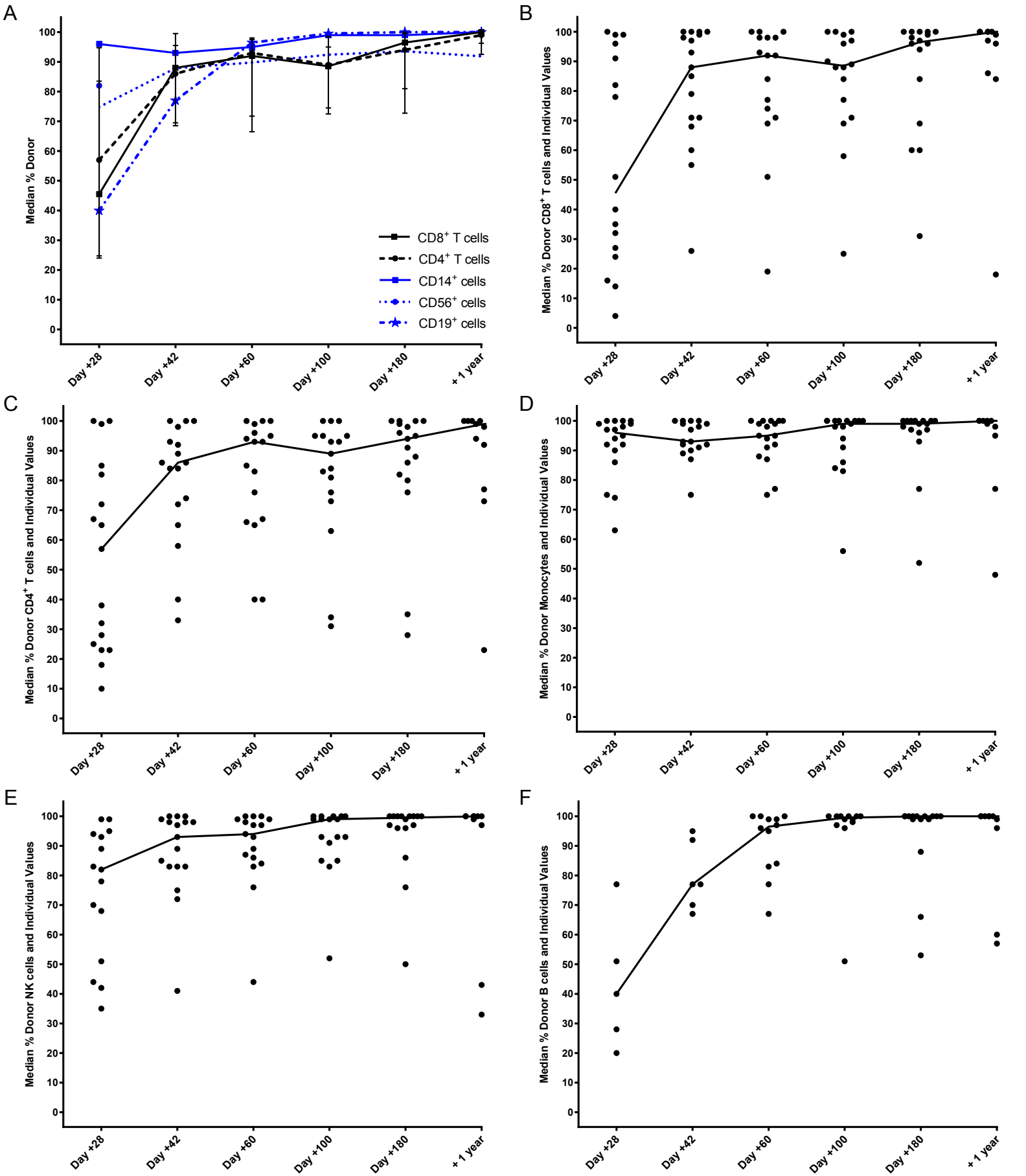
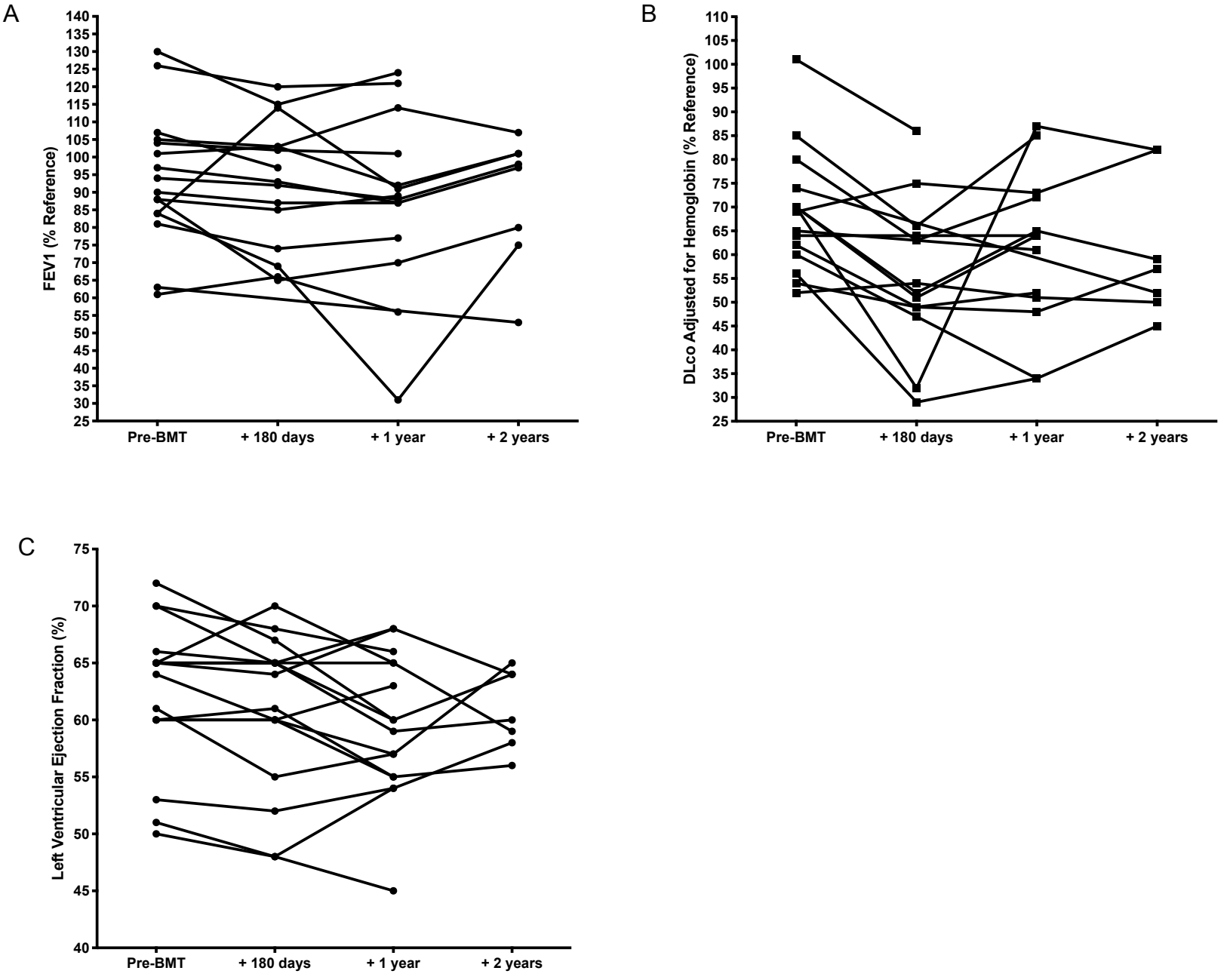
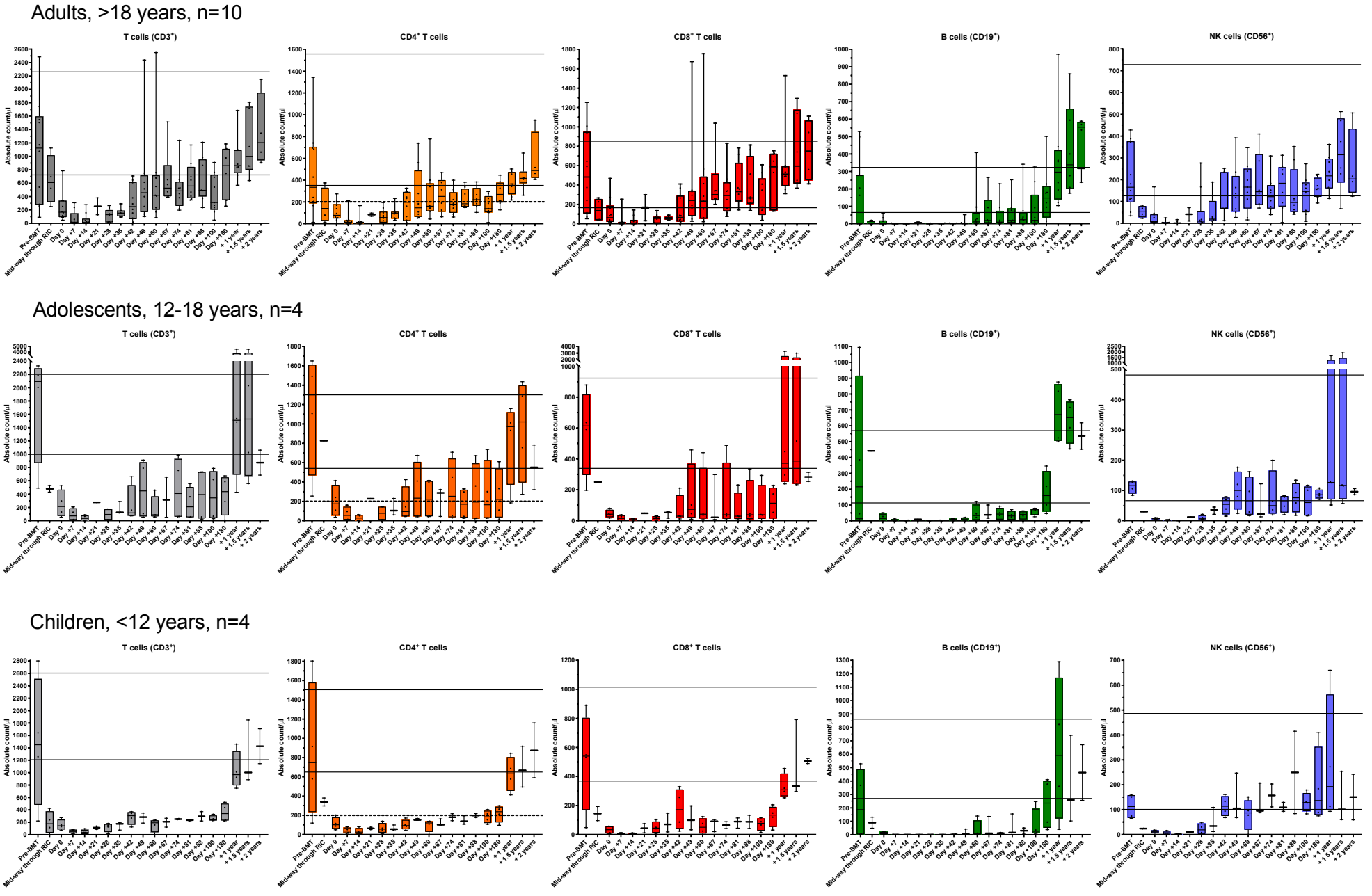


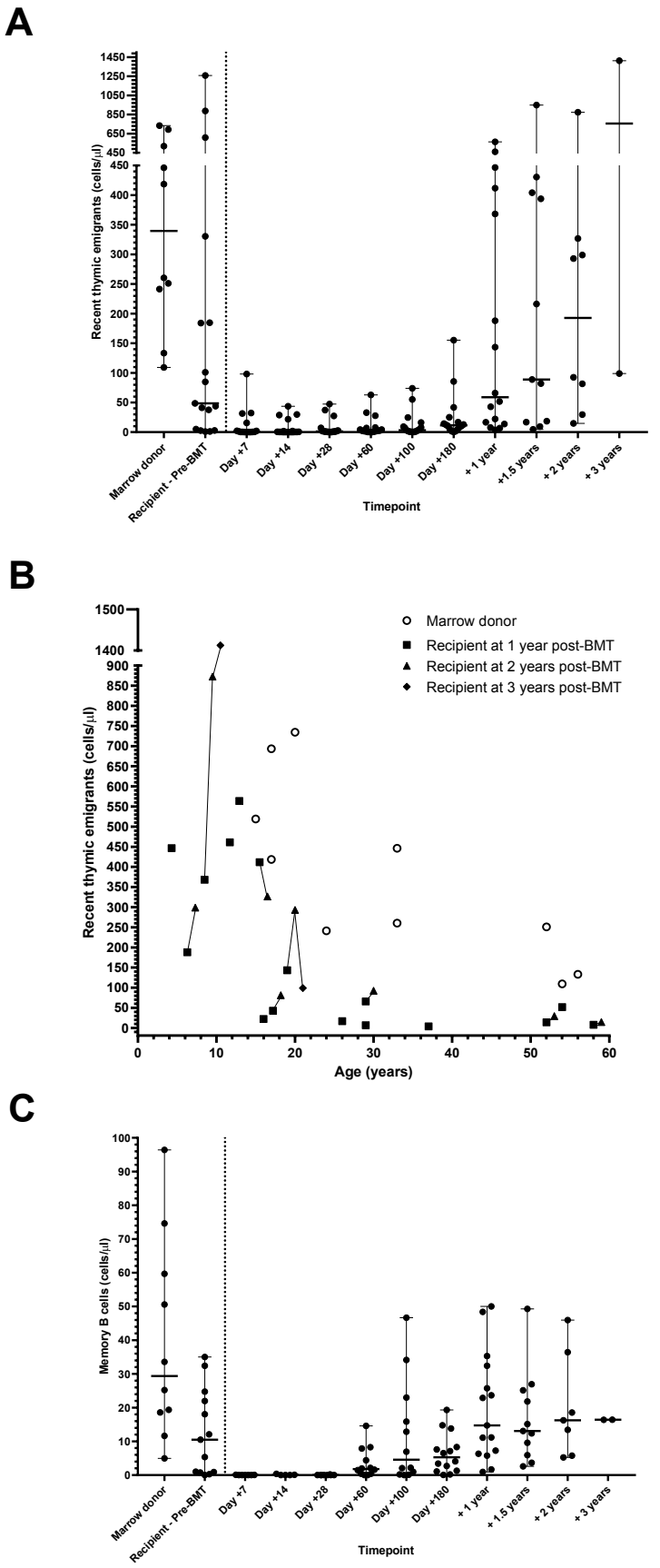
Supplemental Figure 1. Lineage-specific chimerism trends. A) Median and interquartile range of $CD8^+$ T-cell, $CD4^+$ T-cell, $CD14^+$ (monocyte), $CD56^+$ (NK-cell), and $CD19^+$ (B-cell) subsets for engrafted patients (n=18). B-F) Median and individual chimerism values for $CD8^+$ T cells (B), $CD4^+$ T cells (C), $CD14^+$ cells/monocytes (D), $CD56^+$/NK cells (E), and $CD19^+$/B cells (F) over