

Supplemental Table 1: T cell and NK cell subsets as percentages of peripheral blood lymphocytes measured pre and post treatment with tremelimumab and exemestane

Patient		1006	1004	1008	1009	1010	1011	1015	1013	1014
Dose (mg/kg)		3	6	6	6	6	6	6	10	10
Interval		Q28D	Q28D	Q90D						
Number of tremelimumab infusions prior to assay		3	2	6	1	1	1	1	1	1
Weeks between last dose and assay		4	9	13	5	11	4	14	8	4
CD3+	Pre	70.1	41.5	65.7	61.9	67.2	51.9	48.4	46.4	57.9
	Post	74.6	43.5	62.9	60.2	38.0	48.7	22.4	66.2	58.9
CD4+	Pre	58.0	64.9	76.2	79.2	77.0	71.8	58.2	71.5	37.0
	Post	55.6	60.2	75.4	82.0	76.7	75.4	42.8	74.7	37.4
ICOS+	Pre	0.4	2.8	3.8	3.4	1.5	0.7	3.6	2.3	6.3
	Post	1.3	14.0	1.3	7.6	2.4	1.9	8.3	14.2	2.3
CD69+	Pre	2.5	0	0	0	0	0	0	0.2	0.1
	Post	1.4	0	0	0	0	0	0.1	0	0.4
CD45RA+	Pre	20.2	28.0	11.1	43.4	37.4	11.2	28.1	25.9	26.4
	Post	15.2	31.6	9.1	36.6	43.7	16.2	27.0	28.1	26.5
CCR7+	Pre	76.7	74.2	67.8	77.7	89.2	50.8	58.9	87.9	67.4
	Post	67.3	66.6	68.4	66.2	94.0	51.4	49.3	91.4	52.8
CD28+	Pre	93.0	99.2	94.0	99.2	99.8	99.2	96.8	92.6	68.5
	Post	91.8	99.0	94.2	99.1	99.4	93.7	87.3	97.9	60.8
CD27+	Pre	89.9	89.7	89.1	90.3	94.0	78.1	85.4	81.5	54.8
	Post	86.7	88.7	89.2	89.7	97.1	72.0	69.6	76.6	50.9
CD57+	Pre	9.6	3.6	5.9	1.1	0.7	1.4	2.3	4.2	12.8
	Post	6.4	3.1	4.7	1.2	0.4	0.9	9.2	4.3	21.1
Foxp3+	Pre	1.0	0.4	0.8	6.4	2.5	4.9	3.6	4.7	5.6
	Post	0.7	3.1	1.0	8.1	0.8	1.9	1.1	1.1	3.4
CD8+	Pre	39.7	5.5	3.0	17.0	20.7	21.5	33.2	17.0	51.1
	Post	40.5	6.0	9.7	14.3	18.2	9.7	43.8	16.1	53.0
ICOS+	Pre	0.4	4.3	2.3	1.7	1.4	1.2	9.5	1.4	0.9
	Post	1.3	7.5	1.1	2.2	1.5	5.1	3.8	7.7	1.4
CD69+	Pre	1.5	0.4	0.8	0.1	0.1	0.1	0	0.4	0.2
	Post	0.3	0.6	0.8	0.1	0.2	0.1	0.1	0.1	0.2
CD45RA+	Pre	26.9	31.8	28.3	75.9	71.1	52.6	78.3	78.2	78.6
	Post	57.8	30.2	34.2	73.3	68.8	62.7	81.4	80.6	80.1
CCR7+	Pre	23.3	19.9	45.5	73.3	84.8	52.8	46.1	69.5	42.0
	Post	22.1	11.8	45.9	65.1	71.9	55.4	33.1	79.0	22.2
CD28+	Pre	50.8	54.5	75.7	88.3	94.6	68.2	63.7	39.2	12.7
	Post	60.0	58.7	68.0	84.7	83.5	59.7	44.4	66.0	6.8
CD27+	Pre	85.4	81.5	87.4	93.0	94.4	83.5	59.9	87.4	24.2
	Post	90.5	88.6	81.6	92.3	89.3	69.5	39.0	84.5	8.0
CD57+	Pre	48.2	38.6	23.1	6.1	7.0	18.4	17.5	35.2	45.3
	Post	36.3	48.2	30.7	7.6	21.5	14.2	33.3	24.3	42.0
DR+	Pre	3.2	2.6	2.5	3.8	1.6	1.8	7.5	6.2	42.1
	Post	6.9	3.5	2.9	5.4	3.0	1.8	12.8	10.8	21.0
CD56+ CD3-	Pre	8.3	12.8	11.5	10.9	8.9	9.1	21.7	2.4	9.3
	Post	7.0	22.4	14.3	11.0	27.9	14.3	14.7	1.4	8.4

