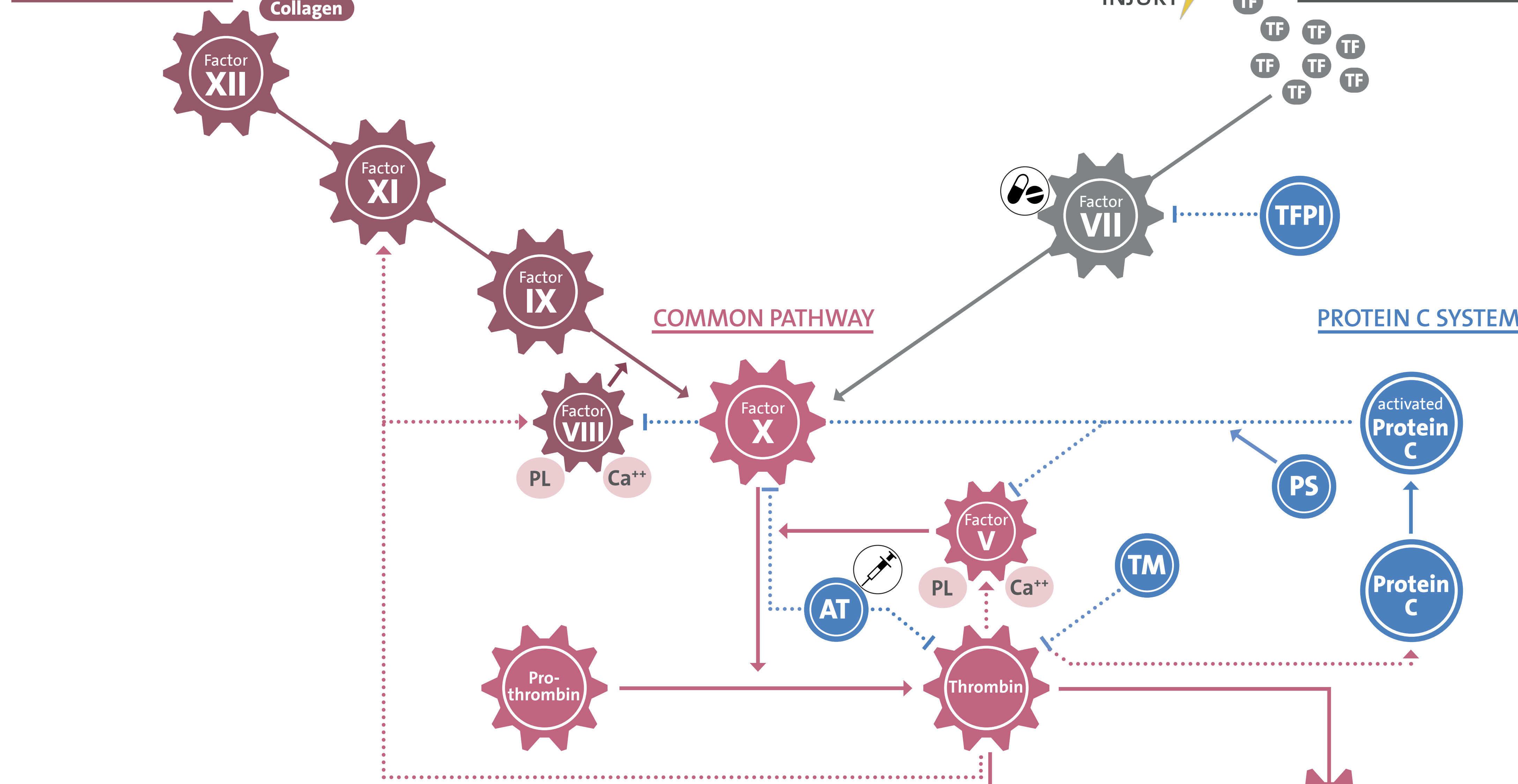
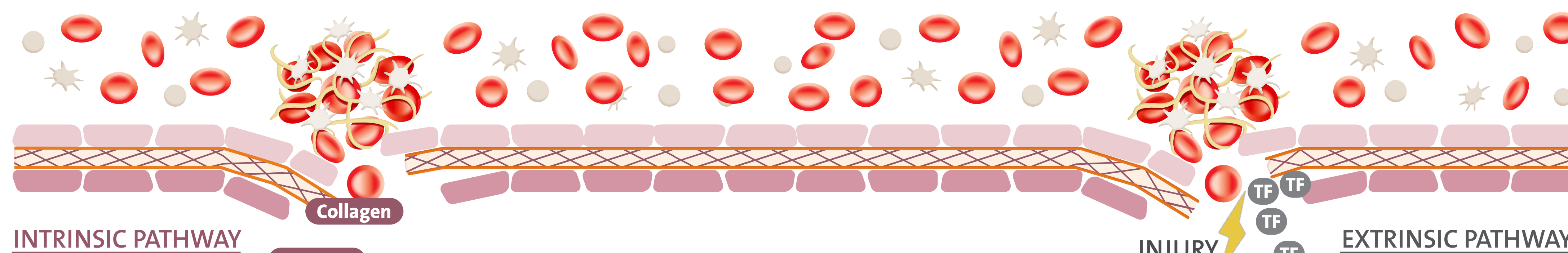


