

Supplementary 1. CT/CK levels in the gram-negative and -positive samples of patients with bacterial meningitis.

CT/CK	Concentration, median (IQR), pg/ml		P-value
	Gram-negative	Gram-positive	
MCP-1	159 (87- 404)	135(36-490)	0.583
IL-8	243 (23-1603)	276 (10-2598)	0.918
IL-1 $\beta$	1 (1-5)	1 (1-10)	0.767
IL-6	32 (10-137)	18 (1-156)	0.512
MIP-1 $\alpha$	1 (1-69)	10 (1-134)	0.527
ENA-78	693 (241-1087)	638 (297-1116)	0.402
IFN- $\gamma$	2 (2-2)	2 (2-2)	0.833
IL-10	3 (1-8)	4 (1-9)	0.935
TNF- $\alpha$	3 (1-9)	1 (1-9)	0.218

CT, cytokine; CK, chemokine; IQR, interquartile range

Supplementary 2. Correlations among the CT/CK concentrations in serum for BM patients

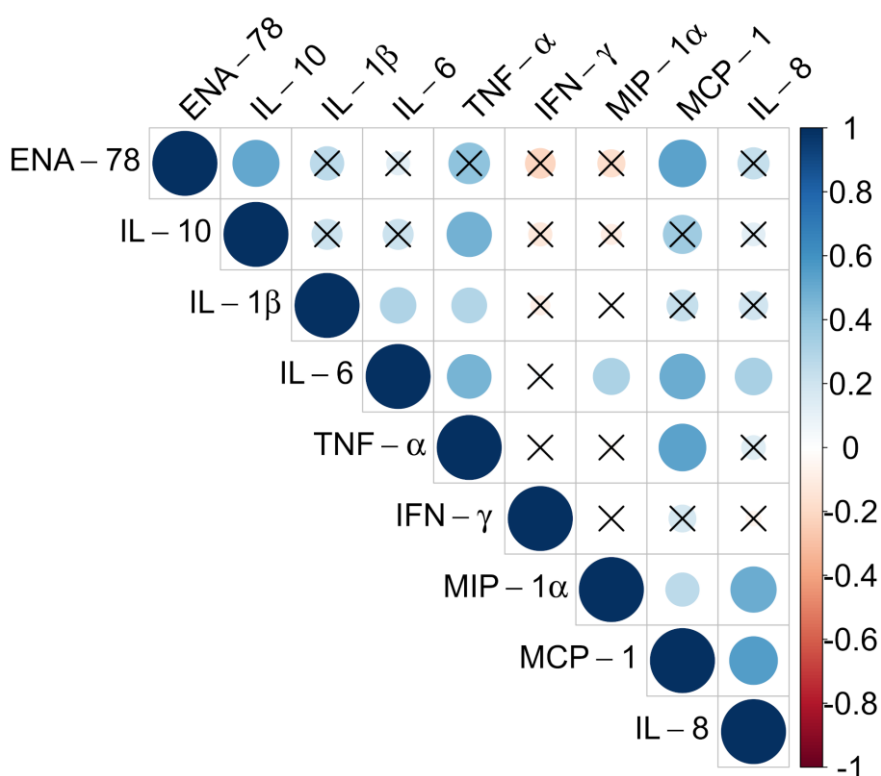
CT/CK	IL-6	TNF- $\alpha$	IL-1 $\beta$	MIP-1 $\alpha$	MCP-1	IL-8	ENA-78	IL-10
IFN- $\gamma$	x	x	x	x	- 0.27	- 0.42	- 0.33	x
IL-6		0.58	0.59	x	0.53	0.57	0.35	0.60
TNF- $\alpha$			0.57	0.43	0.61	0.59	x	0.56
IL-1 $\beta$				0.30	0.72	0.78	0.53	0.60
MIP-1 $\alpha$					x	0.35	x	0.36
MCP-1						0.83	0.65	0.59
IL-8							0.56	0.58
ENA-78								0.39

Spearman's correlation coefficient ( $r$ ) was used to evaluate the relationship between specific variables. The correlations with a lower significance level than 0.01 ( $P < 0.01$ ) are marked with an x.

