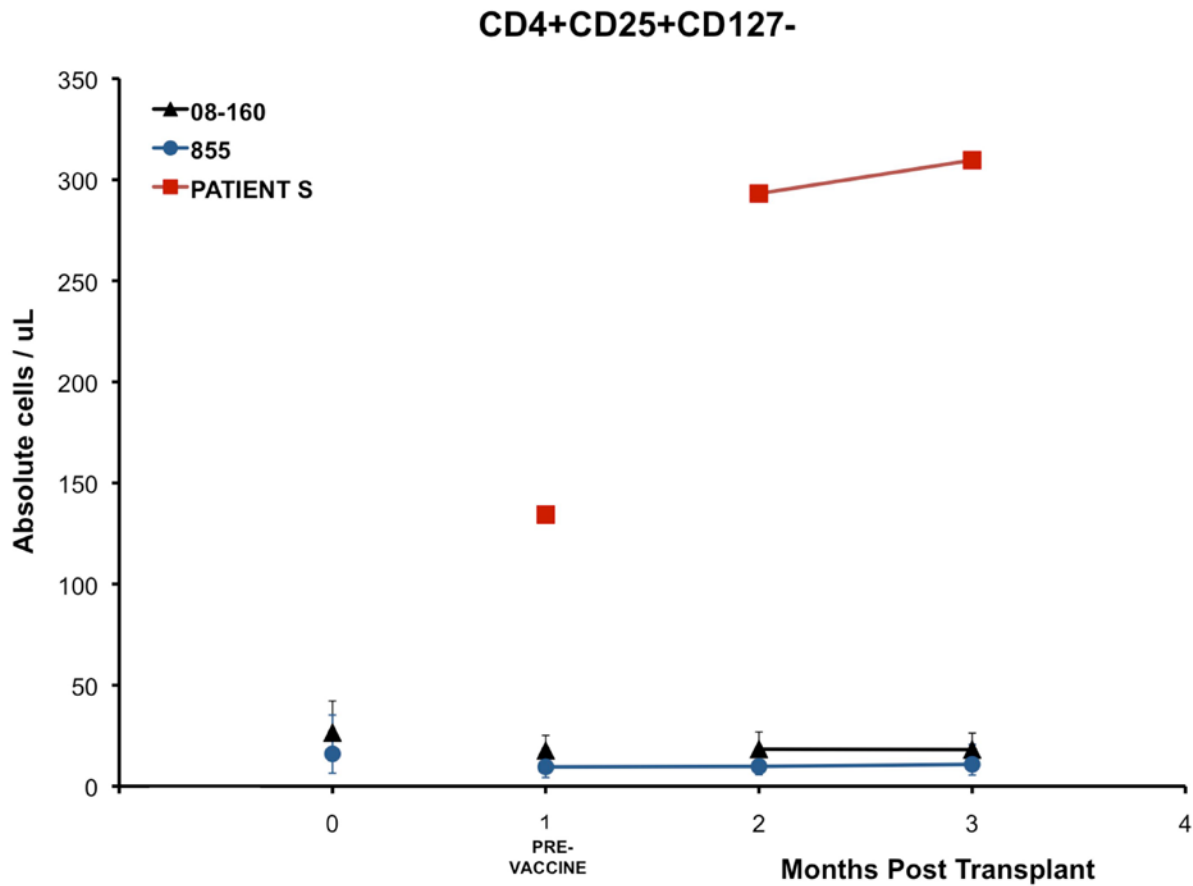


Supplement Figure 1. Tregs in patient S versus other allogeneic HSCT patients. Tregs were identified as CD4+CD25+CD127- (these correspond to FoxP3+ subsets, but can be determined without fixation and permeabilization). Protocol 08-160 represents other patients on the K562-GM-CSF AML vaccine trial as reported in this paper. 855 represents a cohort of allogeneic HSCT patients who received similar low dose Bu/flu RIC conditioning regimen without vaccination. Pre-vaccine time points are approximated at one month post-HSCT for all 08-160 patients. Total numbers of patients analyzed were: N = 217 pre-transplant, n = 254 one month post-HSCT, n = 244 two months post-HSCT, and n = 224 three months post-HSCT. Error bars refer to the first and third quartiles.



