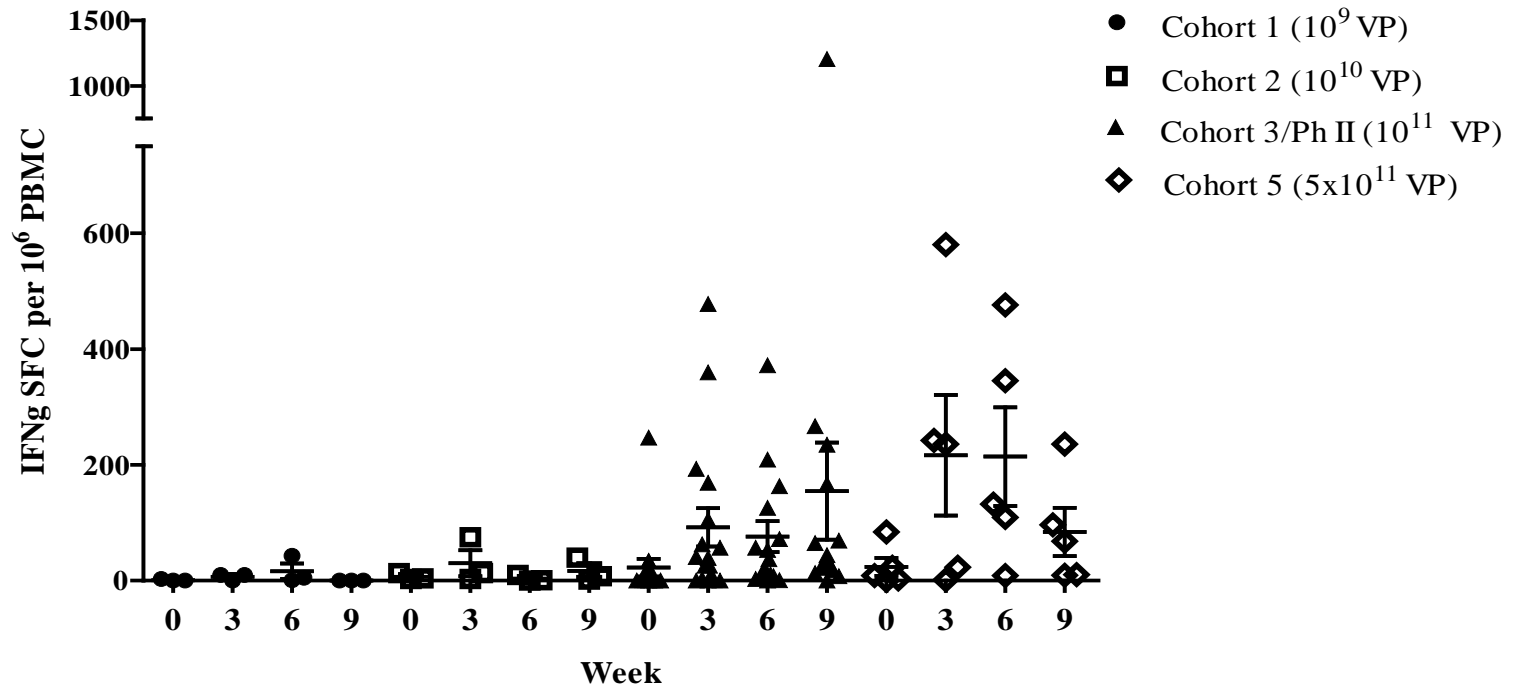


Supplemental Figure 1



Supplemental Figure 1. CEA directed CMI responses in treated patients. CMI (IFN- γ secretion) was assessed at baseline (week 0) and 3 weeks after the last immunotherapy (week 9) for patients in all 4-dose cohorts. A dose response was observed and the highest CMI level occurred in patients that received the highest dose. The CMI response with the highest dose was significantly elevated ($P < 0.02$; *Mann-Whitney test*). Specificity of the responses was demonstrated by the lack of reactivity with the irrelevant antigens β -galactosidase and HIV-gag (data not shown). For positive controls, PBMCs were exposed to concanavalin A (data not shown). Horizontal line and error bar indicate the mean \pm SEM.

Supplemental Table 1. Adverse Events

Adverse Events	# Of Events	Unrelated/ Unlikely	Possible	Probably/ Definite	*Grade (G1, G2, or G3)	% Incidence (Based on 94 treatments)
Injection Site Reaction	21			21	G1 (19); G2 (2)	22.3
Pain (all types)	17	17			G1 (8); G2 (7); G3 (2)	18.1
Fever	10	4	2	4	G1 (7); G2 (3)	10.6
Flu-like symptoms	10	3	5	2	G1 (9); G2 (1)	10.6
Fatigue	8	6	2		G1 (5); G2 (2); G3 (1)	8.5
Shortness of Breath	6	6			G1 (3); G2 (3)	6.4
Anorexia	5	4	1		G1 (3); G2 (2)	5.3
Chills	5	1	1	3	G1 (5)	5.3
Nausea	5	4	1		G1 (5)	5.3
Constipation	5	5			G1 (3); G2 (2)	5.3
Edema	5	5			G1 (3); G2 (2)	5.3
Vomiting	4	4			G1 (4)	4.3
Hypertension	3	3			G1 (2); G2 (1)	3.2
Anemia	3	3			G1 (1); G2 (1); G3 (1)	3.2
Cough	2	2			G1 (2)	2.1
Depression	2	2			G1 (2)	2.1
Diarrhea	2	2			G1 (2)	2.1
Headache	2	1	1		G1 (2)	2.1
Hypoalbuminemia	2	2			G1 (1); G2 (1)	2.1
Hypokalemia	2	2			G1 (1); G2 (1)	2.1
Pleural Effusion	2	2			G2 (1); G3 (1)	2.1
Alkaline Phosphatase Increase	2	2			G1 (1); G3 (1)	2.1
Myalgia	2		2		G1 (2)	2.1
Night Sweats	2	2			G1 (1); G2 (1)	2.1
Sleep	2	2			G1 (2)	2.1
Low Magnesium	2	2			G1 (2)	2.1
Abdominal Bloating	1	1			G1 (1)	1.1
Abdominal Distention	1	1			G3 (1)	1.1
Abdominal Swelling	1	1			G2 (1)	1.1
Abdominal Wound	1	1			G2 (1)	1.1

