

**Supplemental table 1** Treatment

The biomarker group with EOS count  $\geq 300$  and FeNo measure  $\geq 20$  had more patients treated with ICS/LABA/LAMA, LTA, omalizumab and prednisolone, while other biomarker groups with other combination of EOS count and FeNo measure had more patients using ICS alone, Theophylline, and antihistamine.

BIOMARKER GROUP	All patient	ICS alone		ICS/LABA		ICS/LAMA		ICS/LABA/LAMA		LTA		Theophylline		Antihistamine		Omalizumab		Pred	
	N	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
<b>CRITERIA SET #1</b>																			
EOS <300 & FeNO < 20	26	1	3.85	20	76.92	1	3.85	4	15.38	8	30.77	18	69.23	3	11.54	1	3.85	1	3.85
EOS $\geq 300$ & FeNO < 20	6	1	16.67	3	50.00	0	0.00	1	16.67	3	50.00	5	83.33	1	16.67	2	33.33	0	0.00
EOS <300 & FeNO $\geq 20$	62	1	1.61	42	67.74	0	0.00	19	30.65	27	43.55	40	64.52	3	4.84	4	6.45	4	6.45
EOS $\geq 300$ & FeNO $\geq 20$	33	0	0.00	20	60.61	2	6.06	11	33.33	17	51.52	17	51.52	1	3.03	3	9.09	3	9.09
missing	5																		
<b>CRITERIA SET #2</b>																			
EOS $\geq 300$ & FeNO $\geq 20$	33	0	0.00	20	60.61	2	6.06	11	33.33	17	51.52	17	51.52	1	3.03	3	9.09	3	9.09
Others	94	3	3.19	65	69.15	1	1.06	24	25.53	38	40.43	63	67.02	7	7.45	7	7.45	5	5.32
missing	5																		
<b>CRITERIA SET #3</b>																			
EOS <150	50	1	2.00	38	76.00	0	0.00	11	22.00	17	34.00	33	66.00	2	4.00	2	4.00	3	6.00
EOS $\geq 150$	81	2	2.47	51	62.96	3	3.70	24	29.63	39	48.15	47	58.02	6	7.41	8	9.88	5	6.17
missing	1																		
<b>CRITERIA SET #4</b>																			
EOS <200	71	1	1.41	51	71.83	1	1.41	18	25.35	28	39.44	44	61.97	3	4.23	2	2.82	3	4.23
EOS $\geq 200$	60	2	3.33	38	63.33	2	3.33	17	28.33	28	46.67	36	60.00	5	8.33	8	13.33	5	8.33
missing	1																		
<b>CRITERIA SET #5</b>																			
EOS <250	78	1	1.28	56	71.79	1	1.28	20	25.64	30	38.46	49	62.82	3	3.85	3	3.85	3	3.85
EOS $\geq 250$	53	2	3.77	33	62.26	2	3.77	15	28.30	26	49.06	31	58.49	5	9.43	7	13.21	5	9.43

missing	1																		
CRITERIA SET #6																			
EOS <300	90	2	2.22	64	71.11	1	1.11	23	25.56	35	38.89	58	64.44	6	6.67	5	5.56	5	5.56
EOS ≥300	41	1	2.44	25	60.98	2	4.88	12	29.27	21	51.22	22	53.66	2	4.88	5	12.20	3	7.32
missing	1																		
CRITERIA SET #7																			
FeNO <20	32	2	6.25	23	71.88	1	3.13	5	15.63	11	34.38	23	71.88	4	12.50	3	9.38	1	3.13
FeNO ≥20	96	1	1.04	63	65.63	2	2.08	30	31.25	44	45.83	57	59.38	4	4.17	7	7.29	8	8.33
missing	4																		
CRITERIA SET #8																			
FeNO <25	57	2	3.51	39	68.42	2	3.51	13	22.81	23	40.35	42	73.68	4	7.02	4	7.02	3	5.26
FeNO ≥25	71	1	1.41	47	66.20	1	1.41	22	30.99	32	45.07	38	53.52	4	5.63	6	8.45	6	8.45
missing	4																		
CRITERIA SET #9																			
FeNO <30	73	2	2.74	51	69.86	2	2.74	17	23.29	32	43.84	51	69.86	5	6.85	5	6.85	4	5.48
FeNO ≥30	55	1	1.82	35	63.64	1	1.82	18	32.73	23	41.82	29	52.73	3	5.45	5	9.09	5	9.09
missing	4																		
CRITERIA SET #10																			
FeNO <35	81	3	3.70	55	67.90	2	2.47	20	24.69	36	44.44	55	67.90	5	6.17	6	7.41	4	4.94
FeNO ≥35	47	0	0.00	31	65.96	1	2.13	15	31.91	19	40.43	25	53.19	3	6.38	4	8.51	5	10.64
missing	4																		
CRITERIA SET #11																			
FeNO <40	93	3	3.23	61	65.59	3	3.23	25	26.88	41	44.09	60	64.52	5	5.38	6	6.45	4	4.30
FeNO ≥40	35	0	0.00	25	71.43	0	0.00	10	28.57	14	40.00	20	57.14	3	8.57	4	11.43	5	14.29
missing	4																		
CRITERIA SET #12																			
EOS <150 & FeNO < 25	22	0	0.00	17	77.27	0	0.00	5	22.73	8	36.36	17	77.27	2	9.09	1	4.55	1	4.55

EOS $\geq 150$ & FeNO $< 25$	35	2	5.71	22	62.86	2	5.71	8	22.86	15	42.86	25	71.43	2	5.71	3	8.57	2	5.71
EOS $< 150$ & FeNO $\geq 25$	27	1	3.70	20	74.07	0	0.00	6	22.22	9	33.33	16	59.26	0	0.00	1	3.70	2	7.41
EOS $\geq 150$ & FeNO $\geq 25$	43	0	0.00	26	49.06	1	1.89	16	30.19	23	43.40	22	41.51	4	7.55	5	9.43	3	5.66
Missing	5																		

---