

Supplementary table 1: Blood test results and fibrinolysis markers at diagnosis and follow-up for five patients with acute myeloid leukemia and one patient with advanced myelodysplastic syndrome.

	At diagnosis	At follow-up	P-value	Reference range
Standard blood tests				
B-Hemoglobin, mmol/L mean (95% CI)	6.4 (4.9-7.8)	6 (4.3-7.8)	0.62	7.3-10.5
B-Platelet count, 10 ⁹ /L mean (95% CI)	62 (-6-129)	115 (-155-385)	0.63	145-400
B-Leucocyte count, 10 ⁹ /L median (95% CI)	3.4 (0.4-31)	2.5 (0.7-8.8)	0.77	3.5-10
P-Creatinine, μmol/L median (95% CI)	78 (60-101)	74 (46-118)	0.54	45-105
P-C-reactive protein, mg/L median (IQR)	4 (17.2)	6 (5.3)	0.74	<8
Coagulation tests				
P-INR, median (IQR)	1 (0)	1 (0)	0.32	<1.2
P-APTT, seconds median (IQR)	22.5 (1.2)	22 (1)	0.44	20-29
P-D-dimer, mg/L median (IQR)	7.75 (10.9)	0.9 (2)	0.15	<0.5
P-Fibrinogen, μmol/L mean (95% CI)	9.45 (2.43-16.47)	11.97 (6.68-17.27)	0.33	5.5-12.0
Fibrinolysis markers				
P-α2AP activity, % mean (95% CI)	90 (39-141)	131 (102-160)	0.09	75-135
P-PAI-1, ng/mL median (95% CI)	5 (0-142)	7 (3-18)	0.83	7-43
P-PAP, ng/mL median (95% CI)	2228 (307-16182)	411 (122-1386)	0.12	0-514
P-PLG activity, % mean (95% CI)	105 (71-140)	121 (93-149)	0.11	70-130
P-tPA, ng/mL median (95% CI)	3 (2-6)	3 (2-5)	0.78	2-8
P-uPA, ng/mL median (95% CI)	0.8 (0.5-1.4)	0.8 (0.5-1.1)	0.64	1.2-2.4
Clot lysis assay				
Lag time, seconds median (IQR)	938 (188)	711 (114)	0.12	
Peak absorbance, AU mean (95% CI)	0.55 (0.14-0.96)	0.73 (0.25-1.22)	0.55	0.18-0.74
50% lysis time, seconds median (95% CI)	497 (224-1100)	902 (420-1936)	0.14	309-1565
Area under the curve, median (95% CI)	498 (308-807)	887 (323-2433)	0.15	219-1051

B-: Blood, P-: Plasma, CI: Confidence interval, IQR: Interquartile range, INR: International normalized ratio, APTT: Activated partial thromboplastin time, PAI-1: Plasminogen activator inhibitor-1, PLG: Plasminogen, tPA: Tissue type plasminogen activator, uPA: urokinase type plasminogen activator, AUC: Area under the curve.

Supplementary table 2: Blood test results and fibrinolysis markers at diagnosis and follow-up for 39 patients with lymphoma.