Supplemental Table 2: Changes relative to baseline in the percentages of T cell and NK cells subsets after treatment with tremelimumab and exemestane

Patient	1006	1004	1008	1009	1010	1011	1015	1013	1014
Dose (mg/kg)	3	6	6	6	6	6	6	10	10
Interval	Q28D	Q28D	Q90D						
Number of tremelimumab infusions prior to assay	3	2	6	1	1	1	1	1	1
Weeks between last dose and assay	4	9	13	5	11	4	14	8	4
CD3+	1.1	1.1	1.0	1.0	0.6	0.9	0.5	1.4	1.0
CD4+	1.0	0.9	1.0	1.0	1.0	1.1	0.7	1.0	1.0
ICOS+	3.3	5.0	0.3	2.2	1.6	2.7	2.3	6.2	0.4
CD69+	0.6	0	0	0	0	0	0	0	4.0
CD45RA+	0.8	1.1	0.8	0.8	1.2	1.4	1.0	1.1	1.0
CCR7+	0.9	0.9	1.0	0.9	1.1	1.0	0.8	1.0	0.8
CD28+	1.0	1.0	1.0	1.0	1.0	0.9	0.9	1.1	0.9
CD27+	1.0	1.0	1.0	1.0	1.0	0.9	0.8	0.9	0.9
CD57+	0.7	0.9	0.8	1.1	0.6	0.6	4.0	1.0	1.6
Foxp3+	0.7	7.8	1.3	1.3	0.3	0.4	0.3	0.2	0.6
<u>CD4+ICOS+</u> <u>CD4+Foxp3+</u>	4.5	0.6	0.3	1.8	5.0	10.0	7.5	25.8	0.6
CD8+	1.0	1.1	3.2	0.8	0.9	0.5	1.3	0.9	1.0
ICOS+	3.3	1.7	0.5	1.3	1.1	4.3	0.4	5.5	1.6
CD69+	0.2	1.5	1.0	1.0	2.0	1.0	0	0.3	1.0
CD45RA+	2.1	0.9	1.2	1.0	1.0	1.2	1.0	1.0	1.0
CCR7+	0.9	0.6	1.0	0.9	0.8	1.0	0.7	1.1	0.5
CD28+	1.2	1.1	0.9	1.0	0.9	0.9	0.7	1.7	0.5
CD27+	1.1	1.1	0.9	1.0	0.9	1.2	0.7	1.0	0.3
CD57+	0.8	1.2	1.3	1.2	3.1	0.8	1.9	0.7	0.9
DR+	2.2	1.3	1.2	1.4	1.9	1.0	1.7	1.7	0.5
CD56+ CD3-	0.8	1.8	1.2	1.0	3.1	1.6	0.7	0.6	0.9

Supplemental Table 3: T cell and NK cell subsets as absolute counts (cells/ul) measured pre and post treatment with tremelimumab and exemestane

