

SUPPLEMENTARY TABLES

Table S1. Laboratory test results between patients and controls for each individual study period. Statistically significant P-values at level $\alpha=0.05$ are given in bold.

	Control (N=30) Median (IQR)	Day 1		Day 2-3		Day 5-7	
		Patients (N=28) Median (IQR)	p	Patients (N=28) Median (IQR)	p	Patients (N=28) Median (IQR)	p
PT (sec)	12.6 (11.9-13.3)	14.4 (13.2-17.6)	<0.0001	13 (12.3-14.95)	0.0438	12.65 (12.3-13.3)	0.5108
INR	0.95 (0.91-1.03)	1.095 (1-1.34)	<0.0001	0.95 (0.925-1.11)	0.2821	0.96 (0.91-1)	0.9672
APTT (sec)	30.15 (26.4-33.7)	39.05 (36-47.45)	<0.0001	35.45 (31.5-42.55)	0.0017	35.1 (32.1-36.8)	0.0051
Fibrinogen (mg/dL)	253 (219-316)	400 (319-464)	<0.0001	384.5 (276-439.5)	0.0005	293.5 (216-379)	0.1328
D-Dimers (ng/mL)	1175 (790-1475)	2095 (1660-3600)	<0.0001	2210 (1900-3540)	<0.0001	1635 (1100-2280)	0.0339
Protein C (%)	31.5 (28-38)	22 (18-26)	<0.0001	26.5 (21-33)	0.1758	31 (28-35)	0.9357
Protein S (%)	50 (45-57)	47 (36-59)	0.2555	48 (35-56)	0.5943	49 (43-59)	0.8511
vWF (U)	172 (155-209)	221 (200-306)	0.0026	200 (171-218)	0.4112	206 (164-224)	0.4376
WBC ($\times 10^6/\mu\text{L}$)	9955 (7170-12300)	14650 (9855-21800)	0.0266	15700 (9965-18700)	0.0098	13950 (9350-16100)	0.0090
Hemoglobin (g/dL)	14 (12.8-16.2)	12.45 (10.15-14.3)	0.0152	11.5 (10.5-12.85)	0.0002	10.8 (8.9-11.7)	<0.0001
Hematocrit (%)	41 (37-46.8)	36.9 (29.6-39.95)	0.0299	33.65 (30.7-38.5)	0.0004	31.3 (26-34)	<0.0001
PLT ($\times 10^3/\mu\text{L}$)	315.5 (249-350)	208 (119-258.5)	0.0002	187 (99-313)	0.0051	340.5 (140-477)	0.6513
PLT FC ($\times 10^3/\mu\text{L}$)	281 (200-375)	89 (57-155)	<0.0001	106.5 (50-157)	<0.0001	165 (56-240)	0.0021
Reticulocytes (%)	3.45 (1.8-5.1)	2.9 (1.5-4)	0.5539	1.95 (1.3-2.6)	0.0293	1.8 (1.6-2.3)	0.0249
Neutrophils	3335 (2270-4370)	8295 (3800-11850)	0.0006	5360 (2730-9755)	0.0282	4645 (2540-7100)	0.1371
CRP (mg/dL)	0.165 (0.13-0.24)	7.46 (2.595-8.445)	<0.0001	2.86 (1.21-6.405)	<0.0001	0.48 (0.21-0.82)	0.0011
Urea (mg/dL)	20.5 (14-34)	33 (23.5-43)	0.0036	30 (20.5-38.5)	0.0406	17.5 (12-25)	0.3702
Creatinine (mg/dL)	0.6 (0.5-0.7)	0.545 (0.44-0.73)	0.7673	0.54 (0.455-0.67)	0.3582	0.5 (0.42-0.57)	0.0200
SGOT (U/L)	20.5 (18-30)	26.5 (21.5-43.5)	0.0782	22.5 (15.5-36)	0.9627	18.5 (15-26)	0.1728
SGPT (U/L)	7 (6-11)	7.5 (6-21)	0.0857	10 (6.5-19)	0.0117	10 (7-15)	0.0021
Total bilirubin (mg/dL)	7.285 (4.35-10)	6.375 (3.71-7.995)	0.1523	6.24 (4.305-8.12)	0.0899	3.865 (2-5.27)	0.0001
Direct bilirubin (mg/dL)	0.49 (0.43-0.57)	0.495 (0.42-0.635)	0.3663	0.6 (0.46-0.73)	0.0148	0.485 (0.41-0.66)	0.3572

Abbreviations. PT, prothrombin time; APTT, activated partial thromboplastin time; vWF, Von Willebrand factor; WBC, White Blood Cells; PLT, platelets; Platelet FC, platelets estimated by flow cytometry; CRP, C-reactive protein; SGOT, serum glutamic oxaloacetic transaminase; SGPT, glutamate-pyruvate transaminase

Table S2. Linear regression models for MCFplatelet and MCEplatelet with platelet count in sepsis group.

