Risk for DVT or PE

Wells Criteria Prediction for VTE or PE

Multiple tools are available to clinically assess deep vein thrombosis (DVT) and pulmonary embolism (PE). Wells criteria is a risk stratification score and clinical decision rule to estimate the pretest probability for acute DVT and PE. The use of these validated tools has been shown to improve diagnostic accuracy in DVT and PE. Please note, these tools are not intended to replace clinical judgment.

The Wells Clinical Prediction Rules allow healthcare professionals (HCPs) to accurately determine the probability that a patient has DVT or PE before more definitive diagnostic testing is conducted.

− Use of the Wells Clinical Prediction Rule for DVT, combined with a negative D-dimer test, is also an effective diagnostic strategy for ruling out DVT
− A negative D-dimer result, combined with the Wells Clinical Prediction Rule for PE, is also effective in excluding the presence of PE

Wells Clinical Prediction for DVT[1]

Clinical Feature	Score
Active cancer (ongoing treatment, treatment within 6 months, or receiving palliative care)	1
Paralysis, paresis, or recent immobilization of lower extremities	1
Recently bedridden for >3 days or major surgery within 4 weeks	1
Localized tenderness along the distribution of the deep veins	1
Entire leg swollen	1
Calf swelling by >3 cm when compared with the asymptomatic leg*	1
Pitting edema (greater in the symptomatic leg)	1
Collateral superficial veins (nonvaricose)	1
Alternative diagnosis as likely or more likely than DVT diagnosis	-2

*Measured 10 cm below tibial tuberosity.

Calculating Your Patients' Pretest Probability of DVT[1]

Probability	Points
High	≥3
Moderate	1-2
Low	<1

Wells Clinical Prediction for PE [2,3]

Clinical Feature	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 >100 beats per minute	1.5
Immobilization or surgery in the previous 4 weeks	1.5
Previous DVT/PE	1.5
Hemoptysis	1.0
Malignancy (ongoing treatment, treatment within 6 months, or receiving palliative care)	1.0

Calculating Your Patients' Pretest Probability of PE [2,3]

Probability	Points
High	>6
Moderate	2-6
Low	<2

These tools are not intended to replace clinical judgment

References:

1. Wells PS, Anderson DR, Bormanis J, et al. Value of assessment of pretest probability of deep-vein thrombosis in clinical management. *Lancet.* 1997;350(9094):1795-1798.
2. Wells PS, Anderson DR, Rodger M, et al. Derivation of a simple clinical model to categorize patients probability of pulmonary embolism: increasing the models utility with the SimpliRED d-dimer. *Thromb Haemost*. 2000;83(3):416-420.
3. Wells PS, Ginsberg JS, Anderson DR, et al. Use of a clinical model for safe management of patients with suspected pulmonary embolism. *Ann Intern Med*. 1998;129(12):997-1005.