		Effect of Anticoagulant on Test					
Assay	**Principle**	**VKA**	**UFH**	**LMWH**	**Rivaroxaban**	**Apixaban**	**Direct Thrombin Inhibitors (Dabigatran, Bivalirudin, Argatroban)**
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 (UFH, LMWH)	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 Ab	ELISA	N	N	N	N	N	N
Anti-β2-glycoprotein 1 Ab	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 Activity	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