

Fig.1 The TRECs of health children aged from 0-18y. DNA from peripheral blood of health children aged from 0-18 years old was extracted and used to analyzed the TRECs by RT-qPCR. We divided the health control into seven different age groups (0-1m, 1m-6m, 6m-1y, 1-4y, 4-8y, 8-12y, 12-18y), the TRECs level of 410 healthy children was decreased with age.

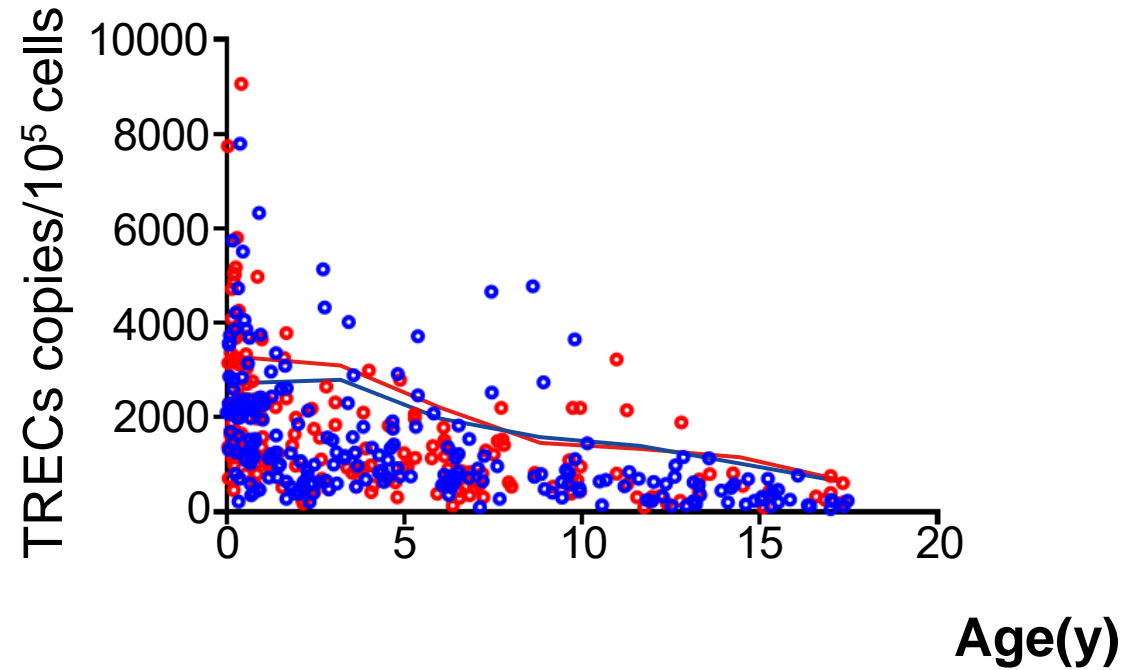


Fig.2 The TRECs level was no difference in female and male. The Higher levels of TRECs were detected in females than males before 1-year-old, but the differences were not statistically significant, after 1-year-old, the TRECs levels in female were similar to male.

