**Table S1. Clinicalpathological Features of the NSCLC Patients**

	All patients (n=43)	Patients used for MDSC analysis (n=23)	Patients (decreased arginase cohort, n=15)	Patient (cohort with no difference in arginase, n=20)
Age (range)	61.5 (40-82)	61.7 (40-82)	61 (45-80)	62 (40-82)
Gender				
Female	27	15	8	14
Male	18	8	7	6
Race				
Black	9	6	1	5
White	34	17	14	15
Tumor grade				
T1	14	5	5	9
T2	9	2	2	4
T3	1	1	1	1
T4	1	1	0	1
Not Reported (NR)	11	14	7	5
Nodal stage				
N0	20	6	7	10
N1	2	1	1	3
N2	3	1	0	1
N3	1	1	0	1
NR	11	14	7	5
Clinical stage				
1	12	3	2	5
2	7	4	2	4
3a	12	10	3	6
4	1	1	1	0
NR	7	5	5	5

Table S2. List of Primer Sequences

Genes	Primer sequences
Mouse *TNF-α*	Forward: 5'- AGGCACTCCCCCAAAAGATG-3' Reverse: 5'- CCACTTGGTGGTTTGTGAGTG-3'
Mouse *IL-12 p35*	Forward: 5'- CAGAATCACAACCATCAGCAG -3' Reverse: 5'- CACCCTGTTGATGGTCACGAC -3'
Mouse *iNOS*	Forward: 5'- AATAGAGGAACATCTGGCCAGG -3' Reverse: 5'- ATGGCCGACCTGATGTTGC -3'
Mouse *IL-6*	Forward: 5'- CCTCTCTGCAAGAGACTTCCAT-3' Reverse: 5'- ACAGGTCTGTTGGGAGTGGT-3'
Mouse *TGF-β1*	Forward: 5'- TGCTAATGGTGGACCGCAA -3' Reverse: 5'- CACTGCTTCCCGAATGTCTGA -3'
Mouse *β-MG*	Forward: 5'- CTTTCTGGTGCTTGTCTC -3' Reverse: 5'- TCAGTATGTTCGGCTTCC -3'
Human *B2M* (beta-2 microglobulin)	Forward: 5'- GCCTTAGCTG TGCTCGCGCT -3' Reverse: 5'- AGTCGACCAG TCCTTGCTGA -3'
Human *Arginase 1*	Forward: 5'- CAGAGCATGAGCGCCAAGT-3' Reverse: 5'- ATCACACTCTTGTTCTTTAAGTTTCTCAA-3'
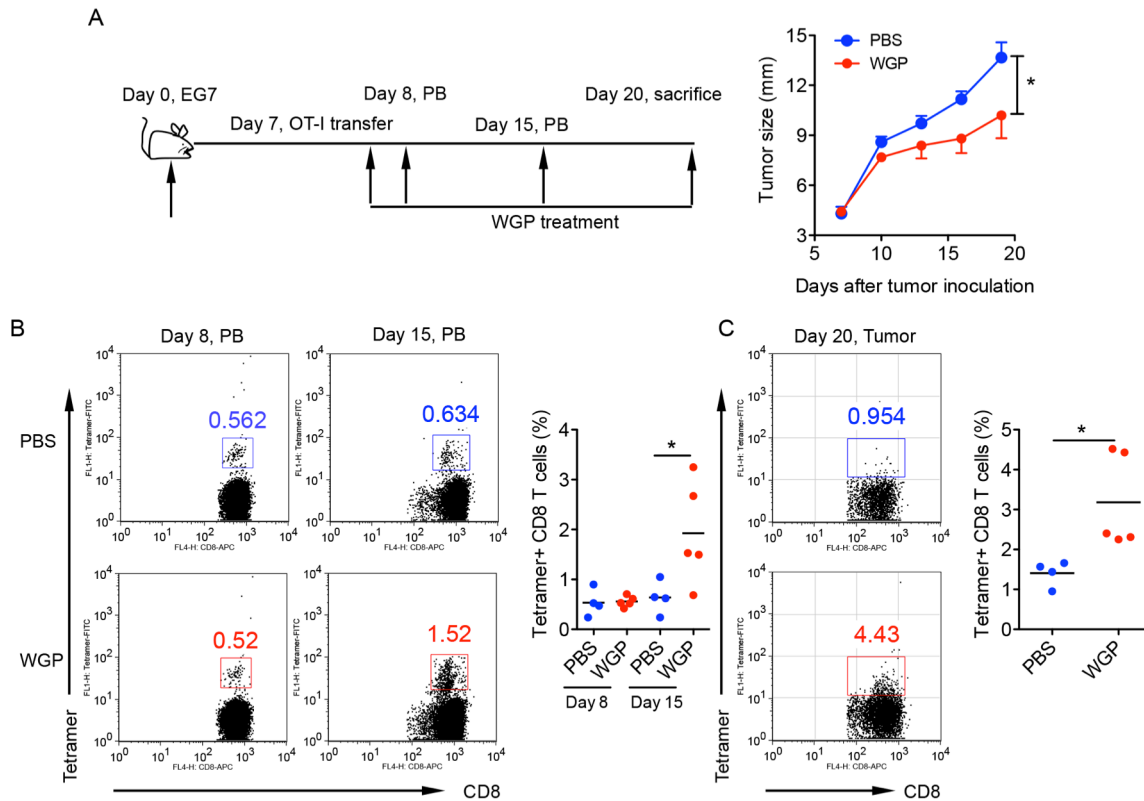
Fig S1. Particulate β-glucan treatment stimulates enhanced Ag-specific CD8 T cell response. (A) Schema showing detailed protocol for this experiment. OVA-expressing EG7 tumor cells were used as a model system. WGP treatment for 2 wks showed reduced tumor burden compared to PBS control mice. (B) Peripheral blood (PB) was collected at days 8 and 15 for tetramer staining. Data show that one day after OT-1 transfer, mice treated with or without WGP have comparable tetramer+ CD8 T cells whereas mice treated with WGP have significantly more tetramer+ CD8 T cells after one week WGP treatment. (C) Tumor-bearing mice were treated with or without WGP for 2 wks and tumors were excised and single cell suspension was stained for tetramer. Cells were gated on CD8$^+$CD19$^-$ cells. Data show that WGP β-glucan treatment significantly increases OVA-specific CD8 T cells in tumors. *p<0.05.