Title: Key laboratory variations in severe trauma, different natural evolution according to patient phenotype

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Supplementary table S1 Percentage of missing values for laboratory data

Missing values ≥ 50%	0 hours	24 hours	48 hours	72 hours	96 hours
MDW	82	85	89	92	94
Phosphoremia	50	71	79	85	85
Lactate	-	-	64	73	77
Urea	-	-	55	69	64
CK	-	-	-	71	79
Albumin	-	-	-	63	70
Ionized calcium	-	-	-	62	68
Base excess	-	-	-	61	67
Fibrinogen	-	-	-	58	66
INR	-	-	-	55	64
aPTT	-	-	-	55	64
Hemoglobin	-	-	-	-	61
Platelets	-	-	-	-	61
Leukocytes	-	-	-	-	61
Neutrophil count	-	-	-	-	61
Lymphocyte count	-	-	-	-	61
Monocyte count	-	-	-	-	61
PLR	-	-	-	-	61
RDW	-	-	-	-	61
Glycaemia	-	-	-	-	61
Sodium	-	-	-	-	61
Creatinine	-	-	-	-	61
NLR	-	-	-	-	61

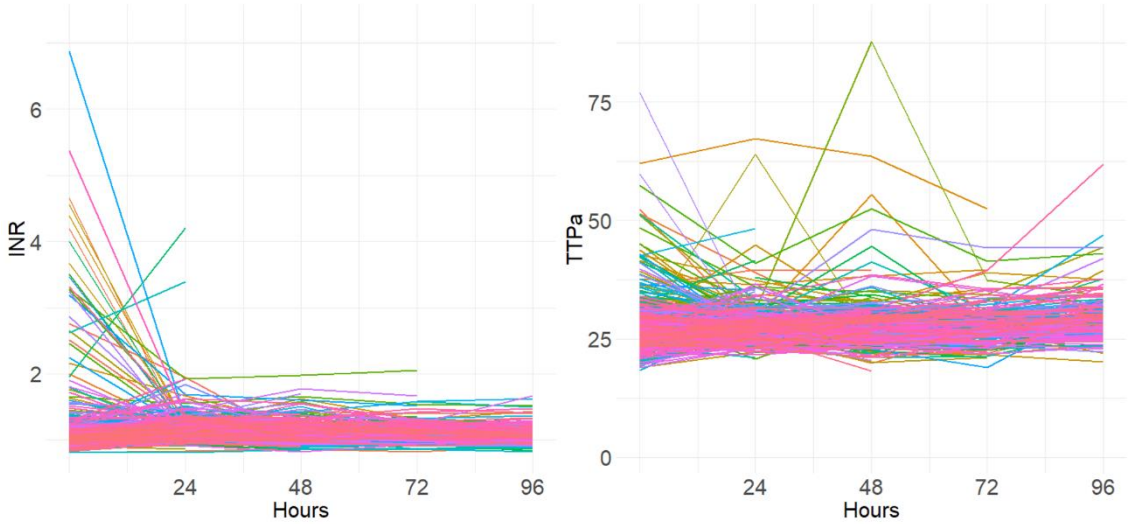
Percentage of missing values for each parameter per time point was calculated. Missing values of equal or more than 50% are shown. Items with too many missing values were not explored, such as MDW or phosphoremia. Statistical analysis was only performed at time points 0 and 24 hours. *MDW monocyte distribution width, CK: creatine-kinase, INR: international normalized ratio; aPTT: activated Partial Thromboplastin Time, NLR: neutrophil-to-lymphocyte ratio, PLR: platelet-to-lymphocyte ratio, RDW: red cell distribution width.*

Supplementary table S2 Significant and clinically relevant differences between patient subgroups for laboratory parameters at the 0 and 24 hours time points