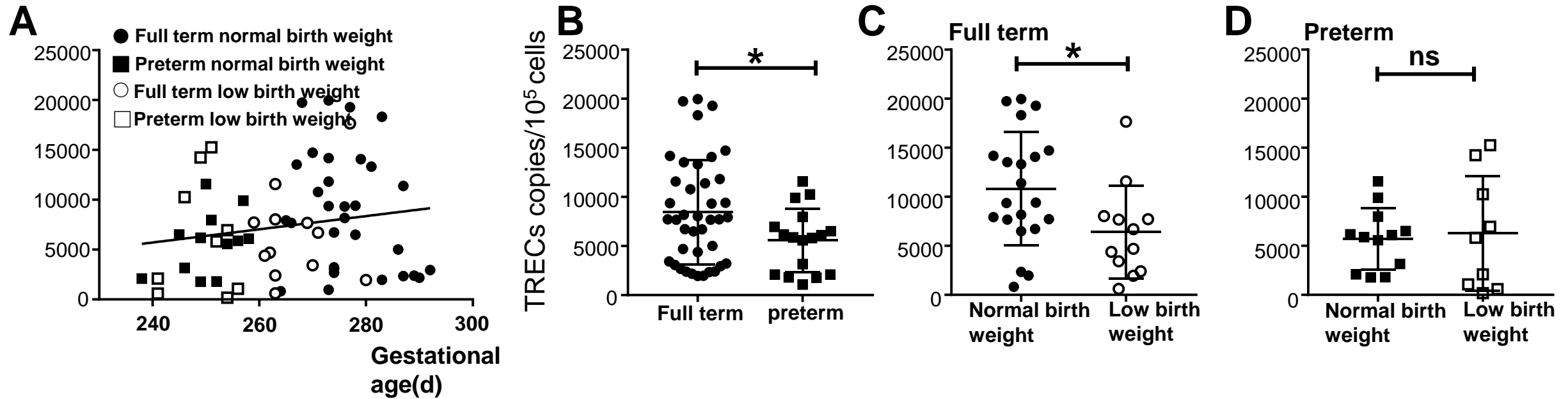


Fig.3 The TRECs of different gestational age and birth weight newborns were analyzed. We extract DNA from dry blood spot of newborns, the TRECs was analyzed. (A)The TRECs of different gestational aged and birth weighted newborns. (B)The TRECs of preterm newborn was lower than full terms. (C)In Full term newborn, the TRECs of low birth weight was lower than normal birth weight. (D) In preterm newborn, the TRECs of low birth weight was comparable to normal birth weight. *: $P < 0.05$; **: $P < 0.01$