MCF_{platelet} and Platelets	MCE_{platelet} and Platelets
Intercept = 35.4, Standard Error= 1.4, p<0.0001 and β =0.021, Standard Error=0.0048, p<0.0001	Intercept = 103.9, Standard Error= 8.68, p<0.0001 and β =0.27, Standard Error=0.03, p<0.0001
the linear model produced by this regression analysis is: MCF _{platelet} =35.4 + 0.021*PLTs, with overall p<0.0001 and adjusted R²=18.79% .	the linear model produced by this regression analysis is: MCE _{platelet} =103.9+ 0.27*PLTs, with overall p<0.0001 and adjusted R²=47.66% .
Abbreviations. MCE, platelet contribution to clot elasticity; MCFplatelet, platelet contribution to clot firmness	

Table S3. Linear regression models for MCFplatelet and MCEplatelet with platelet count in control group.

MCF_{platelet} and Platelets	MCE_{platelet} and Platelets
Intercept = 36.5, Standard Error= 2.94, p<0.0001 and β =0.031, Standard Error=0.0095, p=0.0029	Intercept = 47.50, Standard Error= 30.36, p<0.1290 and β =0.40, Standard Error=0.10, p=0.0004
the linear model produced by this regression analysis is: MCF _{platelet} =36.5 + 0.031*PLTs, with overall p<0.0029 and adjusted R²=24.93% .	the linear model produced by this regression analysis is: MCE _{platelet} =47.50+ 0.40*PLTs, with overall p<0.0004 and adjusted R²=34.32% .
Abbreviations. MCE, platelet contribution to clot elasticity; MCFplatelet, platelet contribution to clot firmness	

Table S4. Multivariable analysis of MCEplatelet and MCFplatelet with PLTs and GPIb CD42b.

Variable	MCEplatelet			MCFplatelet		
	Estimate	Standard Error	p	Estimate	Standard Error	p
Platelets	0.27626072	0.03101817	<.0001	0.0211723	0.0043699	<.0001
GPIb CD42b active	20.5581237	18.4749733	0.2683	-1.9417161	2.6027913	0.4573
GPIb CD42b inactive	-8.10139634	19.4653216	0.6781	-1.9215458	2.7423135	0.485

Abbreviations. MCE, platelet contribution to clot elasticity; MCFplatelet, platelet contribution to clot firmness

Table S5. Regression model for clot strength.

		Coefficient	Standard Error	p
Extem MCF	Intercept	51.7	1.92	<0.0001
	Fibrinogen	0.014	0.004	0.0016
	PLTs count	0.037	0.004	<0.0001
	Control	-2.37	1.25	0.0613
	Patients (reference)			
Fibtem MCF	Intercept	21.3	2.04	<0.0001
	Fibrinogen	0.011	0.005	0.0564
	Control	-5.7	1.5	0.0004
	Patients (reference)			
MCFplatelet	Intercept	35.6	1.24	<0.0001
	PLTs count	0.024	0.004	<0.0001
MCEplatelet	Intercept	98.7	8.6	<0.0001
	PLTs count	0.27	0.03	<0.0001

Abbreviations. EXTEM: extrinsic coagulation pathway; FIBTEM: extrinsic coagulation pathway with platelet inhibition by cytochalasin D; MCF: maximum clot firmness; MCFplatelet: platelet contribution to clot firmness; MCEplatelet: platelet contribution to clot elasticity; Intercept: value at which the adjusted line crosses the y-axis

Table S6. Contribution of fibrinogen and platelets to clot strength.