ALT Increase	1	1			G1 (1)	1.1
AST Increase	1	1			G2 (1)	1.1
Biliary Obstruction	1	1			G3 (1)	1.1
Bowl Obstruction	1	1			G3 (1)	1.1
Cold	1	1			G1 (1)	1.1
Dyspnea	1	1			G3 (1)	1.1
Dysuria	1	1			G1 (1)	1.1
Frequent Urination	1	1			G1 (1)	1.1
GI Disorder	1	1			G3 (1)	1.1
Extra Pyramidal Movements	1	1			G1 (1)	1.1
Insomnia	1	1			G1 (1)	1.1
Herpes Simplex	1	1			G1 (1)	1.1
Hypotension	1	1			G1 (1)	1.1
Loss of Appetite	1	1			G1 (1)	1.1
Low White Blood Cells	1	1			G1 (1)	1.1
Numbness/Sensation in Fingertips	1	1			G1 (1)	1.1
Onset of Menses	1	1			G1 (1)	1.1
Poor Quality Sleep	1	1			G1 (1)	1.1
Presyncope	1	1			G2 (1)	1.1
Pruritis	1	1			G1 (1)	1.1
Rash-Right Lower Eye Lid	1	1			G1 (1)	1.1
Red/Swelling Right Upper Eyelid	1	1			G1 (1)	1.1
Renal Calculi	1	1			G2 (1)	1.1
Runny Nose	1		1		G1 (1)	1.1
Shallow Breathing	1	1			G1 (1)	1.1
Skin Rash	1	1			G1 (1)	1.1
Vaginal Discharge	1	1			G1 (1)	1.1
Concentration	1				G1 (1)	1.1
Weight Loss	1	1			G2 (1)	1.1
Arthritis Joint Inflammation	1	1			G1 (1)	1.1
Flushing	1		1		G1 (1)	1.1
Acute Renal Failure	Disease progression				G3 (1)	1.1

* Parenthesis () indicates numbers of events.

Supplemental Table 2. Hematology, Chemistry, and ANA values

Hematology Test	Week 0 value (Mean ± SEM)	Week 9 value (Mean ± SEM)
Hgb (g/dL)	13.09 ± 0.313	12.48 ± 0.413
Hct (%)	39.63 ± 0.875	37.92 ± 1.140
Plts (x10 ⁹ /L)	225.1 ± 20.76	247.3 ± 23.57
WBC (x10 ³ /mm ³)	6.81 ± 0.532	8.21 ± 0.741
Neutrophils (%)	64.46 ± 2.068	67.28 ± 3.268
Lymphocytes (%)	23.23 ± 1.874	18.34 ± 2.071
Monocytes (%)	8.86 ± 0.462	7.68 ± 0.569
Eosinophils (%)	3.97 ± 0.677	3.16 ± 0.685
Basophils (%)	0.52 ± 0.056	0.38 ± 0.048
Chemistry Test	Week 0 value (Mean ± SEM)	Week 9 value (Mean ± SEM)
Na (mEq/L)	139.2 ± 0.424	137.9 ± 0.718
K (mEq/L)	3.90 ± 0.085	3.80 ± 0.073
Cl (mEq/L)	105.0 ± 0.561	103.3 ± 1.061
CO ₂ (mEq/L)	27.8 ± 0.374	27.63 ± 0.458
BUN (mg/dL)	17.0 ± 1.136	17.1 ± 1.611
Creatinine (mg/dL)	0.81 ± 0.046	0.86 ± 0.054
Glucose (mg/dL)	121.8 ± 7.458	123.5 ± 7.885
Ca (mg/dL)	8.84 ± 0.075	8.87 ± 0.073
Total protein (g/dL)	6.95 ± 0.078	6.67 ± 0.100
Albumin (g/dL)	3.78 ± 0.085	3.62 ± 0.113
AST (U/L)	31.71 ± 3.846	31.88 ± 3.506
ALT (U/L)	27.83 ± 4.228	25.67 ± 3.414
Alkaline phosphatase (U/L)	107.0 ± 13.30	124.0 ± 17.40
Bilirubin (mg/dL)	0.78 ± 0.071	0.75 ± 0.079
*ANA Test	Week 0 value (Mean ± SEM)	Week 9 value (Mean ± SEM)
Titer	103.3 ± 51.04	123.3 ± 50.56

*Values represent inverse of the titer and are from patients with positive values.