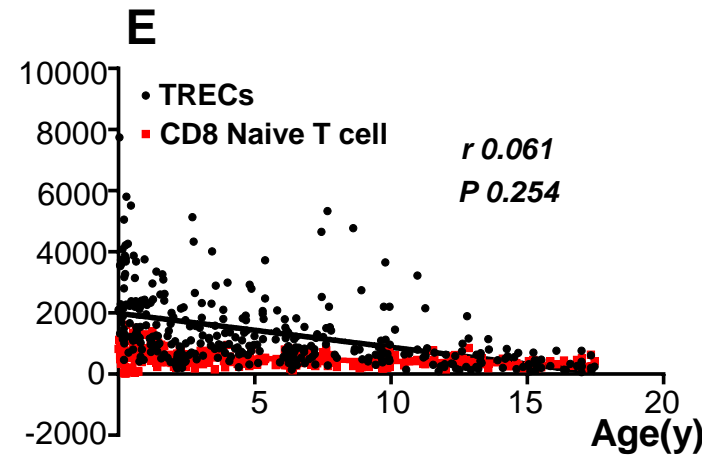
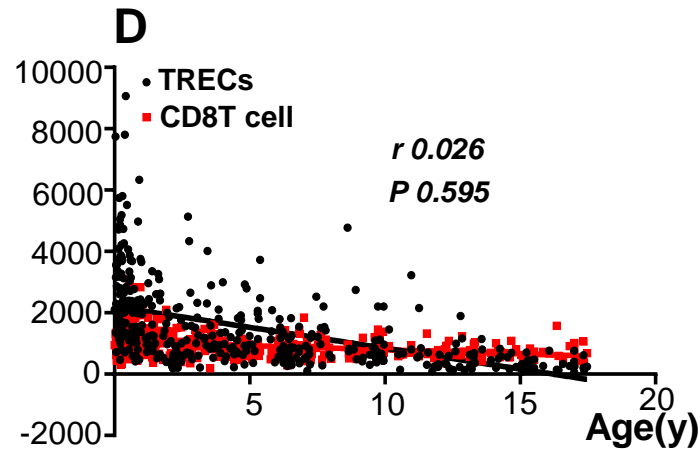
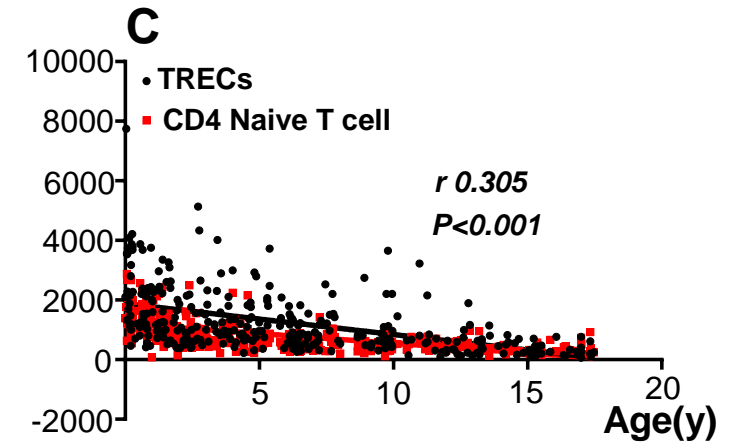
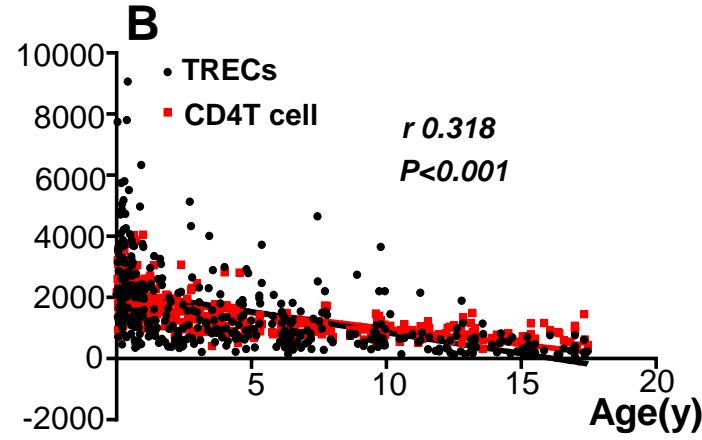
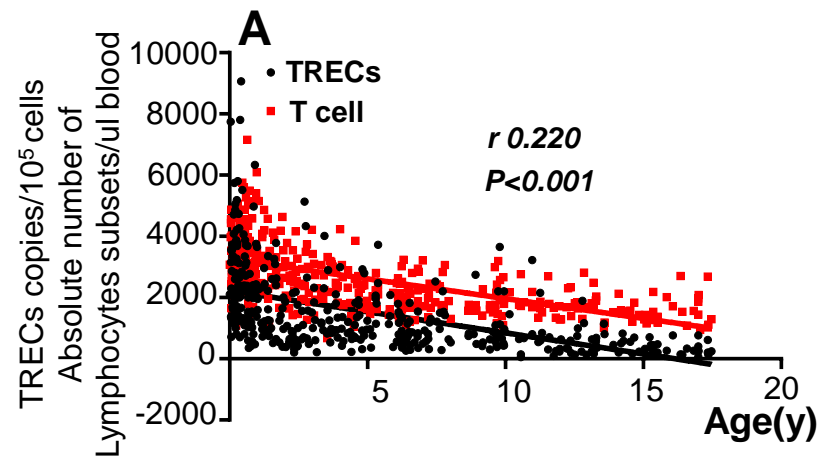