Supplementary 3. Correlations among the CT/CK concentrations in serum for VM patients

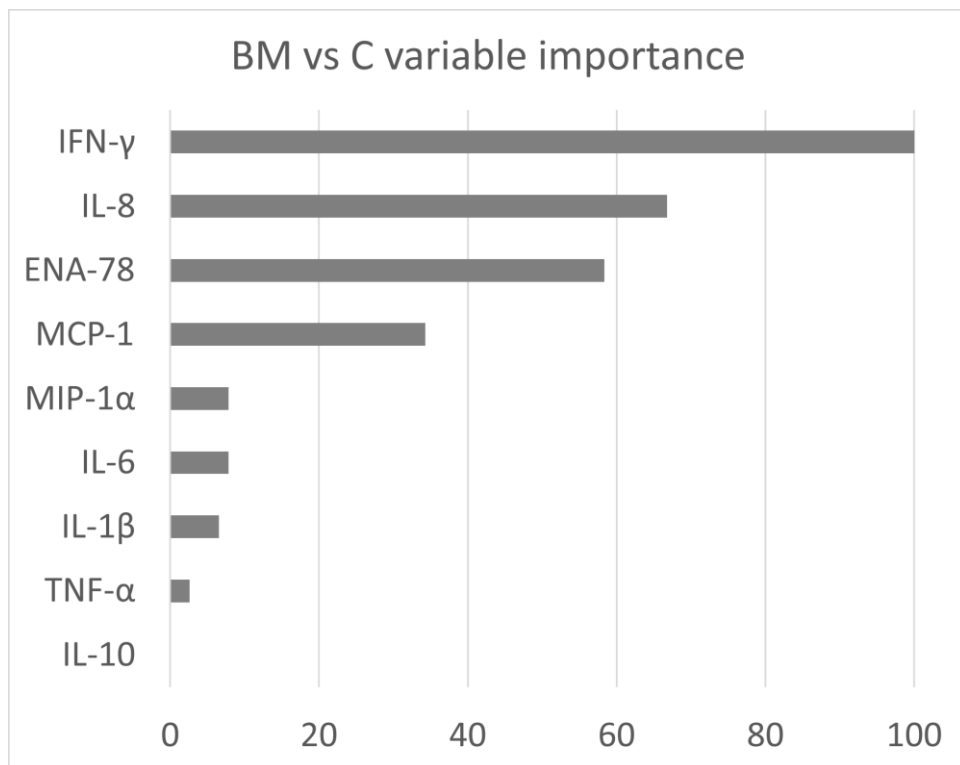
CT/CK	IL-6	TNF- $\alpha$	IL-1 $\beta$	MIP-1 $\alpha$	MCP-1	IL-8	ENA-78	IL-10
IFN- $\gamma$	x	x	x	x	x	x	x	x
IL-6		0.46	0.31	0.32	0.49	0.33	x	x
TNF- $\alpha$			0.29	x	0.53	x	x	0.48
IL-1 $\beta$				x	x	x	x	x
MIP-1 $\alpha$					0.27	0.50	x	x
MCP-1						0.55	0.53	x
IL-8							x	x
ENA-78								0.52

Spearman's correlation coefficient ( $r$ ) was used to evaluate the relationship between specific variables. The correlations with a lower significance level than 0.01 ( $P < 0.01$ ) are marked with an x.



Supplementary 4 - Correlograms representing the correlations among the CT/CK concentrations in patients with VM. The dark blue colour represents the highest positive correlation between the concentrations of two parameters ( $r=1$ ), and the darkest red colour

represents the strongest negative correlation ( $r=-1$ ). Correlations with a significance level  $>0.01$  are marked with an 'X'.



Supplementary 5. Variable importance plot of each cytokine or chemokine in the discrimination of BM from C as determined by the Random Forest algorithm.