Supplement Table 1. Summary statistics of phenotype data (absolute cells/uL)

		N	Median	Q1	Q3	p-value
CD3	pre VAX	22	342.6	206.4	474.4	
	1	29	463.3	224.8	724.1	0.048
	2	27	454.2	288.9	669.3	0.007
	3	23	463.3	263.6	872	0.09
	6	17	280.4	216.2	433.6	1.00
	9	11	431.8	214.2	523.3	0.95
	12	9	616.5	436.4	783.1	0.56
	18	10	661	509.2	1174.4	0.19
CD4	pre VAX	22	186	112.3	265.4	
	1	29	196.4	159.2	356.2	0.11
	2	27	254.5	156.9	318.2	0.0004
	3	23	259.1	116.6	413.8	0.18
	6	17	150.3	66.6	209.2	0.85
	9	11	182.8	117.6	268.6	0.95
	12	9	298.3	128.9	355.1	0.69
	18	10	299.7	255.4	415.5	0.31
CD4+25+127- (CD4+Treg)	pre VAX	22	17.7	13.5	25.5	
	1	29	18.5	14.8	26.5	0.50
	2	27	18.1	14.8	28.4	0.23
	3	23	17.8	10.2	32.7	0.74
	6	17	17.3	5	24.3	0.92
	9	11	15.3	9.3	30.7	0.95
	12	9	22.4	12.5	31.7	0.69
CD4+Tcon	pre VAX	20	168.3	99.2	227.3	
	1	20	162.8	126.7	255.4	0.07
	2	22	220.8	140.4	269	0.0003
	3	19	235.8	109.5	403.8	0.14
	6	15	135.5	75.3	192.5	0.85
	9	11	173.4	97.7	235.6	0.95
	12	9	278.5	116.4	320.6	0.56
	18	10	280.7	214.8	378.5	0.31
CD8+	pre VAX	22	97.6	66.4	201.7	
	1	29	159.1	70.6	360.5	0.05
	2	27	150.3	62.7	321.3	0.15
	3	23	155.8	43.2	308.6	0.16
	6	17	106.6	79.8	147	0.85

	9	11	123.9	60	305.9	0.74
	12	9	207.1	100.6	369.6	0.84
	18	10	265.7	154.2	839.7	0.44
CD56+3-	pre VAX	22	141	58	269	
	1	29	127	83	224	0.44
	2	27	128	81	193	0.13
	3	23	99	69	146	0.19
	6	17	91	72	128	0.23
	9	11	123	65	180	0.38
	12	9	139	101	218	0.56
	18	10	154	86	261	0.31
CD56+3+	pre VAX	22	17	5	35	
	1	29	19	12	57	0.83
	2	27	18	11	53	1.00
	3	23	28	5	50	0.78
	6	17	15	8	30	1.00
	9	11	8	2	14	0.04
	12	9	14	12	19	0.03
	18	10	14	7	35	0.81
CD19+	pre VAX	21	5	1	15	
	1	28	29	9	66	<.0001
	2	27	29	7	108	<.0001
	3	22	31	13	78	0.0009
	6	17	16	2	121	0.027
	9	11	169	23	332	0.016
	12	9	144	81	384	0.031
	18	10	266	78	535	0.06

Q1: 25th percentile value; Q3: 75th percentile value.

p-value: from 2-sided Wilcoxon signed rank test comparing post vaccination values to pre vaccination values.

(note: As shown in Figure 4, at 2 months after the 1st vaccination, the T cell (CD3, CD4, CD8) counts were significantly increased compared to the pre-vaccination counts. At 6 months after 1st vaccination (all vaccination were completed by 3 months), the CD3 and CD4 counts briefly went back to the pre-vaccination level, but then gradually increased.)