Characteristic	Patients (N=82)		Controls (N=30)		p
	Median	Q1-Q3	Median	Q1-Q3	
FIBTEM MCF/EXTEM MCF x 100	36.30	(31.58-43.24)	25.92	(20.97-32.81)	<0.0001
MCEplatelet/EXTEM MCE x 100	84.03	(79.06-86.54)	89.21	(85.64-90.52)	<0.0001
MCFplatelet/EXTEM MCF x 100	63.70	(56.76-68.42)	74.08	(67.19-79.03)	<0.0001

Abbreviations. EXTEM: extrinsic coagulation pathway; FIBTEM: extrinsic coagulation pathway with platelet inhibition by cytochalasin D; MCF: maximum clot firmness; MCEplatelet: platelet contribution to clot elasticity; MCFplatelet: platelet contribution to clot firmness

Table S7. Contribution of fibrinogen and platelets and AUCs in cut-off points.

Fibrinogen	EXTEM MCF	Complete population			Patients			Controls		
		N	Median (Q1-Q3)	p	N	Median (Q1-Q3)	p	N	Median (Q1-Q3)	p
	<55	11	186 (281-95)	0.0291	7	222 (186-400)	0.0264	4	211.5 (175-258)	0.1794
≥55	101	326 (251-411)	75		363 (281-427)	26		257.5 (231-320)		
PLTs count	EXTEM MCF	Complete population			Patients			Controls		
		N	Median (Q1-Q3)	p	N	Median (Q1-Q3)	p	N	Median (Q1-Q3)	p
	<55	11	90 (60-192)	0.0002	7	66 (51-100)	0.0003	4	195.5 (115.5-258.5)	0.0187
≥55	101	259 (164-350)	75		245 (132-343)	26		336.5 (250-354)		

Abbreviations. EXTEM: extrinsic coagulation pathway; MCF: maximum clot firmness; PLTs: platelets

SUPPLEMENTARY FIGURES

	Patients	Patients	Control	Control	All	All
	MCE platelet	MCF platelet	MCE platelet	MCF platelet	MCE platelet	MCF platelet
D-dimers (ng/mL)	-0.29*	-0.37*	-0.23	0.04	-0.21*	-0.4***
Platelets ($\times 10^3/\mu\text{L}$)	0.72***	0.54***	0.66***	0.46*	0.66***	0.55***
Platelet FC ($\times 10^3/\mu\text{L}$)	0.65***	0.58***	0.76*	0.21	0.54***	0.59***
GPIb CD42b MFI inactivated	-0.13	-0.32*	0.11	-0.1	-0.06	-0.34*
GPIb CD42b inactivated receptors	-0.13	-0.32*	0.11	-0.1	-0.06	-0.34*
GPIb CD42b MFI activated	-0.06	-0.27*	0.2	-0.14	0.02	-0.29*
GPIb CD42b activated receptors	-0.06	-0.27*	0.2	-0.14	0.02	-0.29*
GPIIb CD41 MFI inactivated	0.02	-0.17	0.23	0.01	0.08	-0.19*
GPIIb CD41 inactivated receptors	0.02	-0.17	0.23	0.01	0.08	-0.19*
GPIIb CD41 MFI activated	0.08	-0.11	0.36	0.17	0.15	-0.08
GPIIb CD41 activated receptors	0.08	-0.11	0.36	0.17	0.15	-0.08
GPIIIa CD61 MFI inactivated	-0.03	-0.18	0.1	-0.03	0.01	-0.22*
GPIIIa CD61 inactivated receptors	-0.04	-0.18	0.1	-0.03	0.01	-0.22*
GPIIIa CD61 MFI activated	-0.02	-0.2	0.32	0.08	0.06	-0.16
GPIIIa CD61 activated receptors	-0.02	-0.2	0.32	0.08	0.06	-0.16
P-selectin CD62P MFI inactivated	-0.09	-0.11	-0.22	-0.51*	-0.13	-0.01
P-selectin CD62P inactivated receptors	-0.06	-0.09	-0.22	-0.51*	-0.11	0.01
P-selectin CD62P MFI activated	0.16	0.14	0	0.08	0.13	0.15
P-selectin CD62P activated receptors	0.15	0.14	0	0.08	0.12	0.14

Figure S1. Color-coded correlation coefficients for MCEplatelet/MCFplatelet and D-dimers, platelet count and flow cytometry tests. The analysis was performed for patients, controls and for the whole population. In each cell, the spearman correlation coefficient's value is represented by its colour and intensity. P-values are depicted as *: <0.05, **: <0.001, ***: <0.0001.