

DVT and PE Rule-Out Protocols

DVT Decision Rule

Procedure

1. Refer to the DVT Pre-Test Probability Score Table. Add up the score and determine the patient's pre-test probability for DVT.
2. Refer to the DVT Diagnostic Algorithm. According to the pre-test probability follow the relevant diagnostic algorithm.

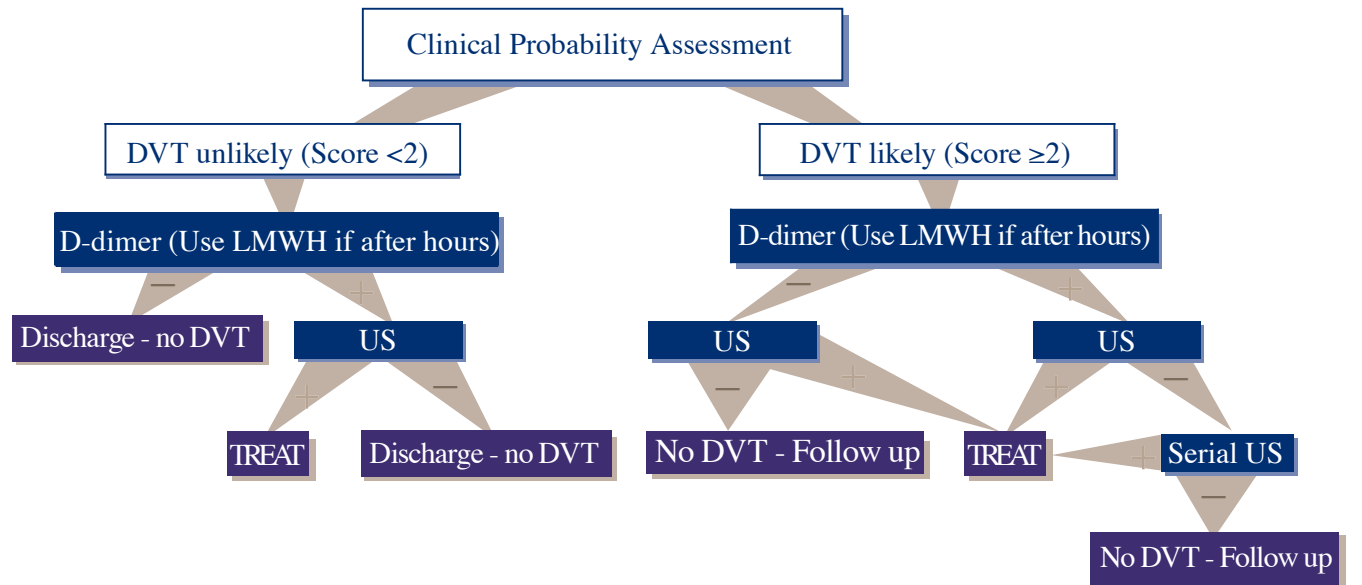
Wells¹ DVT Pre-Test Probability (PTP) Score

Clinical Characteristic	Score
Active cancer (treatment ongoing or within previous 6 months or palliative)	1
Paralysis, paresis, or recent plaster immobilisation of the lower extremities	1
Recently bedridden for 3 days or more or major surgery within the previous 12 weeks requiring general or regional anaesthesia	1
Localised tenderness along the distribution of the deep venous system	1
Entire leg swollen	1
Calf swelling 3cm ≥ asymptomatic side (measured 10cm below tibial tuberosity)	1
Pitting edema confined to the symptomatic leg	1
Collateral superficial veins (non-varicose)	1
Previously documented deep-vein thrombosis	1
Alternative diagnosis as likely or greater than that of DVT	-2

1. Wells PS, Anderson D et al. Evaluation of D-dimer in the Diagnosis of Suspected Deep Vein Thrombosis N Engl J Med. Sept 25, 2003 349(13): 1227-35

	PTP Score
DVT unlikely	<2
DVT likely	≥2

DVT Diagnostic Algorithm



Legend: US - Bi-lateral leg vein ultrasonography, LMWH - Low molecular weight heparin

PE Decision Rule

Procedure

1. Refer to the PE Pre-Test Probability Score Table. Add up the score and determine the patient's pre-test probability for PE.
2. Refer to the PE Diagnostic Algorithm. According to the pre-test probability follow the relevant diagnostic algorithm.

