

SUPPLEMENTAL FIGURE LEGENDS:

FIGURE S1. Gating scheme. Representative flow cytometry plots showing gating scheme for T cells (left) and MDSC (right).

FIGURE S2. Effect of chemoradiation on circulating immunocytes.

Percentage (of all live cells) of effector and suppressive immunocytes from patients who received chemoradiation only (left column) and induction + chemoradiation (right column) Each line represents results from an individual patient. A. CD8+ T cells; B. CD4+T cells; C. regulatory T cells; and D. MDSC. * = $p < 0.05$ with respect to baseline.

FIGURE S3. Intracellular IFN- γ and TNF- α staining in CD8+ and CD4+ T cells.

Representative flow cytometry plots of IFN- γ (left column) and TNF- α (right column) intracellular staining in response to HPV E6/E7 peptides from baseline samples from patients #7026 (who had baseline pooled HPV-specific cytokine responses) and #7023 (who did not have baseline pooled responses).

FIGURE S4. Effect of chemoradiotherapy on PD-1 expression on CD8+ T cells.

Percent PD-1+ expressing CD8+ T cells for individual patients (left) and aggregated -fold change with respect to baseline (right). * = $p < 0.05$ with respect to baseline.

FIGURE S5. Baseline PD-1 expression is correlated with post-treatment PD-1 expression on CD4+ T cells.

Correlation of PD-1 expression at baseline and after completion of chemoradiotherapy for: A. all CD4+ T cells; and B. CD4+CD45RO+ T cells.