	At diagnosis	At follow-up	P-value	Reference range
Standard blood tests				
B-Hemoglobin, mmol/L mean (95% CI)	7.9 (7.5-8.3)	7.4 (6.8-8.1)	0.47	7.3-10.5
B-Platelet count, 10 ⁹ /L mean (95% CI)	297 (257-337)	239 (194-284)	0.06	145-400
B-Leucocyte count, 10 ⁹ /L median (95% CI)	9.4 (7.8-11.3)	4.8 (3.7-6.1)	0.003	3.5-10
P-Creatinine, µmol/L median (95% CI)	71 (66-76)	73 (67-81)	0.79	45-105
P-C-reactive protein, mg/L median (IQR)	6 (10.9)	4 (3.2)	0.10	<8
Coagulation tests				
P-INR, median (IQR)	1 (0.1)	1 (0.1)	0.58	<1.2
P-APTT, seconds median (IQR)	23 (5)	25 (4.8)	0.19	20-29
P-D-dimer, mg/L median (IQR)	0.56 (0.8)	0.43 (0.4)	0.01	<0.5
P-Fibrinogen, µmol/L mean (95% CI)	11.54 (10.24-12.85)	10.47 (9.45-11.49)	0.29	5.5-12.0
Fibrinolysis markers				
P-α2AP activity, % mean (95% CI)	125 (120-130)	121 (116-127)	0.31	75-135
P-PAI-1, ng/mL median (95% CI)	7 (5-10)	9 (6-14)	0.23	7-43
P-PAP, ng/mL median (95% CI)	316 (259-384)	223 (166-301)	0.04	0-514
P-PLG activity, % mean (95% CI)	113 (107-119)	107 (99-114)	0.12	70-130
P-tPA, ng/mL median (95% CI)	3 (2-3)	3 (2-4)	0.37	2-8
P-uPA, ng/mL median (95% CI)	0.6 (0.5-0.6)	0.7 (0.6-0.8)	0.02	1.2-2.4
Clot lysis assay				
Lag time, seconds median (IQR)	720 (253)	582 (120)	0.05	
Peak absorbance, AU mean (95% CI)	0.68 (0.6-0.76)	0.69 (0.6-0.78)	0.86	0.18-0.74
50% lysis time, seconds median (95% CI)	786 (660-936)	854 (712-1025)	0.41	309-1565
Area under the curve, median (95% CI)	764 (606-963)	808 (631-1034)	0.26	219-1051

B-: Blood, P-: Plasma, CI: Confidence interval, IQR: Interquartile range, INR: International normalized ratio, APTT: Activated partial thromboplastin time, PAI-1: Plasminogen activator inhibitor-1, PLG: Plasminogen, tPA: Tissue type plasminogen activator, uPA: urokinase type plasminogen activator, AUC: Area under the curve.

Supplementary Table 3: Blood test results and fibrinolysis markers at diagnosis and follow-up for 14 patients with multiple myeloma and one patient with AL amyloidosis.

	At diagnosis	At follow-up	P-value	Reference range
Standard blood tests				
B-Hemoglobin, mmol/L mean (95% CI)	6.8 (6.1-7.5)	6.9 (6.1-7.7)	0.84	7.3-10.5
B-Platelet count, 10 ⁹ /L mean (95% CI)	209 (163-255)	245 (155-334)	0.35	145-400
B-Leucocyte count, 10 ⁹ /L median (95% CI)	4.9 (4.2-5.6)	5.2 (3.7-7.4)	0.94	3.5-10
P-Creatinine, μmol/L median (95% CI)	75 (62-90)	75 (59-95)	0.70	45-105
P-C-reactive protein, mg/L median (IQR)	4 (6.3)	4 (0.6)	0.37	<8
Coagulation tests				
P-INR, median (IQR)	1 (0.2)	1 (0)	0.44	<1.2
P-APTT, seconds median (IQR)	25 (9)	26 (12)	0.31	20-29
P-D-dimer, mg/L median (IQR)	0.56 (1.7)	0.41 (2.5)	0.82	<0.5
P-Fibrinogen, μmol/L mean (95% CI)	9.56 (7.92-11.21)	11.8 (9.11-14.49)	0.01	5.5-12.0
Fibrinolysis markers				
P-α2AP activity, % mean (95% CI)	99 (87-112)	142 (94-191)	0.01	75-135
P-PAI-1, ng/mL median (95% CI)	7 (3-16)	12 (5-28)	0.03	7-43
P-PAP, ng/mL median (95% CI)	466 (302-718)	233 (129-423)	0.15	0-514
P-PLG activity, % mean (95% CI)	110 (96-125)	126 (88-164)	0.17	70-130
P-tPA, ng/mL median (95% CI)	2(2-3)	4(2-5)	0.04	2-8
P-uPA, ng/mL median (95% CI)	0.6 (0.5-0.8)	0.6 (0.4-1)	0.40	1.2-2.4
Clot lysis assay				
Lag time, seconds median (IQR)	637 (255)	750 (586)	0.92	
Peak absorbance, AU mean (95% CI)	0.6 (0.49-0.71)	0.59 (0.42-0.76)	0.70	0.18-0.74
50% lysis time, seconds median (95% CI)	573 (427-767)	784 (558-1100)	0.21	309-1565
Area under the curve, median (95% CI)	578 (419-798)	695 (416-1162)	0.08	219-1051

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Supplementary Table 4: Blood test results and fibrinolysis markers at diagnosis and follow-up for 19 patients with myeloproliferative neoplasms.