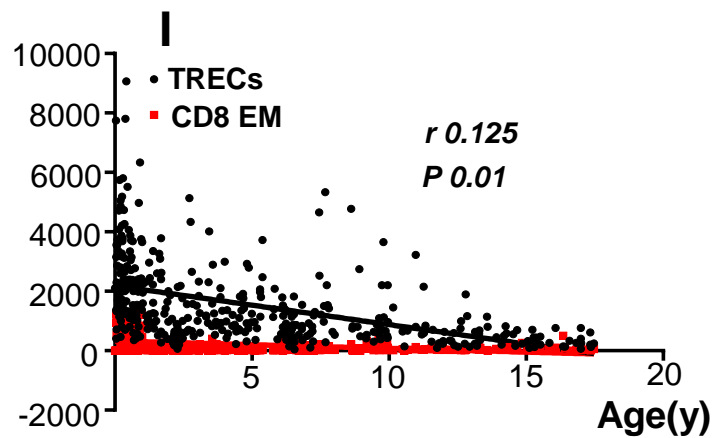
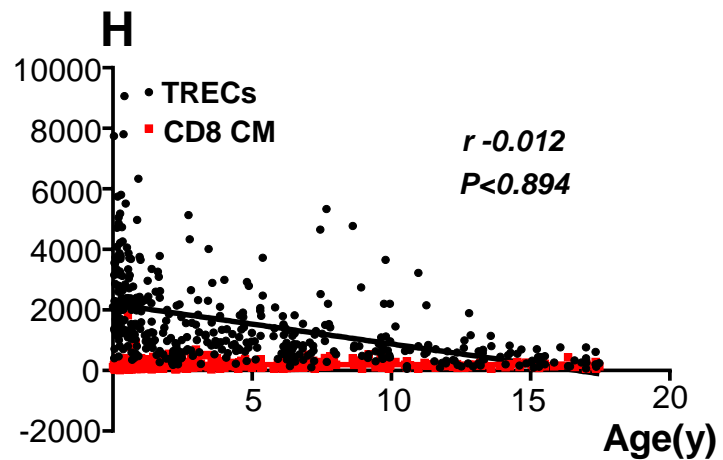
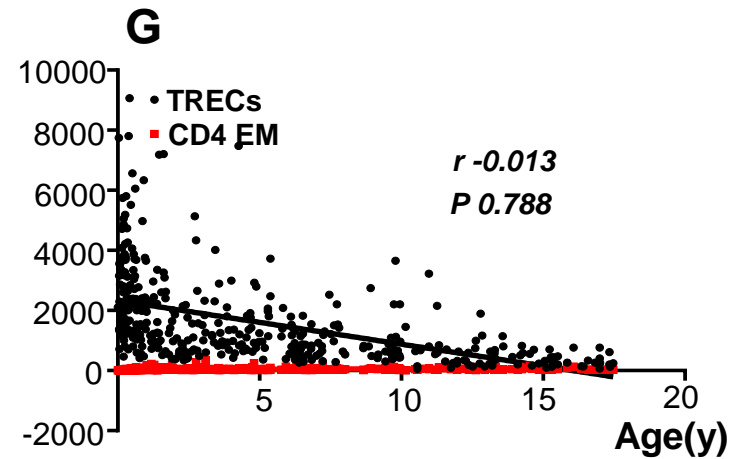
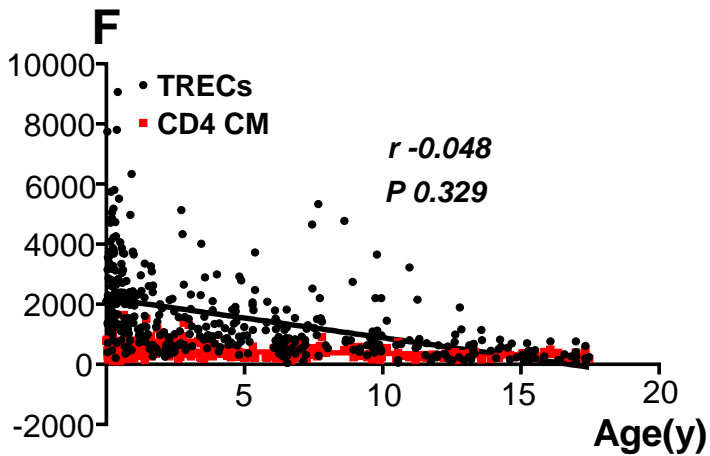


