinically evident cardiac disease (such as recent myocardial infarction, uncontrolled heart failure) or other major acute illness (such as pneumonia).
 - Is taking combined oral contraceptives or hormone replacement therapy.
 - Is obese (body mass index greater than 30 kg/m²).
 - Has varicose veins with phlebitis.
 - Has a family history of venous thromboembolism in a first degree relative.
 - Has polycythaemia.
 - Has known thrombophilia
 - Has a lower-limb fracture in plaster.
 - (The presence of multiple risk factors will further increase the risk of an individual developing travel-related DVT.)
- **High risk** if the person:
 - Has undergone surgery under general anaesthesia lasting more than 30 minutes in the previous four weeks.
 - Has a previous history of DVT or PE and flying > eight hours.
 - Has cancer — untreated or currently on treatment.

- **All travellers should remain as ambulant as possible before, during and after journeys.**
- **Leg exercises whilst seated are recommended.**
- **For the three risk groups above, advice regarding support stockings and LMWH would be:**

Duration of travel	<3 hours	3–8 hours	>8 hours
Low Risk Patients	No Rx	No Rx	No Rx
Moderate Risk Patients	No Rx	No Rx or stockings	Stockings
High Risk Patients	No Rx	Stockings	Stockings, and consider LMWH