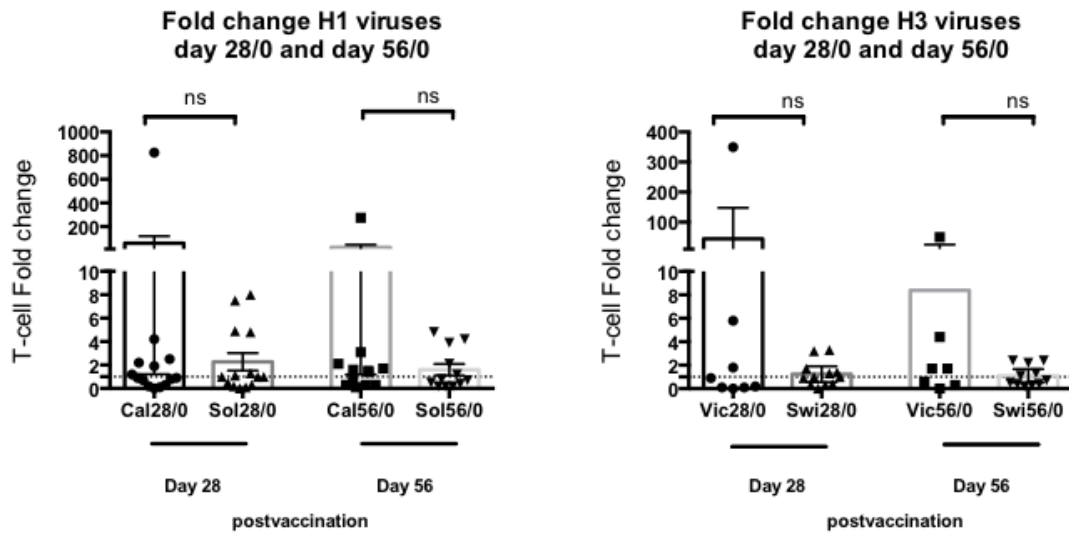
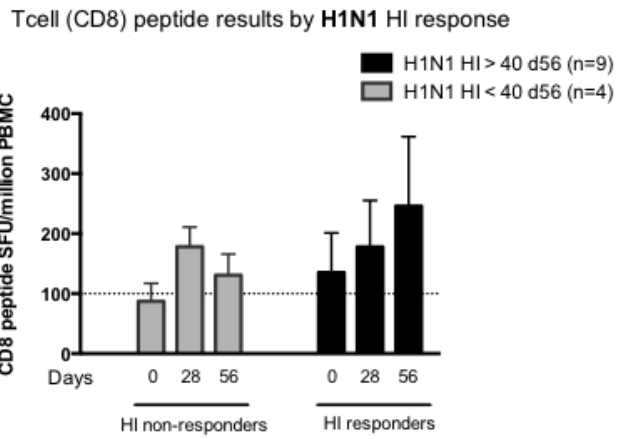


Supplementary Figure 1: HI fold change for the homologous and heterologous influenza H1N1 and H3N2 strains. Fold changes were calculated from pre-vaccination titers (day 0).

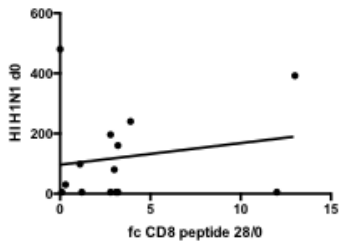


Supplementary Figure 2: T-cell fold-change day 28 and 56 post vaccination to homologous and heterologous H1N1 and H3N2 strains. The Wilcoxon matched-pair signed rank test was used to examine for statistical differences between homologous vaccine and heterologous strains. Fold changes were calculated from pre-vaccination titers (day 0).



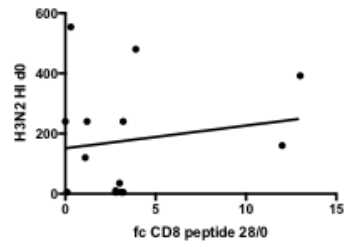
Supplementary Figure 3: CD8 peptide response after LAIV in children with and without an HI antibody response. Both responding children (HI<40) and non-responders (HI<40) after LAIV showed an increase in CD8 T-cell numbers.

Correlation of H1N1 HI d0 and CD8 T-cell response (fc)



	fc CD8 peptide 28/0 vs. HI H1N1 d0
Spearman r	
r	0.29044
95% confidence interval	-0.5096 to 0.5777
P value	
P (two-tailed)	0.3930
P value summary	ns
Exact or approximate P value?	Exact
Significant? (alpha = 0.05)	No
Number of XY Pairs	14

Correlation of H3N2 HI d0 and CD8 T-cell response (fc)



	fc CD8 peptide 28/0 vs. H3N2 HI d0
Spearman r	
r	0.12
95% confidence interval	-0.46 to 0.62
P value	
P (two-tailed)	0.5886
P value summary	ns
Exact or approximate P value?	Exact
Significant? (alpha = 0.05)	No
Number of XY Pairs	14

Supplementary Figure 4: Correlation between HI day 0 (pre-vaccination) and foldchange of the CD8 peptide response after one dose, day 28. The non-parametric Spearman correlation test was used, with r indicated and with $p < 0.05$ considered significant.