Patient		1006	1004	1008	1009	1010	1011	1015	1013	1014
Dose (mg/kg)		3	6	6	6	6	6	6	10	10
Interval		Q28D	Q28D	Q90D						
Number of infusions		3	2	6	1	1	1	1	1	1
Weeks between last dose and assay		4	9	13	5	11	4	14	8	4
Absolute lymphocyte count	Pre	1400	1400	1100	1400	1400	1460	205	600	460
	Post	1700	585	1500	1300	1400	1400	900	1000	1200
CD3+	Pre	981	581	723	867	941	758	99	278	266
	Post	1268	254	944	783	532	682	202	662	707
CD4+	Pre	569	377	551	687	725	544	58	199	99
	Post	705	153	712	642	408	514	86	495	264
ICOS+	Pre	2	11	21	23	11	4	2	5	6
	Post	9	21	9	49	10	10	7	70	6
CD69+	Pre	14	0	0	0	0	0	0	0	0
	Post	10	0	0	0	0	0	0	0	1
CD45RA+	Pre	115	106	61	298	271	61	16	52	26
	Post	107	48	65	235	178	83	23	139	70
CCR7+	Pre	436	280	374	534	647	276	34	175	67
	Post	474	102	487	425	384	264	42	452	140
CD28+	Pre	529	374	518	682	724	540	56	184	68
	Post	647	151	671	636	406	482	75	485	161
CD27+	Pre	512	338	491	620	682	425	50	162	54
	Post	611	136	635	576	396	370	60	379	134
CD57+	Pre	55	14	33	8	5	8	1	8	13
	Post	45	5	33	8	2	5	8	21	56
Foxp3+	Pre	6	2	4	44	18	27	2	9	6
	Post	5	5	7	52	3	10	1	5	9
CD8+	Pre	389	32	22	147	195	163	33	47	136
	Post	514	15	92	112	97	66	88	107	375
ICOS+	Pre	2	1	1	2	3	2	3	1	1
	Post	7	1	1	2	1	3	3	8	5
CD69+	Pre	6	0	0	0	0	0	0	0	0
	Post	2	0	1	0	0	0	0	0	1
CD45RA+	Pre	105	10	6	112	139	86	26	37	107
	Post	297	5	31	82	68	41	72	86	300
CCR7+	Pre	91	6	10	108	165	86	15	33	57
	Post	114	2	42	73	70	37	29	85	83
CD28+	Pre	198	17	17	130	184	111	21	18	17
	Post	308	9	63	95	81	39	39	71	26
CD27+	Pre	332	26	19	137	184	136	20	41	33
	Post	465	13	75	103	87	46	34	90	30
CD57+	Pre	187	12	5	9	14	30	6	17	62
	Post	187	7	28	9	21	9	29	26	158
DR+	Pre	31	15	18	33	15	14	7	17	112
	Post	88	9	27	42	16	12	26	71	148
CD56+CD3-	Pre	116	179	127	153	125	133	44	14	25
	Post	119	131	215	143	391	200	132	14	59

Supplemental Table 4: Changes relative to baseline in the absolute counts of T cell and NK cells subsets after treatment with tremelimumab and exemestane

Patient	1006	1004	1008	1009	1010	1011	1015	1013	1014
Dose (mg/kg)	3	6	6	6	6	6	6	10	10
Interval	Q28D	Q28D	Q90D						
Number of tremelimumab infusions prior to assay	3	2	6	1	1	1	1	1	1
Weeks between last dose and assay	4	9	13	5	11	4	14	8	4
Absolute lymphocyte count	1.2	0.4	1.4	0.9	1.0	1.0	4.4	1.7	2.6
CD3+	1.3	0.4	1.3	0.9	0.6	0.9	2.0	2.4	2.7
CD4+	1.2	0.4	1.3	0.9	0.6	0.9	1.5	2.5	2.7
ICOS+	4.5	1.9	0.4	2.1	0.9	2.5	3.5	14.0	1.0
CD69+									
CD45RA+	0.9	0.4	1.1	0.8	0.7	1.4	1.4	2.7	2.7
CCR7+	1.1	0.4	1.3	0.8	0.6	1.0	1.2	2.6	2.1
CD28+	1.2	0.4	1.3	0.9	0.6	0.9	1.4	2.6	2.4
CD27+	1.2	0.4	1.3	0.9	0.6	0.9	1.2	2.3	2.5
CD57+	0.8	0.4	1.0	1.0	0.4	0.6	8.0	2.6	4.3
Foxp3+	0.8	2.5	1.7	1.2	0.2	0.4	0.5	0.6	1.5
CD4+ICOS+ CD4+Foxp3+	6.0	0.8	4.1	1.8	5.5	5.0	7.0	21.5	0.7
CD8+	1.3	0.5	4.2	0.8	0.5	0.4	2.7	2.3	2.8
ICOS+	3.5	1.0	1.0	1.0	0.3	1.5	1.0	8.0	5.0
CD69+									
CD45RA+	2.8	0.5	5.2	0.7	0.5	0.5	2.8	2.3	2.8
CCR7+	1.3	0.3	4.2	0.7	0.4	0.4	1.9	2.6	1.5
CD28+	1.6	0.5	3.7	0.7	0.4	0.4	1.9	3.9	1.5
CD27+	1.4	0.5	3.9	0.8	0.5	0.3	1.7	2.2	0.9
CD57+	1.0	0.6	5.6	1.0	1.5	0.3	4.8	1.5	2.5
DR+	2.8	0.6	1.5	1.3	1.1	0.9	3.7	4.2	1.3
CD56+ CD3-	1.0	0.7	1.7	0.9	3.1	1.5	3.0	1.0	2.4