

**Table 1.** Experimental design

		Exp 1	Exp 2	Exp 3	Exp 4	Exp 5.1	Exp 5.2	Exp 5.3
Collection tube	Serum	√						
	EDTA	√	X	X	X	X	X	X
	Lithium heparin	√						
Stabilisation cocktail included	Yes	√	X			√	X	X
	No	√		X	X	√		
Time stabilisation cocktail prepared	Fresh		√					
	1 day in advance		√					
	1 week in advance		√					
Time until stabilisation	Immediate						√	
	Delayed						√	
Temperature samples maintained during processing	Room temp					√	√	√
	Refrigerated					√	√	√
Time until centrifugation	Immediately					√	X	
	Delayed					√		
Combined stabilisation and centrifugation	Immediately							√
	Delayed							√
Frozen storage temperature after processing	-20				√			
	-80				√			
Freeze-thaw cycles	0			√				
	1			√				
	2			√				
Delay until UPLC-MS/MS analysis	Immediately				√			
	Delayed				√			

√, conditions varied in experiment; X, conditions fixed in experiment; EDTA, ethylenediamine tetraacetic acid; UPLC-MS/MS, ultra-perform

ance liquid chromatography-tandem mass spectrometry.