Fig.4 The correlation of T cell subsets and TRECs level. (A)

There was a minor correlation between TRECs and T cells absolute number. (B&C) There was a low correlation between TRECs and CD4+/CD4+ Naive T cells absolute number. (D&E) There was no correlation between CD8+/CD8+ Naive T cells absolute number.



(F&H&G&I) There was no correlation between CD4+/CD8+ centra memory(CM) /CD4/CD8 effector memory(EM) T cells absolute number and TRECs.

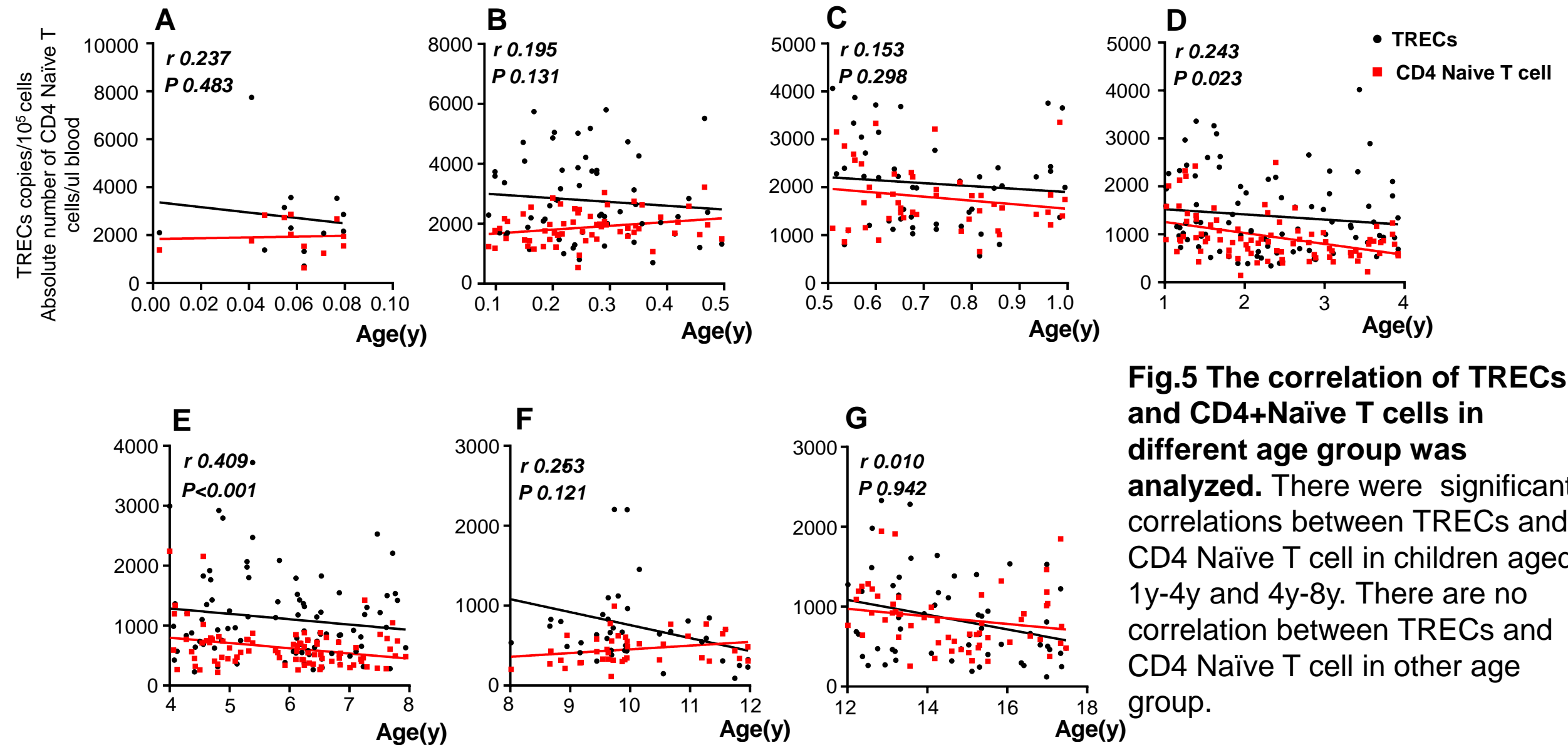


Fig.5 The correlation of TRECs and CD4+Naïve T cells in different age group was analyzed. There were significant correlations between TRECs and CD4 Naïve T cell in children aged 1y-4y and 4y-8y. There are no correlation between TRECs and CD4 Naïve T cell in other age group.

