

Supplementary Materials

Supplementary I table 1

	Time point	Sample Name	Samples to take	Test for
Day 0	Pre-IV Heparin (baseline) (30-60minutes)	Pre-heparin	EDTAx1 Citrate x3	TEG, FBC Coagulation Screen VWF:Ag VWF:RCo VWF:CBA Anti Xa level Spin & Freeze plasma
Day 0	Post IV Heparin (30-60minutes)	Post- heparin	EDTA x1 Clotting x3	TEG, FBC Coagulation Screen VWF:Ag VWF:RCo VWF:CBA Heparin anti-Xa level Spin & Freeze plasma
Day 0	Pre-Protamine (15-30minutes)	Pre-protamine	EDTA x1 Clotting x3	TEG, FBC Coagulation Screen VWF:Ag VWF:RCo VWF:CBA Heparin anti-Xa level Spin & Freeze plasma
Day 0	Post protamine (15-30minutes)	Post-protamine	EDTA x1 Clotting x3	TEG, FBC Coagulation Screen VWF:Ag VWF:RCo VWF: CBA Heparin anti-Xa level Spin & Freeze plasma
Day +1	12hr post op	12hours Post OP	EDTA x1 Clotting x3	TEG, FBC Coagulation Screen VWF:Ag VWF:RCo VWF:CBA Heparin anti-Xa level Spin & Freeze plasma

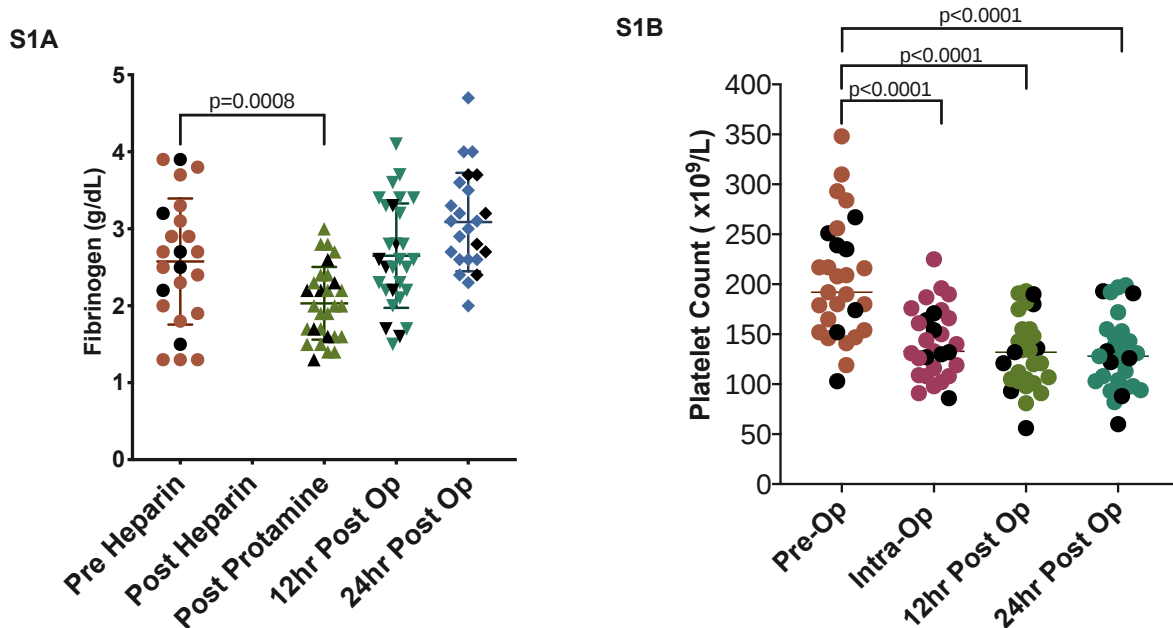
Day +1	24hr post op	24hours Post OP	EDTA x1 Clotting x3	TEG, FBC Coagulation Screen VWF:Ag VWF:RCo VWF: CBA Heparin anti-Xa level Spin & Freeze plasma
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EDTA= Ethylenediaminetetraacetic acid; TEG =Thromboelastography; FBC = full blood count.

