Repeated PR1 and WT1 peptide vaccination in Montanide-adjuvant fails to induce sustained high-avidity, epitope-specific CD8+ T cells in myeloid malignancies

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Online Supplementary Figure S1. CD8+ T-cell responses to PR1 and WT1 vaccination by intracellular IFN-γ assay. Longitudinal data on IFN-γ production by CD8+ T cells in PBMC samples from patient 1, cultured for six hours with PR1, with WT1 or without peptide (negative control) and CMV (positive control) are presented. Results are expressed as percentages of total CD8+ T cells. A T-cell response was positive if frequencies of IFN-γ+CD8+ T cells in peptide-stimulated PBMCs was ≥2-fold higher than in unstimulated PBMCs and if there was a minimum of 0.05% IFN-γ+CD8+ T cells.
Online Supplementary Figure S3. Disease response to vaccination with PR1 and WT1 peptides as measured by WT1/ABL gene expression. Results in 6 individual patients who received 6 courses of vaccine, 3 of whom also received a booster vaccine three months after the 6th dose of vaccine are shown. Weeks after vaccination are shown on the X-axis. WT1 gene expression in peripheral blood is expressed as the ratio of WT1/ABL. wk: weeks post-vaccine.

Online Supplementary Figure S2. Frequencies of CD4\(^{+}\)Foxp3\(^{+}\) and ratio of CD4\(^{+}\)Foxp3\(^{+}\)/CD4\(^{+}\)CD25\(^{+}\) T cells following vaccination. (A and B) Frequencies before each vaccine from patient 1 and 7. Following vaccination, there was a significant and transient reduction in frequencies of CD4\(^{+}\)Foxp3\(^{+}\) T cells and a significantly lower proportion of CD4 CD25\(^{+}\) T cells that were Foxp3\(^{+}\), indicating selective elimination of CD4\(^{+}\)CD25\(^{+}\)FOXP3\(^{+}\) T cells. wk: weeks post-vaccine.

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