

Supplemental table 1  
**Baseline characteristics of the discovery cohort**

Characteristic	Overall, N = 105 <sup>1</sup>	Non-Responder, N = 33	Responder, N = 41	Flare-Responder, N = 31	P-value <sup>2</sup>
<b>age</b>					0.6
Median, (IQR)	63, (58, 71)	62, (57, 75)	63, (58, 69)	66, (60, 71)	
Range	31, 91	43, 84	31, 91	49, 88	
<b>histology</b>					0.8
adenocarcinoma	83 (83%)	26 (81%)	34 (85%)	23 (82%)	
SCC	14 (14%)	4 (12%)	5 (12%)	5 (18%)	
other	3 (3.0%)	2 (6.2%)	1 (2.5%)	0 (0%)	
Unknown	5	1	1	3	
<b>concurrent cytostatic therapy</b>					0.13
no	50 (48%)	20 (61%)	19 (46%)	11 (35%)	
yes	55 (52%)	13 (39%)	22 (54%)	20 (65%)	
<b>smoking status</b>					0.14
current	39 (45%)	7 (29%)	17 (50%)	15 (54%)	
former	39 (45%)	14 (58%)	16 (47%)	9 (32%)	
never	8 (9.3%)	3 (12%)	1 (2.9%)	4 (14%)	
Unknown	19	9	7	3	
<b>ECOG</b>					0.2
0	0 (0%)	0 (0%)	0 (0%)	0 (0%)	
1	14 (14%)	3 (9.1%)	7 (17%)	4 (14%)	
2	52 (50%)	19 (58%)	15 (37%)	18 (62%)	
>2	37 (36%)	11 (33%)	19 (46%)	7 (24%)	
Unknown	2	0	0	2	
<b>sex</b>					0.3
male	58 (55%)	15 (45%)	26 (63%)	17 (55%)	
female	47 (45%)	18 (55%)	15 (37%)	14 (45%)	
<b>line of therapy</b>					<b>0.043</b>
first line	70 (67%)	17 (53%)	33 (80%)	20 (65%)	
later lines	34 (33%)	15 (47%)	8 (20%)	11 (35%)	
Unknown	1	1	0	0	
<b>presence of cerebral metastasis</b>					0.6
no	60 (57%)	17 (52%)	23 (56%)	20 (65%)	
yes	45 (43%)	16 (48%)	18 (44%)	11 (35%)	
<b>concurrent steroid therapy</b>					0.3
no	80 (76%)	22 (67%)	34 (83%)	24 (77%)	
yes	25 (24%)	11 (33%)	7 (17%)	7 (23%)	

Supplemental table 1

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Characteristic	Overall, N = 105 <sup>1</sup>	Non-Responder, N = 33	Responder, N = 41	Flare-Responder, N = 31	P-value <sup>2</sup>
<b>TPS score</b>					0.055
Median, (IQR)	10, (0, 60)	10, (0, 56)	50, (5, 80)	5, (0, 45)	
Range	0, 100	0, 100	0, 100	0, 95	
Unknown	13	5	4	4	
<b>TPS score</b>					0.2
TPS ≤ 50%	65 (71%)	20 (71%)	23 (62%)	22 (81%)	
TPS > 50%	27 (29%)	8 (29%)	14 (38%)	5 (19%)	
Unknown	13	5	4	4	
<b>baseline CRP</b>					<0.001
Median, (IQR)	17, (6, 47)	6, (2, 28)	28, (10, 60)	13, (6, 31)	
Range	0, 305	0, 78	2, 305	1, 185	
Unknown	3	2	0	1	
<b>baseline CRP</b>					<0.001
Baseline CRP ≤ 5 mg/L	21 (21%)	14 (45%)	1 (2.4%)	6 (20%)	
Baseline CRP > 5 mg/L	81 (79%)	17 (55%)	40 (98%)	24 (80%)	
Unknown	3	2	0	1	

<sup>1</sup> c("Median, (IQR)", "Range"); n (%)

<sup>2</sup> Kruskal-Wallis rank sum test; Fisher's exact test; Pearson's Chi-squared test