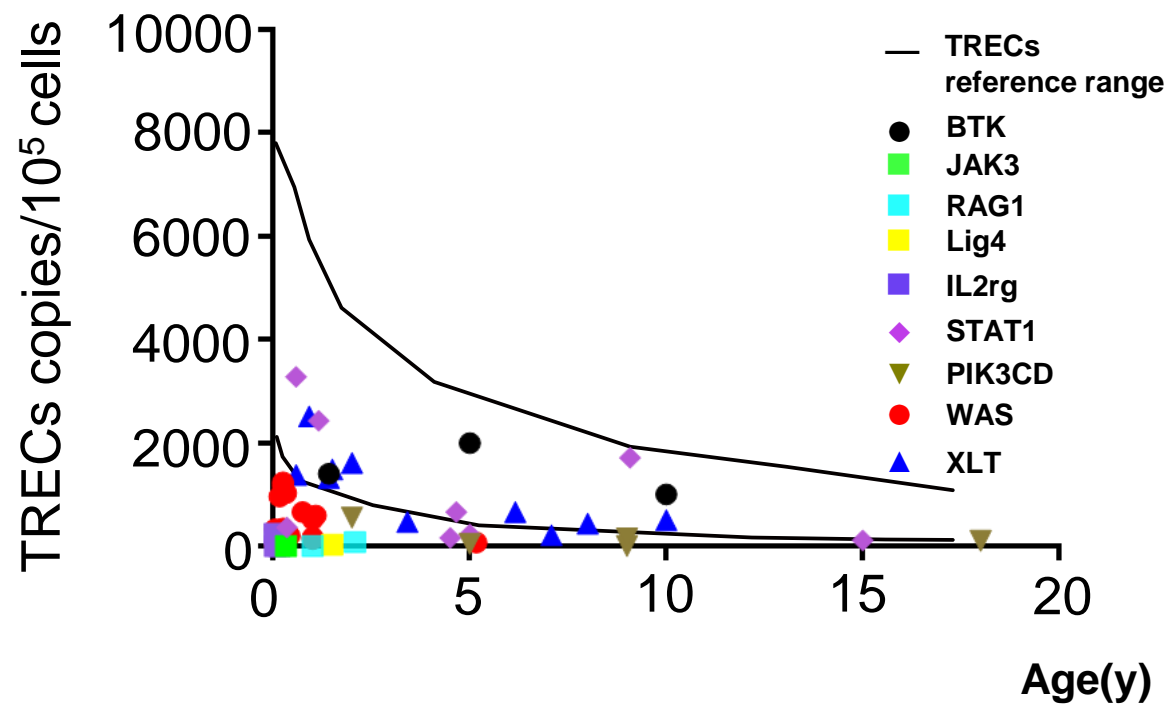


Fig.6 The TRECs copies in different PIDs. The qRT-PCR was used to analyzed the TRECs of peripheral blood DNA in different PIDs, including XLA/SCID/CMCD/MSMD/APDS/WAS/XLT

