SUPPLEMENTARY FIGURE LEGENDS

Supplementary Figure 1: Influence of prior lines of treatment on ICI therapy outcome Kaplan-Meier analysis for progression-free survival (A; PFS) and overall survival (B; OS) comparing patients with therapies before ICI treatment with participants receiving ICI as first line therapy. (C): Comparison of participants with therapies before ICI treatment with participants receiving ICI as first line therapy according to the plasmatic vWF levels (ng/ml). Data are presented as box blots showing the mean and the standard deviation.

Supplementary Figure 2: Multivariable Cox logistic regression analysis of PFS and OS. (A) Multivariate PFS analysis of vWF:Ag baseline levels with ECOG and BRAF mutation status. (B) Multivariate PFS analysis of vWF:Ag baseline levels with LDH and S100 levels. (C) Multivariate OS analysis of vWF:Ag baseline levels with ECOG and BRAF mutation status. (D) Multivariate OS analysis of vWF:Ag baseline levels with LDH and S100 levels.
(E,F): Multivariate PFS (E) and OS (F) analysis of D-dimers baseline levels with ECOG and BRAF mutation status.

Supplementary Figure 3: A-F: Comparison of the different biological parameters levels at baseline between primary resistance and primary response groups. NLR, neutrophil to lymphocyte ratio. Median, minimum and maximum values are shown.

Supplementary Figure 4: Evolution profiles of standard biological parameters during the course of ICI. A, C, E, G: Comparison of primary resistance and primary response groups at 6, 12 and 24 weeks for LDH (A), S100 (C), CRP (E) and NLR (G).
B, D, F, H: LDH (B), S100 (D), CRP (F) and NLR (H) measurements within primary resistance and primary response groups at baseline, 6, 12 and 24 weeks.

Supplemental Table 1: Total number of patients available at each time point for each parameter analysed. Reasons for a not even number of patients at the different time points are diverse, either due to tumor evolution (therapy switch after a progression, occurrence of severe side effects, or dramatic progression leading to death) or due to a non-systematic record of bioclinical parameters during the course of therapy.

	Baseline	6 weeks	12 weeks	24 weeks
LDH	79	56	52	46
S100	75	52	47	40
CRP	75	53	48	43
NLR	55	33	28	19
Platelets	78	57	52	42
D-Dimers	66	40	40	36
ADAMTS-13 activity	49	43	31	25
VWF:Ag	83	64	55	47

Supplemental Table 2: Pearson correlation coefficients between the biological parameters at baseline. Among all correlations tested, only the significant ones are figured.

Extreme outliers are removed for this analysis.

	LDH	S100	CRP	NLR	Platelets	D-Dimers	ADAMTS-13 activity	VWF:Ag
LDH	-		**0.32 p=0.009**			**0.29 p=0.026**		
S100		-						
CRP			-	**0.3 p=0.037**		**0.52 p<0.0001**		
NLR				-				
Platelets					-			
D-Dimers						-		
ADAMTS-13 activity							-	
VWF:Ag								-