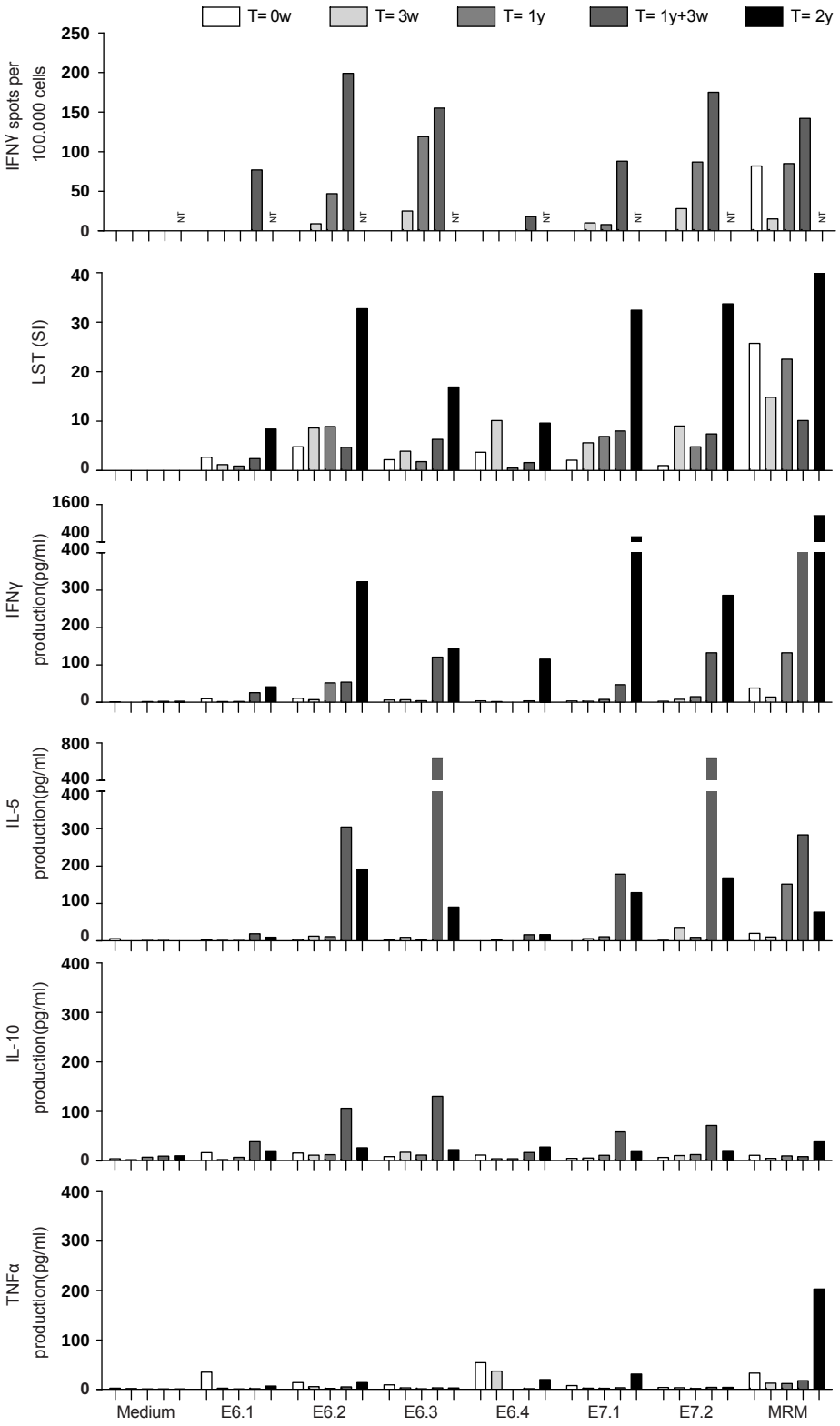
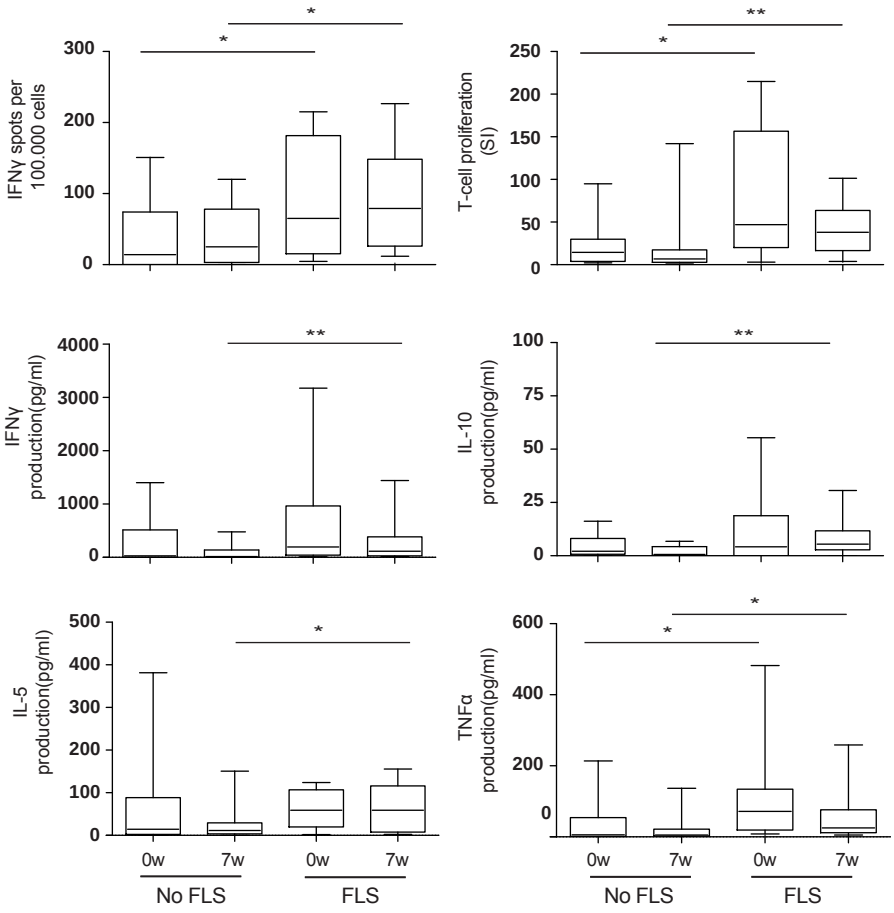
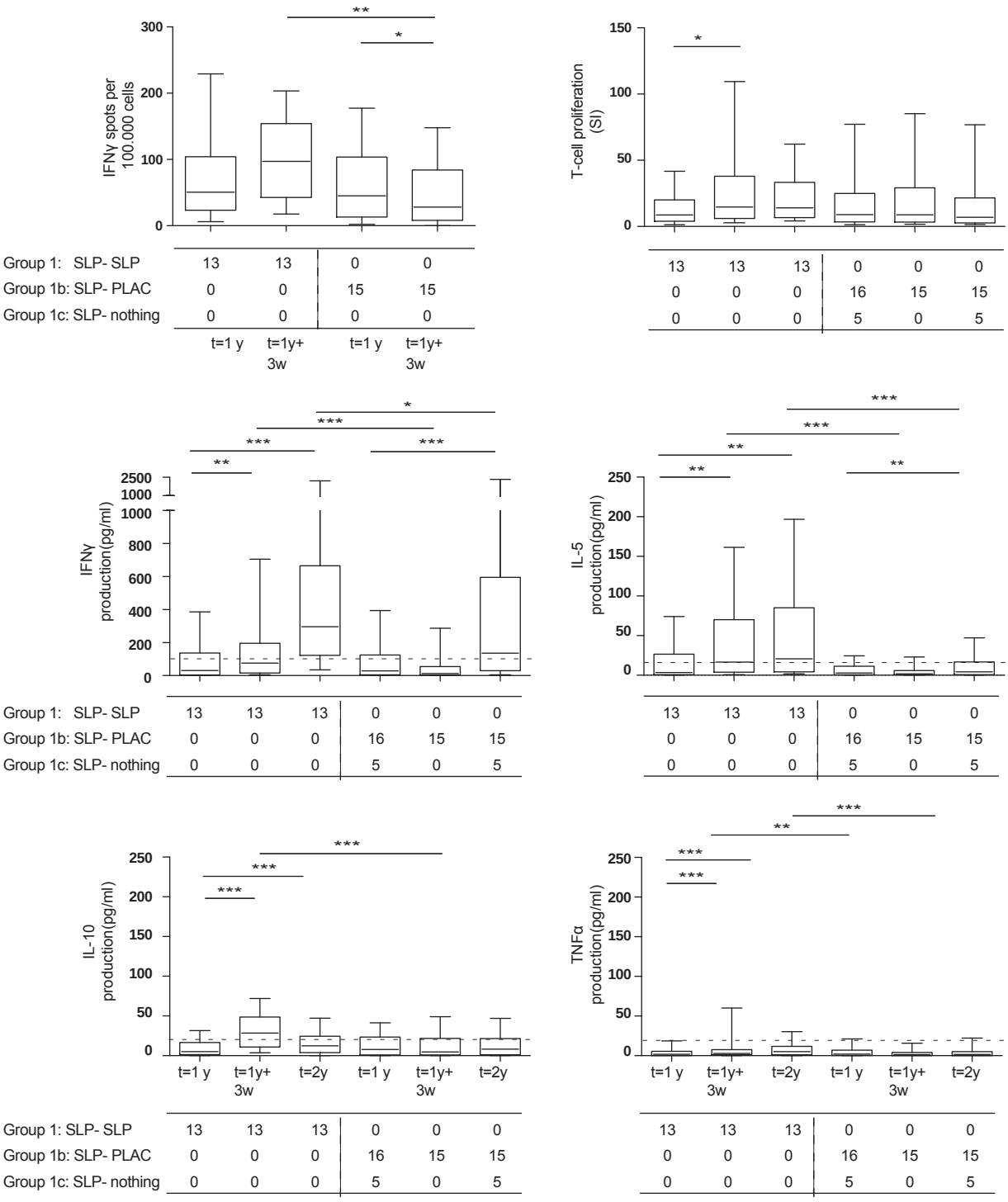


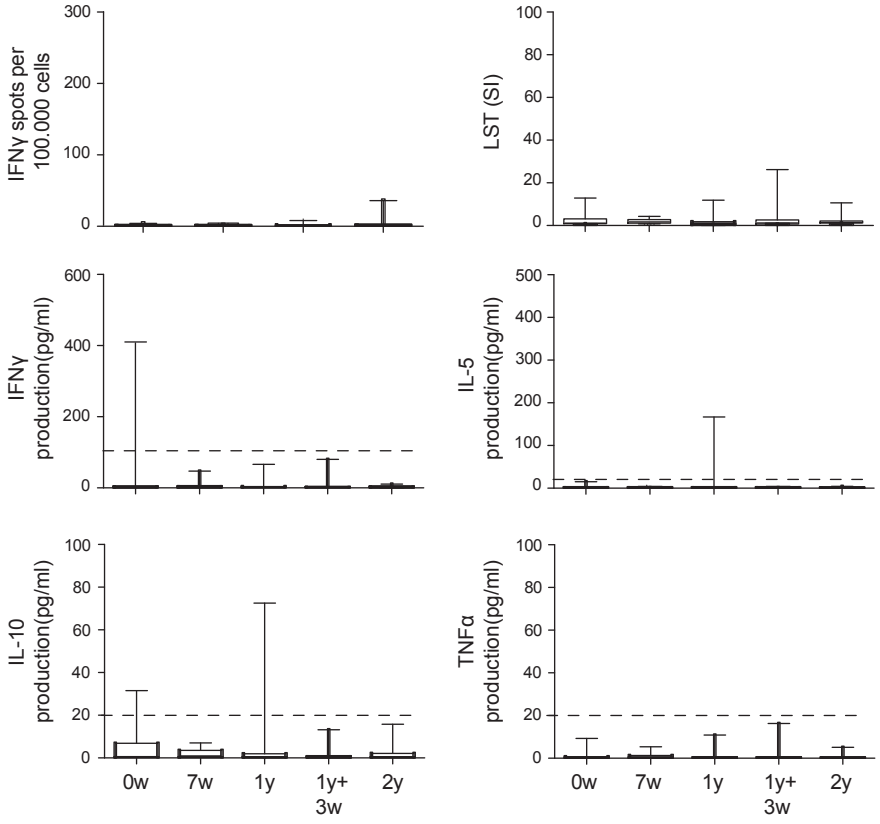
Supplemental Figure 1. Representative immunomonitoring data for patient 1026 is shown. Responses are measured by IFNγ- Elispot, proliferation assay (LST) and cytokine production (IFNγ, IL-5, IL-10 and TNFa). This patient was allotted to group 1a, receiving the HPV16-SLP twice at T=0w and T=3w and again at T=1y. A response is measured in the Elispot, LST and Il-5 after vaccination. After booster vaccination (T=1y+3w) a further augmentation (3x pre-booster vaccination) is seen in the Elispot, IFNγ, Il-5 and Il-10 assays.



Supplemental figure 2. Stronger T-cell responses against MRM peptides were seen in patients that had the Flu-like syndrome (FLS) after vaccination compared to patients with