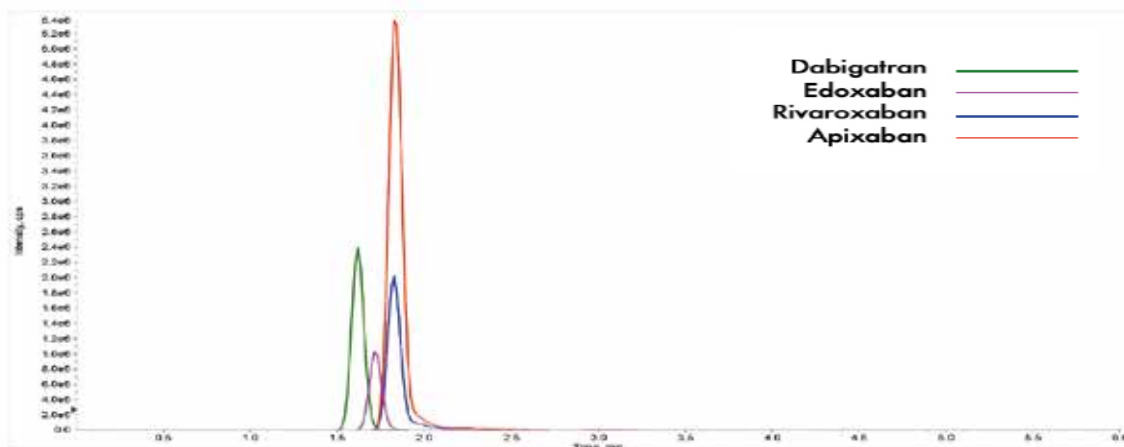


# SHORT METHOD DESCRIPTION

## FloMass<sup>®</sup> NOAC in Serum

The development of NOACs represented an important progress in therapy for the prevention of arterial and venous thromboembolism. The “direct oral anticoagulants” DOACs or “new oral anticoagulants” NOACs are represented by Edoxaban, Rivaroxaban, Apixaban (inhibitors of coagulation factor Xa) and by Dabigatran (direct thrombin inhibitor). Although NOACs show many advantages, the reduction in hepatic metabolism and impairment of renal function can cause an increase in the plasma concentration of the drug, inducing the risk of bleeding and developing a thromboembolic episode. Since it appears that there is a direct association between the plasmatic NOAC concentration and the anticoagulant effect, it is possible to predict the existence of therapeutic plasma concentration ranges where the risk of these effects is lower. TDM (Therapeutic Drug Monitoring) is generally recommended for drugs with large pharmacokinetic variability, drugs with a narrow therapeutic index, and drugs that have no clear association between drug concentration and therapeutic effect and/or adverse reaction. Since all these points fit to NOACs, a targeted dosage is necessary for a good TDM and optimization of therapy.



### HPLC-MS/MS system conditions

**Ionization:** ESI positive mode

**MS/MS:** specific MRM

**Injection volume:** 1-10  $\mu$ l (variable according to instrumental sensitivity)

**Running time:** 5 min

**Column heater:** 30°C

### Performance

Analyte	Linearity (ng/mL)	LLOD (ng/mL)	LLOQ (ng/mL)	CV% Intra	CV% Inter
Apixaban	0.21 - 1000	0.06	0.21	4.1 - 4.2	4.0 - 10.3
Edoxaban	0.31 - 1000	0.09	0.31	4.2 - 6.0	5.7 - 12.7
Rivaroxaban	0.21 - 1000	0.06	0.21	3.3 - 5.2	8.8 - 14.3
Dabigatran	0.41 - 1000	0.12	0.41	2.3 - 7.2	3.0 - 13.4

## ORDERING GUIDE

Order No.	Description	Quantity
<b>EUM12100</b>	<b>FloMass® NOAC in Serum</b> LC-MS/MS detection	<b>100 assays</b>
	<b>Contents</b>	
	Mobile Phase A	1 x EUM12011
	Mobile Phase B	1 x EUM12012
	Mobile Phase C	1 x EUM12013
	Precipitant Solution	1 x EUM12021
	Internal Standard	1 x EUM12031
	<b>Separately available components</b>	
EUM12011	Mobile Phase A	1000 ml
EUM12012	Mobile Phase B	600 ml
EUM12013	Mobile Phase C	250 ml
EUM12021	Precipitant Solution	25 ml
EUM12031	Internal Standard	0.6 ml
	<b>Accessory</b>	
EUM00C12	Analytical Column with test chromatogram	1 pc
EUM12071	FloTuning NOAC	1x2 ml
EUM12051	Control Set for NOAC in Serum, lyoph. (3 levels)	2x3x1 ml
EUM12041	Calibrator Set for NOAC in Serum, lyoph. (7 levels)	2x7x1 ml