time. The abililty to assess donor chimerism in lineage subsets was contingent on sufficient cells for analysis, thus certain subsets (namely B cells) were not assessable in some patients, particularly at early timepoints.



Supplemental Figure 2: Individual patient trends in pulmonary and cardiac function. A) Forced expiratory volume in 1 second on pulmonary function testing pre-BMT and serially after BMT. Transient declines were noted at times of acute infection. B) Diffusing capacity of the lungs for carbon monoxide, corrected for hemoglobin, on pulmonary function testing pre-BMT and serially after BMT. Transient decline was noted in most patients at day +180 or infrequently at times of acute illness. C) Left ventricular ejection fraction by 2D echocardiogram pre-BMT and serially after BMT. A single patient (P20) had mild but sustained decline in left ventricular ejection fraction; of note, his pre-BMT echocardiogram showed borderline low ejection fraction along with global hypokinesis, of unknown etiology.



Supplemental Figure 3. Post-BMT lymphocyte subset reconstitution by age, with box-and-whisker plot denoting median and range. Upper and lower limit of age-specific normal range are demarcated for each subset. Patients who experienced graft failure are excluded from this analysis. Pediatric reference ranges: Shearer WT et al. Lymphocyte subsets in healthy children from birth through 18 years of age. Journal of Allergy and Clinical Immunology, Volume 112, Issue 5, 973 - 980.



Supplemental Figure 4. Recent thymic emigrant ($CD4^+CD45RA^+CCR7^+CD31^+$) numbers by timepoint (**A**) and recipient age (**B**) and memory B cell ($CD19^+CD20^+CD27^+CD10^-IgD^-$) numbers by timepoint (**C**).