

Table S1 Reagents used for this study

Antibodies		
Name	Company	Catalogue #
CT45	United States Biological	34313
NY-ESO-1	Millipore Sigma	N2038
MAGE-A1	AbCam	ab21472
MAGE-A3	AbCam	ab38496
XAGE-1	AbCam	ab134805
SSX1	AbCam	ab206839
PRAME	AbCam	ab219650
BORIS	AbCam	ab187163
MHC Class I	AbCam	ab134189
b-Tubulin	AbCam	ab15568
CD45	BioLegend	HI30
CD4	BioLegend	RPA-T4
CD8	BioLegend	SK1
CD25	BioLegend	BC96
Foxp3	BioLegend	206D
CD14	BioLegend	HCD14
CD16	BioLegend	3G8
PD-1	BioLegend	29F
CTLA-4	BioLegend	L3D10
TIM-3	BioLegend	F38-2E2
HLA-DR	BioLegend	L243
PD-L1	BioLegend	29E.2A3
TaqMan primers and probes		
Name	Company/sequence	Catalogue #
MAGE-A1	Thermo Fisher	Hs00607097_m1
MAGE-A6	Thermo Fisher	Hs00602508_m1
MAGE-A12	Thermo Fisher	Hs04176236_m1
GAGE	Thermo Fisher	Hs00275620_m1
XAGE-1	Thermo Fisher	Hs00220764_m1
SSX1	Thermo Fisher	Hs00846692_s1
SSX2	Thermo Fisher	Hs00817683_m1
CT45 F	5'-CTCTGCCATGTCCAAAGCAA-3'	
CT45 R	5'-AAGTCATCAATCTGAGAATCCAATTG-3'	
CT45 probe	6FAM-AAGCTTATGACAGGACATGCTATTCCACCCA-TAMRA	
NY_ESO-1 F	5'-TGCTTGAGTTCTACCTCGCCAT-3'	
NY-ESO-1 R	5'-GCTCCTGCGGGCCAG-3'	
NY-ESO-1 probe	6FAM-TTTCGCGACACCCATGGAAGCAG-TAMRA	
MAGE-A3 F	5'-TCCTGTGATCTTCAGCAAAGCTT-3'	
MAGE-A3 R	5'-GGGTCCACTTCCATCAGCTC-3'	
MAGE-A3 probe	6FAM-CAGTTCCTTGACAGCTGGTCTTTGGCAT-TAMRA	
BORIS F	5'-CCCATTGTGCCACCATCA-3'	
BORIS R	5'-AGCATGCAAGTTGCGCATAT-3'	
BORIS probe	6FAM-TGCACGGAAAAGCGACCTACGTGTG-TAMRA	
b-actin F	5'-GCGAGAAGATGACCCAGATC-3'	
b-actin R	5'-CCAGTGGTACGGCCAGAGG-3'	
b-actin probe	6FAM-CCAGCCATGTACGTTGCTATCCAGGC-TAMRA	
Cell lines		
Name	Company	Catalogue #
H1299	ATCC	CRL-5803
H841	ATCC	CRL-5845
NHBE	Lonza	CC-2541
SAEC	Lonza	CC-2547S
K562-GM	Barry Kobrin, Johns Hopkins University	

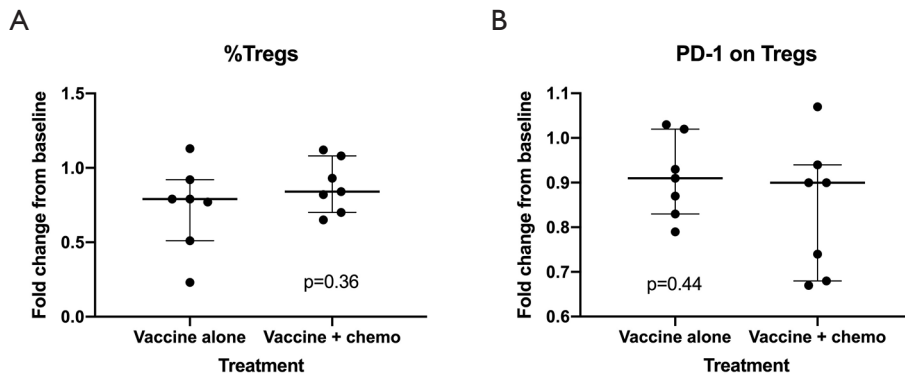


Figure S1 Comparison of fold change from baseline of percent Tregs (A) and intensity of PD-1 expression on Tregs (B) between vaccine alone and vaccine with chemotherapy. The Mann-Whitney U test was used to compare the two groups.