

PROTHROMBIN TIME (PT)

Description	The prothrombin time (PT) and its derived international normalized ratio (INR) are measures of the extrinsic pathway of coagulation.
Indication	It is used in conjunction with the activated partial thromboplastin time (aPTT) which measures the intrinsic pathway. The PT is used to determine the clotting tendency of blood, in the measure of warfarin dosage, liver damage, and vitamin K status. PT measures factors I, II, V, VII, and X.
Additional Info	Other hospitals may use different reagents, so you may get different results.
Concurrent Tests	It is used in conjunction with the APTT to form a "Clotting Screen"
Interpretation	The prothrombin time is the time it takes plasma to clot after addition of tissue factor). This measures the quality of the extrinsic pathway (as well as the common pathway) of coagulation. The speed of the extrinsic pathway is greatly affected by levels of factor VII in the body. Factor VII has a short half-life and its synthesis requires vitamin K. The prothrombin time can be prolonged as a result of deficiencies in vitamin K, which can be caused by warfarin, malabsorption, or lack of intestinal colonization by bacteria (such as in newborns). In addition, poor factor VII synthesis (due to liver disease) or increased consumption (in disseminated intravascular coagulation) may prolong the PT.
Collection Conditions	Samples must be correctly filled as the ratio of anticoagulant to blood is crucial for accurate test results. Samples will be rejected by the laboratory if they are under or over filled.
Frequency Of Testing	As required
Clinical AdviceContact	