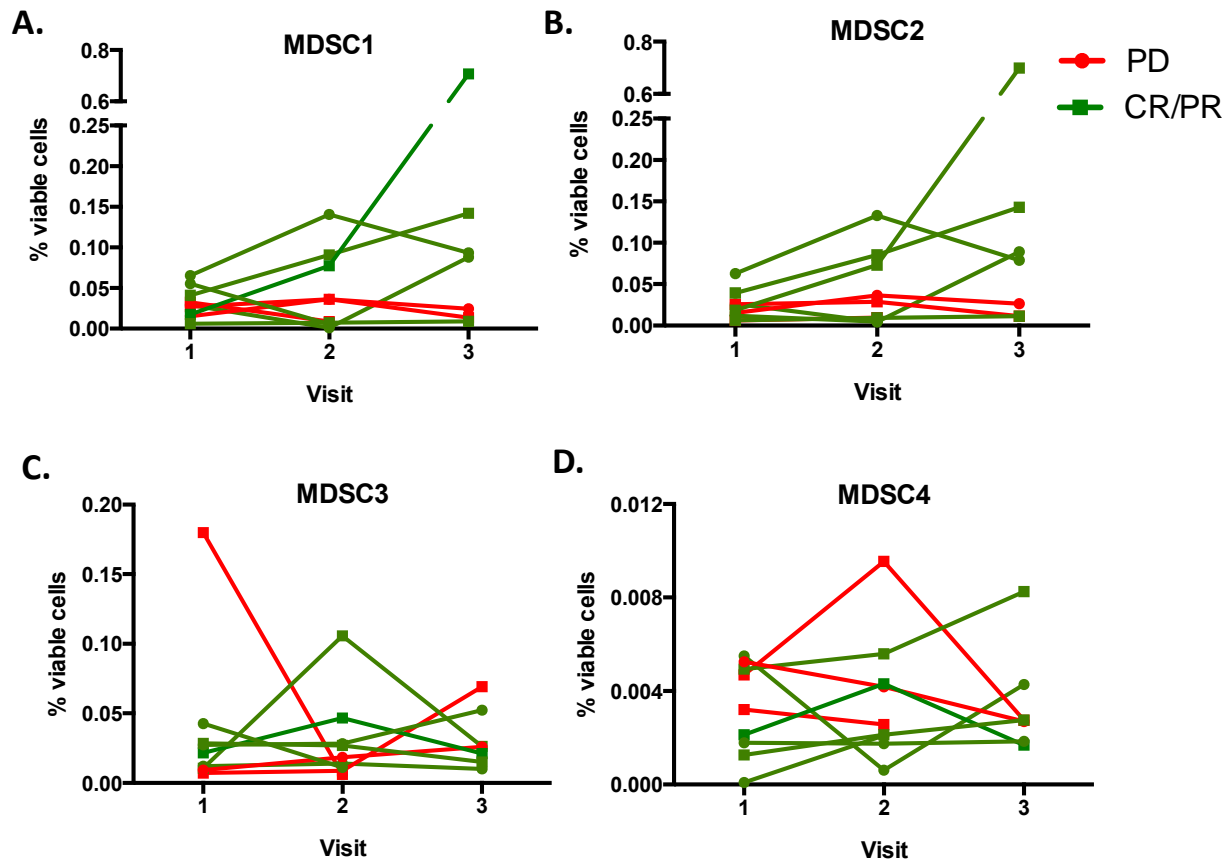


Supplementary Figure S1 Conventional flow cytometric analyses of PBMC from melanoma patients treated with radiation and ipilimumab (A) PBMC from melanoma patients receiving ipilimumab were collected and cryopreserved at baseline pre-treatment (visit 1), 2nd ipilimumab dose (visit 2) and 4th ipilimumab dose (visit 3). The frequency of CCR7+CD45RA- CD8+ T cells (central memory, Tcm) is shown in (A). (B-D) PBMC from (A) were stimulated *ex vivo* with a melanoma peptide mix containing MART-1, gp100 and NY-ESO-1 for 6 hours and (B) IFN γ , (C) IL-2 and (D) TNF α producing CD8+ T cells were identified using intracellular cytokine staining and flow cytometry. PD=Progressive Disease, CR/PR=Complete Response/Partial Response.



Supplementary Figure S2 Myeloid Derived Suppressor Cells (MDSC) phenotyping by conventional flow cytometric analyses of whole blood from melanoma patients treated with radiation and ipilimumab. Samples were collected from patients at baseline pre-treatment (visit 1), 2nd ipilimumab dose (visit 2) and 4th ipilimumab dose (visit 3). These samples were stained using the antibody panel detailed in the methods section. Cells were analyzed by flow cytometry and the frequency of MDSC 1-4 (A-D) was determined using the gating strategy described by Walter et al. PD=Progressive Disease, CR/PR=Complete Response/Partial Response.