Plasmatic Coagulation Cascade



COAGULATION MECHANISMS

Intrinsic Pathway: Triggered by Thrombin, Collagen and negatively charged surfaces. The corresponding assay is HEMOSTAT aPTT-EL (aPTT).

Extrinsic Pathway: Triggered by Tissue Factor (TF) that is released by injured tissue. The corresponding assay is HEMOSTAT Thromboplastin (PT).

Common Pathway: Final coagulation pathway that leads to the conversion of fibrinogen to insoluble fibrin strands and the formation of a fibrin clot.

ANTI-COAGULATION MECHANISMS

Tissue Factor Pathway Inhibitor (TFPI): Down-regulates active Factor VII.

Antithrombin (AT): Inhibits Factor X and Thrombin.

Protein C System: Activated Protein C with its co-factor Protein S inhibits active Factor V and Factor VIII.

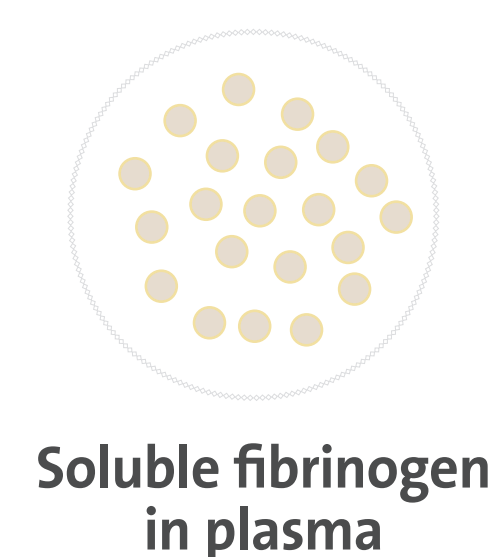
Fibrinolysis: The fibrin clot is degraded by Plasmin into fibrin degradation products (FDP), including D-dimer. The corresponding assay is HEMOSTAT D-Dimer.

Vitamin K Antagonists (VKAs): Anticoagulant drugs, for example warfarin, that mainly decrease the function of the extrinsic pathway.

Unfractionated Heparin (UFH): Anticoagulant drug that greatly accelerates the activity of Antithrombin.

AT	Antithrombin
Ca ⁺⁺	Calcium
PL	Phospholipids
PS	Protein S
TF	Tissue Factor
TFPI	Tissue Factor Pathway Inhibitor
TM	Thrombomodulin
.....>	Positive feedback of Thrombin
.....	Inhibition

FORMATION OF A FIBRIN CLOT



CLOT DEGRADATION BY FIBRINOLYSIS