no FLS in patients of group 1. The median (line), interquartile range (boxes) and 10-90% range (bars) of the MRM T-cell response by IFN γ-Elispot, lymphocyte stimulation test (LST) and cytometric bead array (CBA) are shown for both groups. Patients with FLS had significantly stronger responses after vaccination by all tests (* $0.01 < P < 0.05$; ** $0.001 < P < 0.01$). This difference was already seen before vaccination in the IFNγ Elispot, LST and TNFα.



Supplemental Figure 3. Box plots of the response to booster vaccination showing the median (line), interquartile range (boxes) and 10-90% range (bars) during the second year. Responses are shown for time-points T=1y, T=1y+3w and T=2y (except for the IFNγ-Elispot) for group 1A (who received the HPV16-SLP at T=0, T=3w and T=1y), Group 1B (who received the HPV16-SLP at T=0, T=3w and PBS at T=1y) and Group 1C (who received the HPV16-SLP at T=0, T=3w and nothing at T=1y). The results of Group 1B and 1C are depicted combined as both patient groups did not receive the HPV16-SLP vaccine. HPV16-specific T-cell responses are shown when measured by IFNγ Elispot, proliferation assay (LST) and proliferation associated production of IFNγ, IL-5, IL-10 and TNFα. In groups 1B and 1C a certain degree of fluctuation was seen, although significant increases in cytokine production were observed more often in group 1A after booster vaccination with HPV16-SLP.



Supplemental figure 4. The HPV16-specific T-cell response for patients in group 2, who received placebo at all time-points are depicted. No significant changes were observed in the immunological tests conducted: IFNγ-Elispot, proliferation assay (LST) or cytometric bead array (CBA) for the indicated cytokines.