

Supplementary Material

Supplementary Table 1: Baseline Characteristics of the OAK cohort stratified by CRP kinetics

Characteristic	Flare-Responder, N = 65 ¹	Responder, N = 297 ¹	Non-Responder, N = 396 ¹	p-value ²
Age Group 65				0.5
< 65	32 (49%)	168 (57%)	211 (53%)	
>= 65	33 (51%)	129 (43%)	185 (47%)	
sex				0.3
female	31 (48%)	110 (37%)	149 (38%)	
male	34 (52%)	187 (63%)	247 (62%)	
ECOG Performance Score				0.083
0	34 (52%)	115 (39%)	177 (45%)	
1	31 (48%)	182 (61%)	219 (55%)	
smoking history				0.7
current	10 (15%)	48 (16%)	61 (15%)	
never	13 (20%)	44 (15%)	73 (18%)	
former	42 (65%)	205 (69%)	262 (66%)	
PD-L1 expression				0.3
TC0 and IC0	21 (32%)	124 (42%)	175 (44%)	
TC1/2/3 or IC1/2/3	44 (68%)	169 (57%)	218 (55%)	
UNKNOWN	0 (0%)	4 (1.3%)	3 (0.8%)	
Pathology/Histology per eCRF				0.8
NON-SQUAMOUS	50 (77%)	221 (74%)	290 (73%)	
SQUAMOUS	15 (23%)	76 (26%)	106 (27%)	

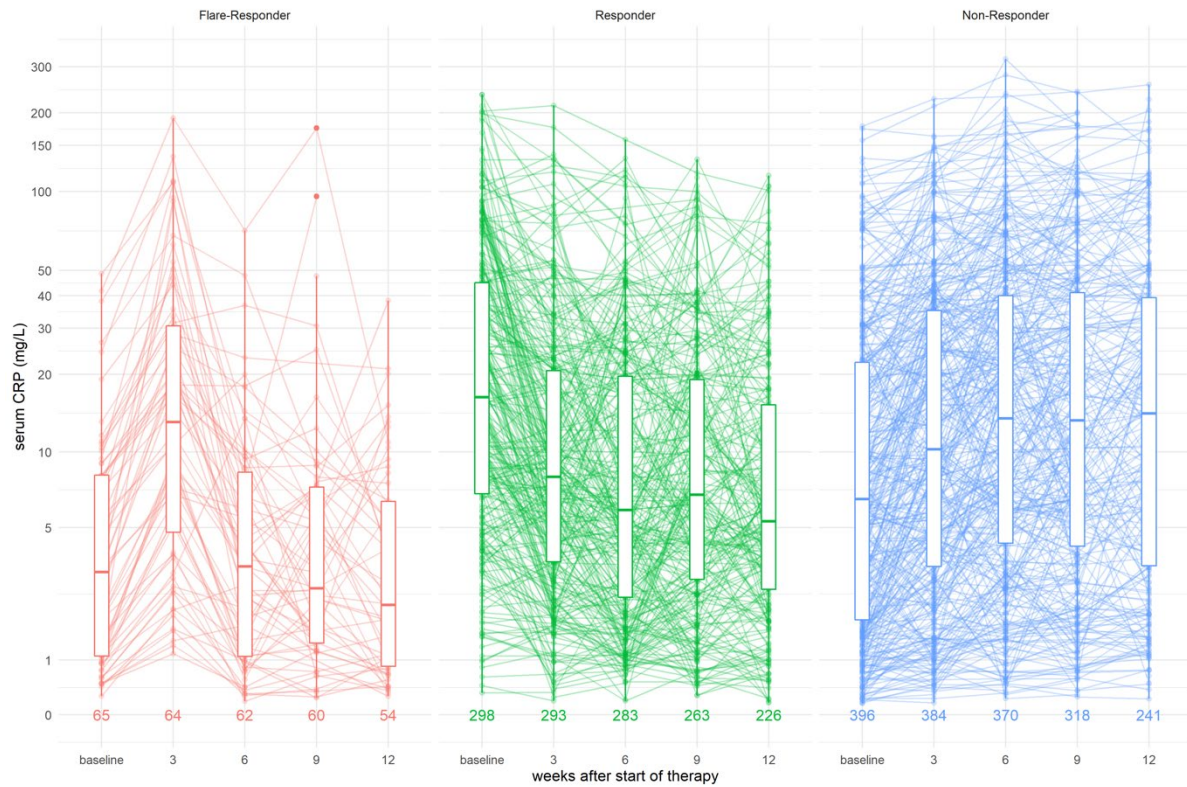
¹n (%)

²Pearson's Chi-squared test; Fisher's exact test

Supplementary Table 2: Univariable and multivariable Cox regression for CRP kinetics and baseline characteristics in relation to OS for the entire OAK cohort.

Characteristic	N	HR ¹	95% CI ¹	p-value
univariate				
CRP_resp_12	758			
Non-Responder		—	—	
Responder		0.77	0.64, 0.92	0.005
Flare-Responder		0.52	0.36, 0.74	<0.001
PD-L1 score	751			
TC0 and IC0		—	—	
TC1/2/3 or IC1/2/3		0.83	0.70, 0.99	0.043
Sex	758			
F		—	—	
M		1.17	0.98, 1.41	0.081
Age Group 65	758			
< 65		—	—	
>= 65		1.01	0.85, 1.20	>0.9
Pathology/Histology per eCRF	758			
NON-SQUAMOUS		—	—	
SQUAMOUS		1.67	1.38, 2.02	<0.001
ECOG Performance Score	758			
0		—	—	
1		1.50	1.25, 1.79	<0.001
treatment	758			
docetaxel		—	—	
atezolizumab		0.81	0.68, 0.96	0.017
multivariate				
CRP kinetics	751			
Non-Responder		—	—	
Responder		0.75	0.62, 0.90	0.002
Flare-Responder		0.55	0.38, 0.78	<0.001
PD-L1 score	751			
TC0 and IC0		—	—	
TC1/2/3 or IC1/2/3		0.84	0.70, 1.00	0.051
Pathology/Histology per eCRF	751			
NON-SQUAMOUS		—	—	
SQUAMOUS		1.62	1.33, 1.96	<0.001
ECOG Performance Score	751			
0		—	—	
1		1.48	1.24, 1.78	<0.001
treatment	751			
docetaxel		—	—	
atezolizumab		0.82	0.68, 0.98	0.026

¹HR = Hazard Ratio, CI = Confidence Interval



Supplementary Figure 1: Individual CRP kinetics of the atezolizumab-treated patients stratified for the CRP-kinetics subgroups. Individual CRP values are shown for the first three months, i.e., the observational period used for the CRP kinetics definition. Boxplots show median CRP and 1st/3rd quartiles. Colored number at the bottom of the boxplots demonstrates number at risk.