VWF:Ag= von Willebrand factor antigen; VWF:RCo = Von Willebrand Ristocetin Cofactor; VWF:CBA= Von Willebrand collagen binding activity

Supplementary Figure 1

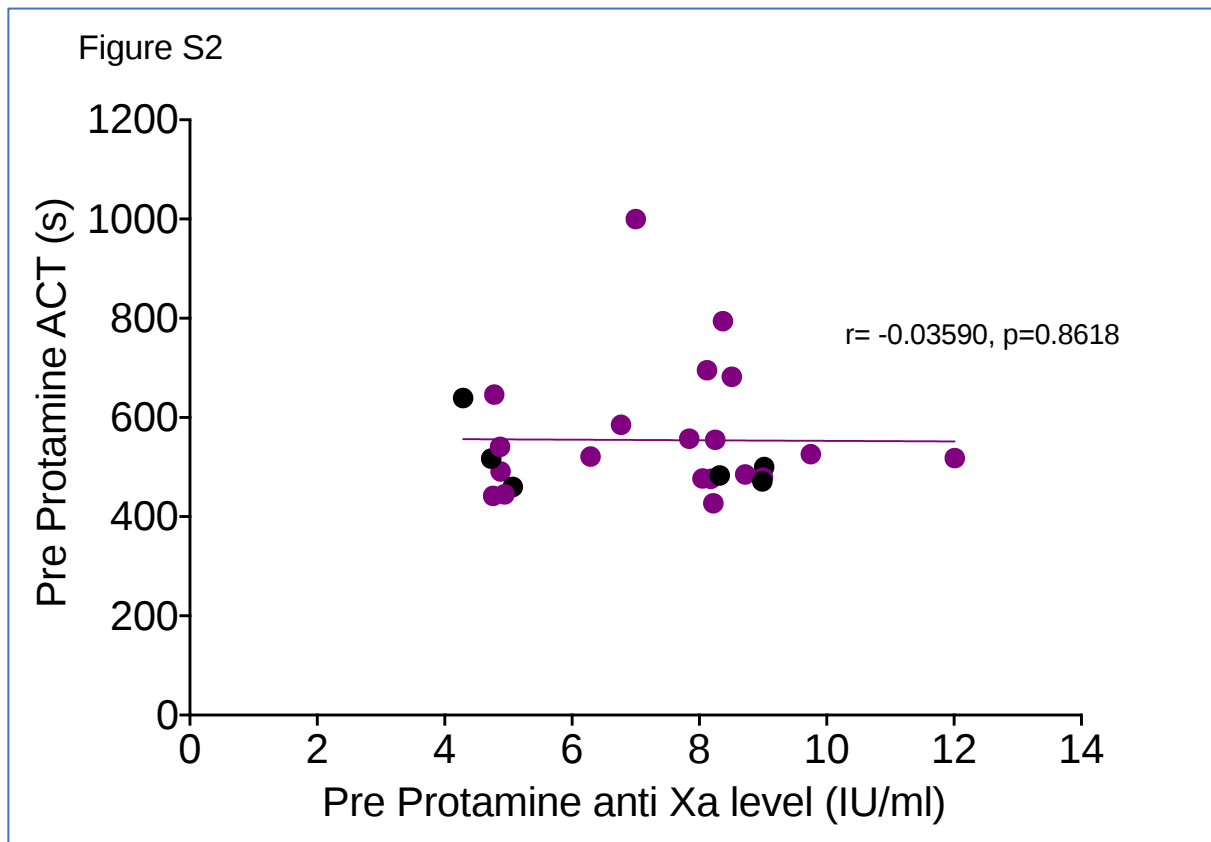
1A Fibrinogen Activity (by Clauss) and 1B Platelet Count



Samples were taken at baseline, at the end of surgery, 12 and 24 hours post operatively to characterise the changes in fibrinogen levels. There was a statistically significant fall in fibrinogen at the end of the operation (Post Protamine) compared to baseline, p=0.0008.

Data was collected on the pre, intra- and postoperative platelet counts of the study participants. There was a significant fall in the platelet count intraoperatively which persisted for at least 24 hours post-surgery (p<0.0001 for all).

Supplementary Figure 2: Intra Op ACT and Anti-Xa Level



There is no correlation between the Pre-Protamine ACT and anti-Xa level in patients undergoing cardiopulmonary bypass surgery, receiving IV UFH, with Spearman Correlation $r = -0.03590$, $p = 0.8618$