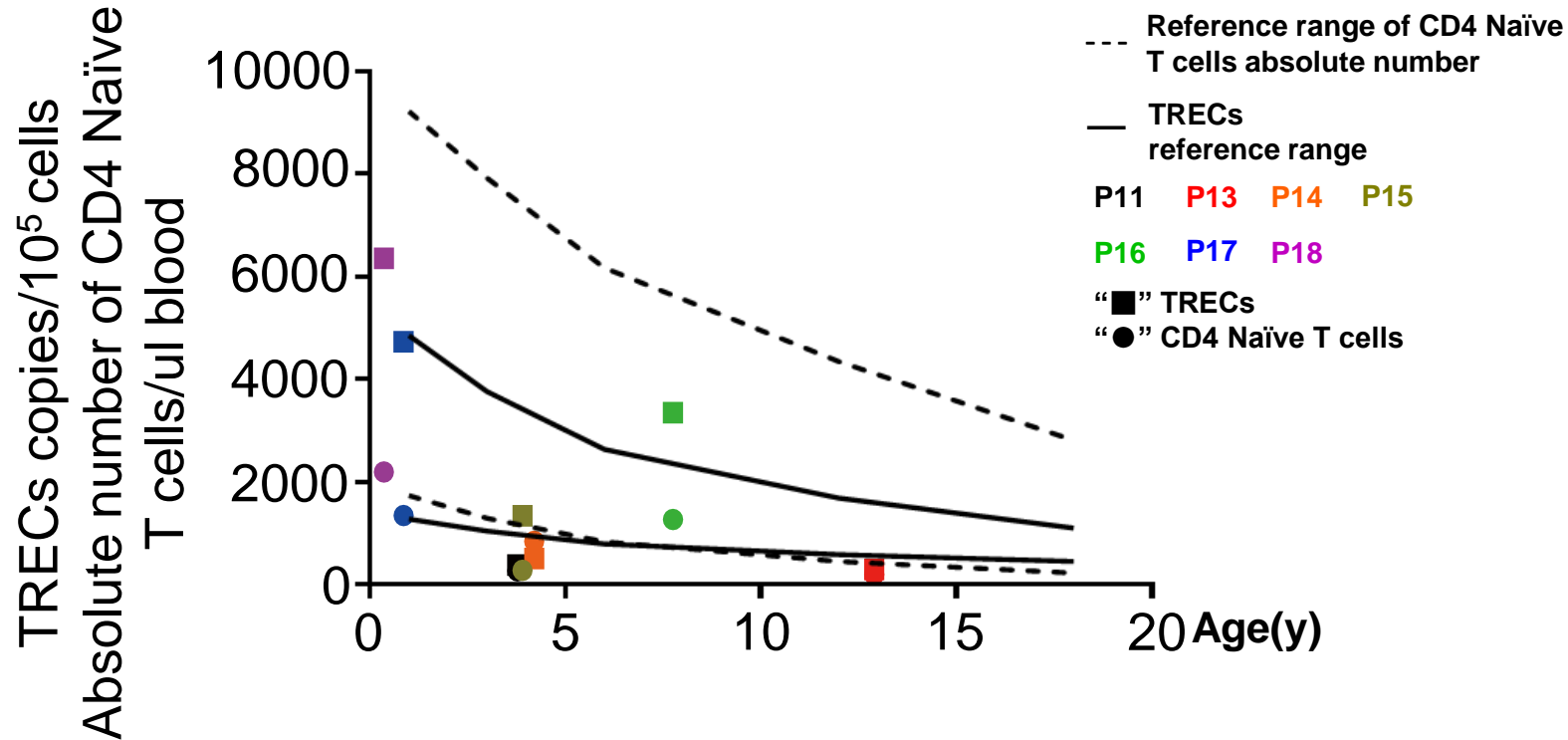


Fig.7 The TRECs level and CD4 Naïve T cells absolute number of STAT1 patients. The TRECs level of P11/P13/P14/P15 were decreased while the TRECs of P16/P17/P18 were in the normal range, that was consistent to their change of CD4 Naïve T cells absolute number

