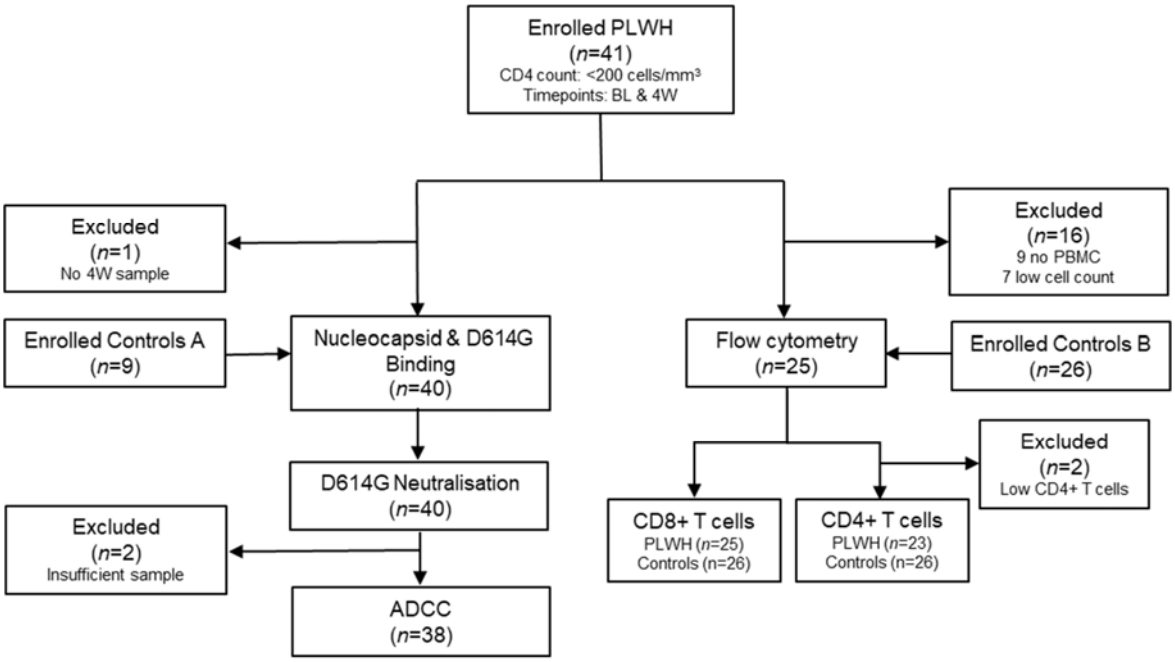
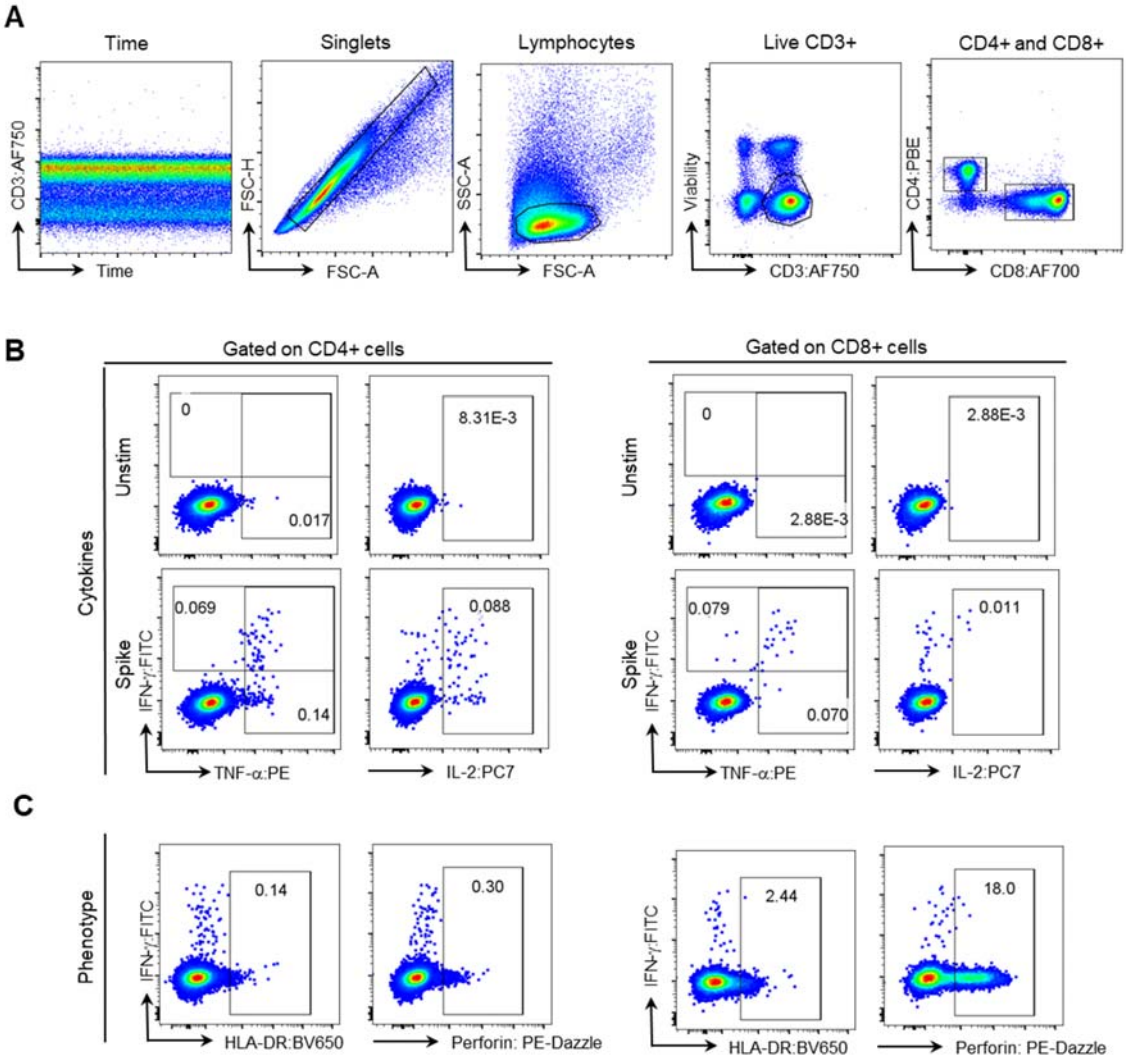
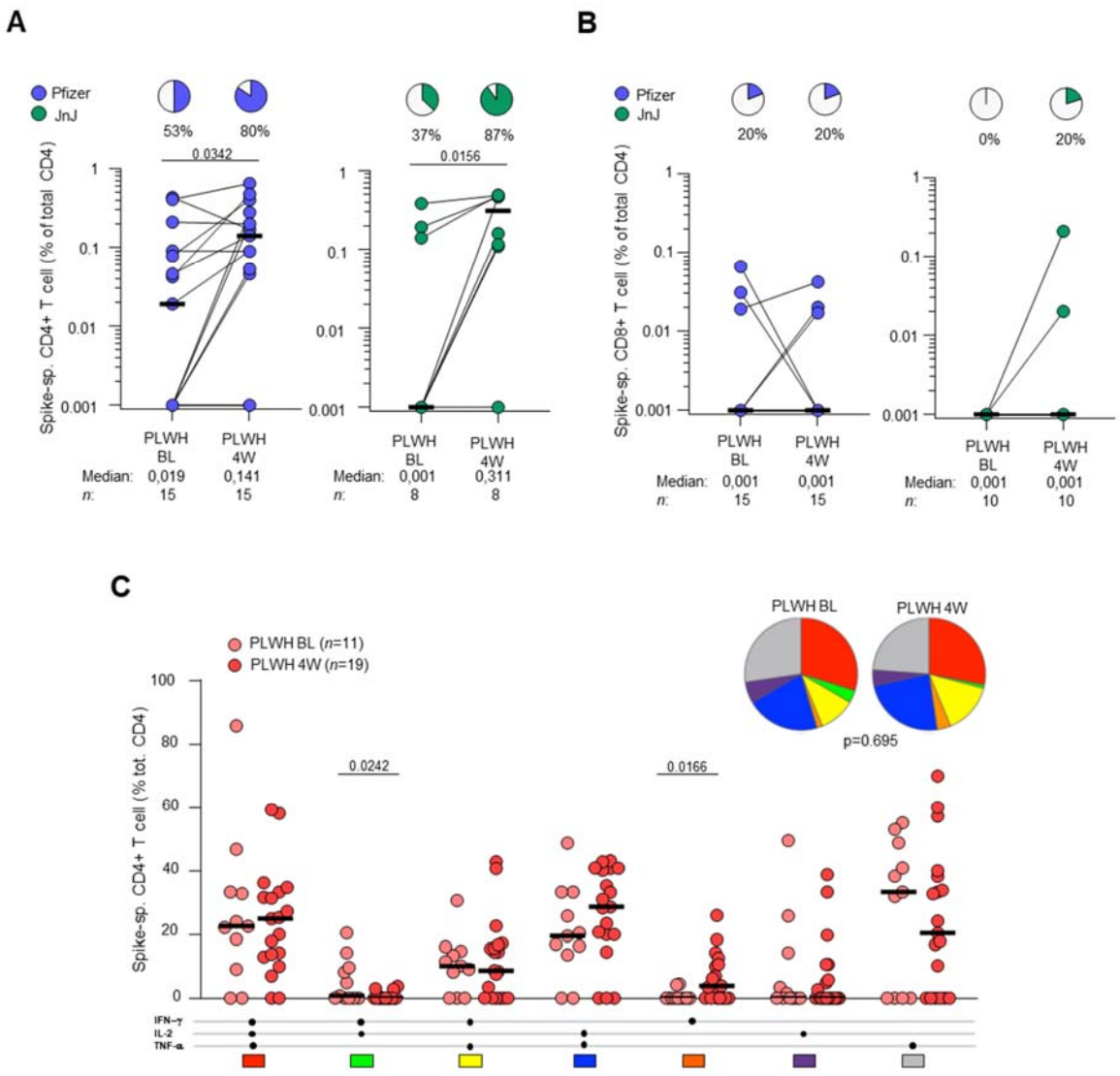


Supplementary Figure 1: The flow chart illustrates the availability and inclusion of samples from study participants for each immunological assay. A total of 41 PLWH with CD4 counts <200 cells/mm³ were enrolled and sampled both at baseline (BL) and four weeks (4W) after vaccination.



Supplementary Figure 2: Gating strategy. (A) Gating strategy to identify CD4+ and CD8+ T-cell populations. (B) Production of IFN-γ, TNF-α and IL-2 by CD4+ and CD8+ T-cells after stimulation with spike peptide pool. (C) Expression of HLA-DR and perforin on total CD4+ and CD8+ T-cells. Alexa Fluor 750 (AF750), Pacific Blue (PBE), Alexa Fluor 700 (AF700), Fluorescein isothiocyanate (FITC), R Phycoerythrin (PE), R Phycoerythrin-Cyanine 7 (PC7), Brilliant Violet 650 (BV650) and R Phycoerythrin (PE)-Dazzle.



Supplementary Figure 3: The magnitude and function of spike-specific T-cells. (A-B) Frequency of total spike-specific CD4+ and CD8+ T-cells in PLWH who were vaccinated with Pfizer (blue dots) and those vaccinated with JnJ (green dots). (C) Poly-functional profile of spike-specific CD4+ T-cells in PLWH at BL and 4W. The coloured bars (underneath) and pie chart slices represent different cytokine combinations produced by spike-specific T-cells (e.g., a red bar/slice represents cells producing INF-γ, TNF-α and IL-2). Statistical significance was calculated using a Mann-Whitney U test. Black horizontal bars indicate the median values.