



Figure S1. Schematics of the preparations of A) gp100/L-Tyrosine formulation and B) gp100/saline mixed with L-Tyrosine (see the section of materials and methods for details). C) L-Tyrosine microparticles at 10x magnification with scale bar.

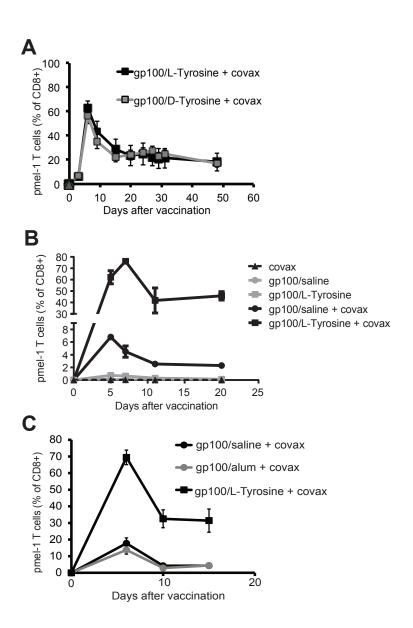


Figure S2. A) gp100/L-Tyrosine induces very modest T cell response in the absence of covax. B) L- and D-Tyrosine induced similar T cell responses. C) A comparison of pmel-1 T cell induction by gp100 peptide in saline, L-tyrosine and alum formulations. Mice received 8x10<sup>5</sup> pmel-1 T cells and indicated treatments on day 0. Pmel-1 T cell level as a percentage of CD8 + T cells in the blood at indicated time points.

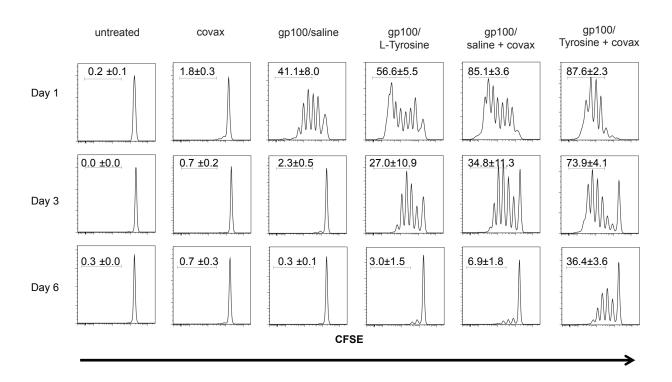


Figure S3. Ag presentation time of gp100 in saline and L-tyrosine formulations in the absence and presence of covax. All mice were treated as indicated on day 0. At indicated time points, 2x106 CFSE labeled pmel-1 CD8+ T cells were transferred to hosts. 72 hours post T cell transfer, vaccination site-draining lymph nodes were harvested and CFSE dilution of pmel-1 T cells was measured by flow cytometry. n = 3 mice per group. Data are shown as mean  $\pm$  s.e.m.

Table SI Amount of peptide trapped by L-Tyrosine particles after preparation process.

Peptide	gp100 <sub>25-33</sub>	OVA <sub>257-264</sub>
	(KVPRNQDWL)	(SIINFEKL)
% from initial input	24.0 ± 3.6%	25.0 ± 2.1%

Data shown are representative of two independent experiments.