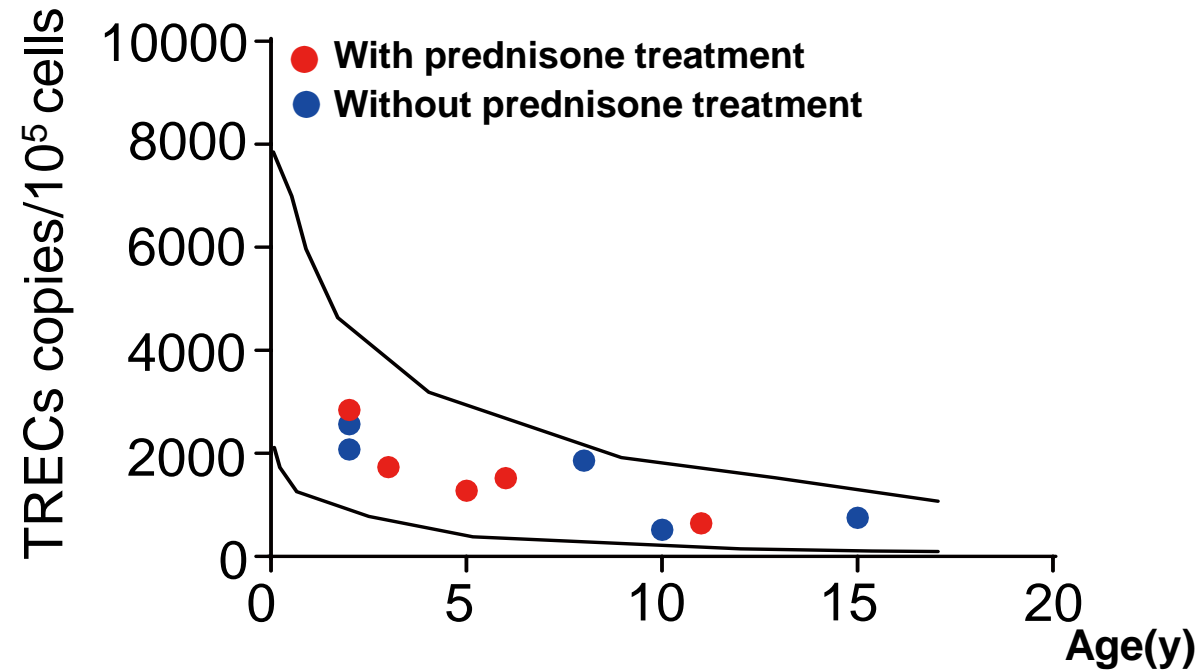


Fig.8 The TRECs level of nephrotic syndrome(NS) patients with or without prednisone treatment. The TRECs level of NS patients with or without prednisone treatment were in normal range.

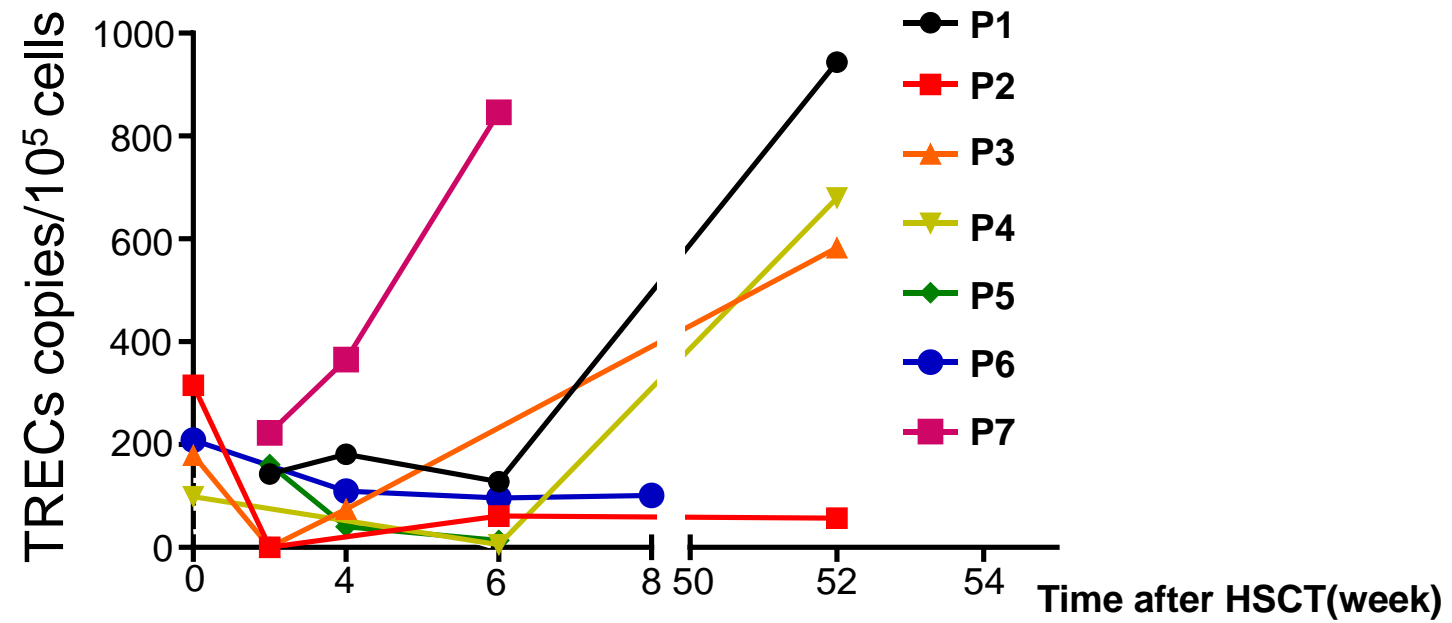


Fig.9 TRECs monitoring T cell reconstitution after HSCT. We followed up the TRECs level of 5 WAS and 2 CGD after HSCT.