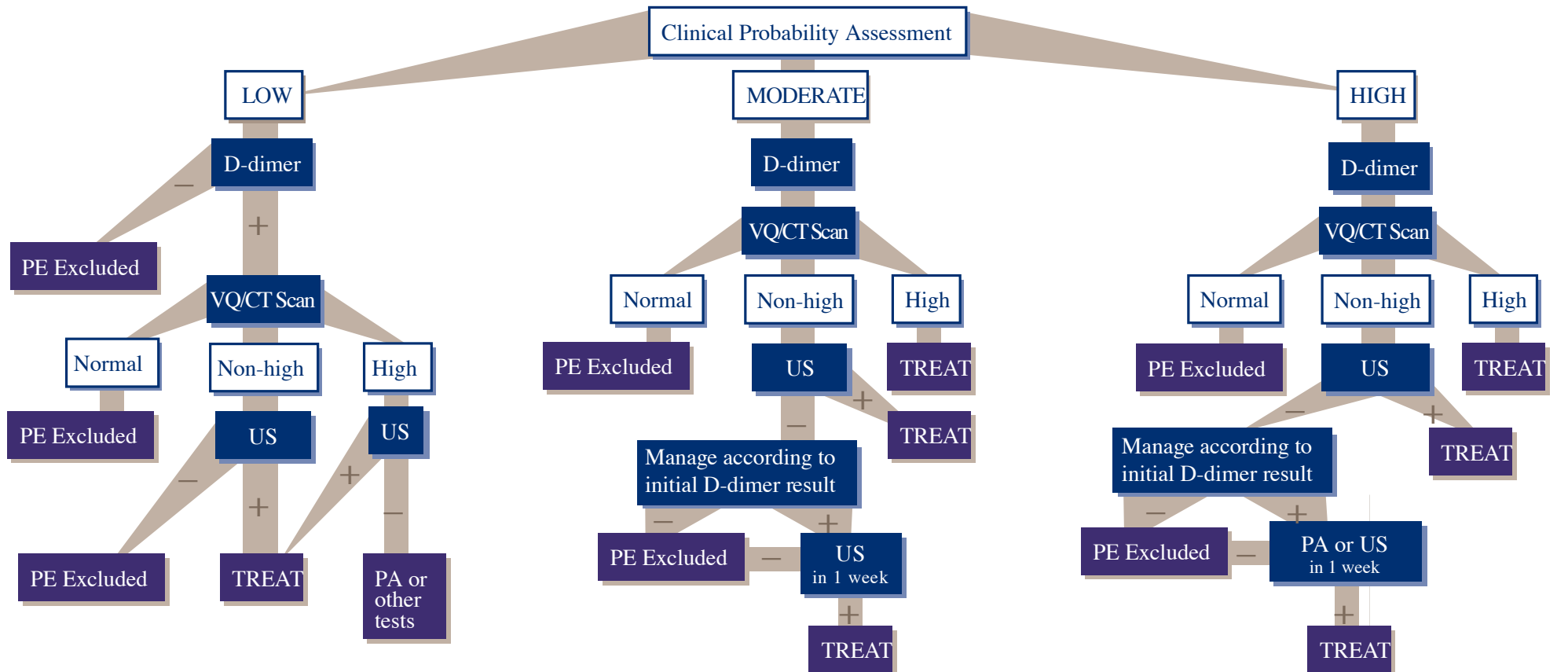
Wells² PE Pre-Test Probability (PTP) Score

Clinical Characteristic	Score
Clinical signs and symptoms of DVT (minimum of leg swelling and pain with palpation of the deep veins)	3.0
An alternative diagnosis is less likely than PE	3.0
Heart rate greater than 100 beats/min	1.5
Immobilisation or surgery in the previous 4 weeks	1.5
Previous DVT/PE	1.5
Hemoptysis	1.0
Malignancy (at treatment, treated in the last 6 months or palliative)	1.0

2. Wells P.S., Anderson D. et al. Derivation of a simple Clinical Model to Categorize Patients Probability of Pulmonary Embolism: Increasing the Models Utility with SimpliRED D-dimer. Thromb Haemost 2000;83:416-20

	PTP Score
Low Probability	<2.0
Moderate Probability	2.0 - 6.0
High Probability	>6.0

PE Diagnostic Algorithm



Legend: US - Bi-lateral leg vein ultrasonography, PA - Pulmonary Angiography, VQ - Ventilation/Perfusion Scan, CT - Computed Tomography

“Low PTP – single most important step in a safe rule-out protocol”³

3. Kline JA, Wells PS. Methodology for a rapid protocol to rule out pulmonary embolism in the emergency department. Ann Emerg Med 2003; 42: 266-76.