

		Effect of Anticoagulant on Test					
Assay	Principle	VKA	UFH	LMWH	Rivaroxaban	Apixaban	Direct Thrombin Inhibitors (Dabigatran, Bivalirudin, Argatroban)
LEGEND: ↑- increased; ↓- decreased; N- no impact; FP- false positive; FN- false negative. ACRONYMS: aPTT- activated partial thromboplastin time; dRVVT- dilute Russell's Viper Venom Time; LAC- lupus anticoagulant; LMWH- low molecular weight heparin; PF4- platelet factor 4; PT- prothrombin time;UFH- unfractionated heparin; VKA- vitamin K antagonist; VWF- von Willebrand Factor							
Routine Coagulation							
PT	Clot-based	↑ ¹	N ²	N ²	↑	N or ↑	N or ↑
aPTT	Clot-based	N or ↑	↑	N or ↑	↑	N or ↑	↑
Fibrinogen	Clot-based	N	N	N	N	N	N or ↓ ³
Thrombin Time	Clot-based	N	↑	N or ↑ ²	N	N	↑↑
Reptilase Time	Clot-based	N	N	N	N	N	N
D-Dimer	Immunoturbidimetric	N	N	N	N	N	N
Factor Assays							
PT Factor Assays	Clot-based	N or ↓ ¹	N	N	↓	N or ↓	↓
PTT Factor Assays	Clot-based	N or ↓ ¹	↓	N or ↓ ¹	↓	N or ↓	↓
Chromogenic FVIII	Chromogenic	N	N	N	↓	N or ↓	↓
von Willebrand Disease Assays							
VWF Antigen	Immunoturbidimetric	N	N	N	N	N	N
VWF Activity (VWF:Ab)	Immunoturbidimetric	N	N	N	N	N	N
Anticoagulant Monitoring							
Anti-Xa Activity (heparin)	Chromogenic	N	↑	↑	↑	↑	N
Apixaban Concentration	Chromogenic	N	↑	↑	↑	↑	N
Antiphospholipid Syndrome							
LAC dRVVT Confirm Ratio	Clot-based	N or FP ⁴	N ²	N or FP	FP or FN	FP or FN	FP
Hexagonal Phase Confirmation	Clot-based	N ^{2,4}	N or FP ^{2,4}	N or FP ^{2,4}	N or FP ⁴	N or FP ⁴	FP
Anti-cardiolipin Antibodies	ELISA	N	N	N	N	N	N
Anti-β-glycoprotein 1	ELISA	N	N	N	N	N	N
Thrombophilia							
Activated Protein C Resistance	Clot-based	N	N ²	N ²	FN	FN	FN
Antithrombin Activity – FXa-based	Chromogenic	N	N	N	↑	↑	N
Protein C Activity	Chromogenic	↓ ¹	N	N	N	N	N
Protein S Activity	Clot-based	↓ ¹	N ²	N ²	↑	↑	↑
Free Protein S Antigen	Immunoturbidimetry	↓ ¹	N	N	N	N	N
Anti-PF4/heparin	ELISA	N	N	N	N	N	N
Other							
ADAMTS13	ELISA	N	N	N	N	N	N
1- VKAs result in deficiencies of FII, VII, IX, X, C, & S (in vivo effect); 2- Can be prolonged/overestimated/ false positive at supratherapeutic concentration of anticoagulant; 3-PMID: 25231101; 4- Based on manufacturer package insert							