	At diagnosis	At follow-up	P-value	Reference range
Standard blood tests				
B-Hemoglobin, mmol/L mean (95% CI)	9.3 (8.7-9.9)	9.1 (8.3-9.9)	0.12	7.3-10.5
B-Platelet count, 10 ⁹ /L mean (95% CI)	516 (406-625)	261 (111-412)	0.02	145-400
B-Leucocyte count, 10 ⁹ /L median (95% CI)	16.6 (10.9-25.1)	6.2 (3.9-9.9)	0.07	3.5-10
P-Creatinine, μmol/L median (95% CI)	67 (56-79)	87 (51-149)	0.08	45-105
P-C-reactive protein, mg/L median (IQR)	4 (0)	4 (0)	0.32	<8
Coagulation tests				
P-INR, median (IQR)	1.1 (0.2)	1.1 (0.1)	0.91	<1.2
P-APTT, seconds median (IQR)	27 (2.5)	26 (2)	0.29	20-29
P-D-dimer, mg/L median (IQR)	0.53 (0.5)	0.44 (0.2)	0.29	<0.5
P-Fibrinogen, μmol/L mean (95% CI)	9.3 (8.34-10.26)	8.56 (5.72-11.4)	0.81	5.5-12.0
Fibrinolysis markers				
P-α2AP activity, % mean (95% CI)	114 (106-122)	111 (82-141)	0.31	75-135
P-PAI-1, ng/mL median (95% CI)	12 (7-18)	13 (6-26)	0.27	7-43
P-PAP, ng/mL median (95% CI)	241 (185-313)	182 (127-261)	0.06	0-514
P-PLG activity, % mean (95% CI)	100 (94-106)	104 (92-117)	0.72	70-130
P-tPA, ng/mL median (95% CI)	3 (3-4)	3 (3-4)	0.34	2-8
P-uPA, ng/mL median (95% CI)	0.8 (0.7-1.1)	0.7 (0.5-1)	0.11	1.2-2.4
Clot lysis assay				
Lag time, seconds median (IQR)	593 (139)	565 (213)	0.75	
Peak absorbance, AU mean (95% CI)	0.65 (0.57-0.73)	0.68 (0.53-0.84)	0.35	0.18-0.74
50% lysis time, seconds median (95% CI)	682 (529-879)	694 (400-1204)	0.19	309-1565
Area under the curve, median (95% CI)	687 (528-894)	744 (545-1016)	0.33	219-1051

B-: Blood, P-: Plasma, CI: Confidence interval, IQR: Interquartile range, INR: International normalized ratio, APTT: Activated partial thromboplastin time, PAI-1: Plasminogen activator inhibitor-1, PLG: Plasminogen, tPA: Tissue type plasminogen activator, uPA: urokinase type plasminogen activator, AUC: Area under the curve.

Supplementary Table 5: Regression coefficients for multiple linear regression of proteins and enzymes involved with clot formation and fibrinolysis in 79 hematological cancer patients.

		Dependent variables							
		D-Dimer	Plasminogen	PAP	PAI-1	A2AP	Fibrinogen	tPA	uPA
Predictor variables	D-Dimer		0.77	234 ***	-0.37	-0.7	0.038	-0.038	0.032 *
	Plasminogen	0.018		0.79	-0.08	0.64 ***	0.064 ***	0.051 *	-0.0044
	PAP	0.0017 ***	0		0.0033	-0.0036	0	0	0
	PAI-1	-0.0052	-0.049	6.24		0.11	-0.0024	0.11 ***	0
	A2AP	-0.011	0.44 ***	-7.77	0.12		0.013	-0.023	-0.0024
	Fibrinogen	0.03	2.2 ***	-19.3	-0.13	0.64		0.013	0.007
	tPA	-0.016	0.93 *	-6.47	3.18 ***	-0.61	0.0068		0.027 **
	uPA	1.29 *	-7.74	-315	2.52	-6.15	0.36	2.57 **	

PAI-1: Plasminogen activator inhibitor-1, tPA: Tissue type plasminogen activator, uPA: urokinase type plasminogen activator, α2AP: Alpha-2-antiplasmin *: p < 0.05, **: p < 0.01, *** p < 0.001

Supplementary Figure 1: Example curves of clot formation and lysis assay for different diagnosis groups in patients with hematological cancers.

