

Glossary of Terms

Acute coronary syndrome (ACS)	An umbrella term used to cover any group of clinical symptoms compatible with an acute heart attack. The subtypes of acute coronary syndrome include unstable angina (in which the heart muscle is not damaged), and two forms of heart attack in which the heart muscle is damaged. These latter types are named according to the appearance of the electrocardiogram as <i>non-ST segment elevation myocardial infarction</i> (NSTEMI) and <i>ST segment elevation myocardial infarction</i> (STEMI).
Anticoagulant drugs	Drugs designed to prevent and treat blood clots. Sometimes referred to as 'blood thinners'.
Arthroplasty	Surgical replacement of a joint.
Atrial fibrillation (AF)	A heart rhythm disorder where chambers in the upper heart (atria) beat more rapidly than those in the lower section of the heart. Blood is not pumped out of the upper chambers completely during beating, and may pool and form a clot. A stroke results if a section of clot dislodges from the upper chambers and becomes lodged in the brain.
Coagulation cascade	A chain of biochemical reactions that result in clot formation. Anticoagulants work by blocking or regulating a stage, or stages, of the coagulation cascade.
Composite endpoint	A combination of two or more endpoints in a clinical trial.
Deep vein thrombosis (DVT)	A blood clot in a deep vein, usually resulting from damage to the vein or blood flow slowing down or stopping. Usually DVTs are found in the leg, but can also be in the arm. <i>Distal</i> DVTs are found in deep veins of the calf, and are the most common type of DVT. <i>Proximal</i> DVTs are found in the legs above the calf muscle up to the waist.
Drug–drug interaction	A modification of the effect of a drug when administered with another drug, usually either an increase or decrease in the action of either substance, or an effect not normally associated with either drug alone.
Efficacy	The ability of a drug to produce the desired effect.
Electrocardiogram	A test that records the electrical activity of the heart, shows abnormal rhythms, and detects heart muscle damage.
Factor Xa	Pivotal component of blood clotting cascade. Stimulates the production of thrombin, the enzyme in the coagulation cascade that promotes the formation of blood clots.

Factor Xa inhibitor	An anticoagulant drug that inhibits the blood coagulation cascade at a pivotal point where thrombin is generated.
International Normalized Ratio (INR)	A system for assessing the clotting tendency of blood in patients receiving anticoagulant therapy. For patients with atrial fibrillation, the recommended target INR range is between 2 and 3. If the INR is higher than 3, patients are at risk of serious bleeding. If the INR is less than 2, patients are at risk of a blood clotting event.
Low molecular weight heparin (LMWH)	An anticoagulant used to prevent new clots forming and existing clots from getting larger. It is injected subcutaneously (under the skin).
Major orthopaedic surgery	Major operations on the bones or joints including total hip or knee replacement surgery.
Prothrombin	Inactive version of thrombin, the enzyme in the coagulation cascade that promotes the formation of blood clots. Factor Xa stimulates the conversion of prothrombin to thrombin.
Pulmonary embolism (PE)	A potentially fatal condition caused by a blood clot blocking a vessel in the lung: usually the clot originates from a DVT in the legs. PE can result in permanent lung damage.
Subcutaneous	Introduced beneath the skin.
Thrombin	Enzyme in the blood clotting cascade that promotes the formation of blood clots.
Thrombosis	Formation of a clot inside a blood vessel.
Thromboprophylaxis	Preventative treatment for blood clotting.
Venous thromboembolism (VTE)	A disease process beginning with a blood clot occurring within the venous system, including deep vein thrombosis and pulmonary embolism.
Vitamin K antagonist (VKA)	An anticoagulant that inhibits multiple steps in the blood clotting process. Administered orally, the dose varies by patient, and regular monitoring and dose adjustment is required. Vitamin K antagonists have interactions with food and other drugs. Due to the many limitations of this drug, many patients are actually not treated and many of those who are treated are outside of the required target INR range, which can be the cause for increased bleeding or a greater risk of stroke.