## Supplementary Table S1: CEA-specific T-cell responses post- vs. pre-vaccination

		CD4 <sup>+</sup> T cells				CD8 <sup>+</sup> T cells				# of Responses <sup>a</sup>
Patient	Cohort	CD107a	IFNγ	IL2	TNFα	CD107a	IFNγ	IL2	TNFα	Responses
B cycle 1	0	0	0	2582	0	0	0	0	0	2/4 (50%)
F cycle 1	0	0	1391	0	0	0	288	0	0	
EE cycle 1	4	0	0	0	0	0	130	0	0	
OO cycle 1	4	0	0	0	0	0	0	0	0	
D cycle 2	0	1482	0	0	0	0	0	0	0	2/6 (33%)
E cycle 2	0	1156	0	0	0	0	0	0	0	
J cycle 2	1	0	0	0	0	0	0	0	0	
M cycle 2	1	63	0	0	0	0	0	0	0	
O cycle 2	1	0	0	0	0	0	0	0	0	
FF cycle 2	4	0	0	0	0	0	0	0	0	
A cycle 3	0	0	0	0	0	0	0	0	0	3/9 (33%)
C cycle 3	0	0	0	0	0	0	0	0	0	
N cycle 3	1	0	0	0	79	532	0	0	0	
LL cycle 3	4	22	0	17	17	0	0	0	0	
NN cycle 3	4	0	0	0	0	0	0	0	0	
PP cycle 3	4	0	297	0	0	0	0	0	0	
RR cycle 3	4	0	0	0	0	0	0	0	0	
UU cycle 3	4	260	128	0	0	0	0	141	0	
VV cycle 3	4	0	0	0	0	0	0	0	0	
*NN cycle 5	4	87	0	147	351	2116	0	0	1716	3/3 (100%)
*PP cycle 6	4	2281	806	0	0	0	27085	0	97	
*UU cycle 6	4	460	0	5	0	0	0	0	0	

Note: Absolute # of CD4+ or CD8+ T cells producing cytokine or CD107a+ / 1x106 cells plated at start of in vitro stimulation.

Numbers in bold are those positive post- vs. pre-vaccination.

a Cytokine or CD107a in CD4+ or CD8+T cells.\* Same patient tested as previous cycle.