	Differences between groups 1 and 2	**Differences between groups 1 and 3**	**Differences between groups 2 and 4**	**Differences between groups 3 and 4**	**Dunn-Bonferroni test p**
Values on arrival (0h):					
Hemoglobin (g/dL)		14 vs 12	14 vs 10		<0.001
Platelets (10^3/µL)	220 vs 200	220 vs 190		190 vs 180	<0.001
Leukocytes (10^3/µL)					<0.001
Neutrophils (10^3/µL)					NS
Lymphocytes (10^3/µL)		1.8 vs 2.2	1.6 vs 2.6		<0.001
Monocytes (10^3/µL)			0.6 vs 0.5		<0.001
NLR					NS
PLR		120 vs 86	110 vs 66		<0.001
RDW					NS
Ionized calcium (mmol/L)		1.10 vs 1.04	1.09 vs 1.02	1.04 vs 1.02	<0.001
Albumin (g/dL)		4.0 vs 3.2	4.0 vs 2.9		<0.001
Glycaemia (mg/dL)		130 vs 170	140 vs 190		<0.001
Sodium (mmol/L)					NS
CK (U/l)		350 vs 540	280 vs 610		<0.001
Creatinine (mg/dL)		0.86 vs 0.98	0.78 vs 1.0		<0.001
Lactate (mmol/L)		1.7 vs 3.1	1.8 vs 3.6		<0.001
Base excess (mmol/L)		2.5 vs -5.7	2.4 vs -5.7		<0.001
INR		1.06 vs 1.19	1.07 vs 1.31	1.19 vs 1.31	<0.001
aPTT (s)			27.1 vs 33.4	27.7 vs 33.4	<0.001
Fibrinogen (mg/dL)		323 vs 284	324 vs 282		<0.001
Values at 24 hours:					
Hemoglobin (g/dL)		14 vs 12	14 vs 10	12 vs 10	0.002
Platelets (10^3/µL)		160 vs 120	160 vs 120		<0.001
Leukocytes (10^3/µL)	9.2 vs 11				<0.001
Neutrophils (10^3/µL)	6.9 vs 8.8	6.9 vs 7.9			<0.001
Lymphocytes (10^3/µL)	1.2 vs 1.0	1.2 vs 0.9	1.0 vs 0.7		<0.001
Monocytes (10^3/µL)					NS
NLR	5.9 vs 8.7	5.9 vs 8.8	8.7 vs 13	8.8 vs 13	<0.001
PLR			160 vs 170		<0.001
RDW		14 vs 15			<0.001
Ionized calcium (mmol/L)		1.09 vs 1.01	1.09 vs 1.02		<0.001
Albumin (g/dL)		3.3 vs 3.0	3.4 vs 3.0		<0.001
Glycaemia (mg/dL)					NS
Sodium (mmol/L)		140 vs 145	142 vs 145	145 vs 149	<0.001
CK (U/l)		1100 vs 2600	520 vs 1700		<0.001
Creatinine (mg/dL)		0.71 vs 0.86	0.67 vs 0.98		<0.001
Lactate (mmol/L)		0.95 vs 1.8	1.1 vs 2.5	1.8 vs 2.5	<0.001
Base excess (mmol/L)			1.1 vs 2.6	1.6 vs 2.6	<0.001
INR					NS
aPTT (s)					NS
Fibrinogen (mg/dL)		414 vs 379	425 vs 380		<0.001

A post hoc, non parametric Dunn-Bonferroni test was performed to compare study groups between them. For comparisons were made: Group 1 vs Group 2, Group 1 vs Group 3, Group 2 vs Group 4, Group 3 vs Group 4. Results shown fulfil two criteria: statistical significance and a sufficient difference between values with a potential clinical relevance according to the writers. */mcL: cell count per microliter, s: seconds, NLR: neutrophil-to-lymphocyte ratio, PLR: platelet-to-lymphocyte ratio, RDW: red cell distribution width, INR: international normalized ratio; aPTT: activated Partial Thromboplastin Time, CK: creatine-kinase, NS: non significant, TBI: traumatic brain injury, HD: hemodynamic.*

Supplementary figure S3 INR and aPTT evolution on patient-by-patient basis in group 2 (stable hemodynamic, major TBI)



Evolution of INR and aPTT values on a patient-by-patient basis in group 2 (stable hemodynamics, major TBI). Each continuous line depicts the values of the same patient. Truncated lines mean missing data (due mostly to patient death or to ICU discharge). Outlier value evolution can be seen, detached from the main body of frequent where all the lines are confounded. High INR values on arrival and high aPTT values at time points 0, 24 and 48h can be seen. *INR: international normalized ratio; TTPa: activated Partial Thromboplastin Time.*