

Fig.S1 Efficiency of this device to load cells. (a) The frequency distribution of the total number of cells per well at different initial concentrations. Statistics for each group are 500 wells. (b) The frequency distribution of ratio of immune/cancer cells after injecting into the device at 1: 1 initial mixed with the concentration of 10 million/ml. N = 500 wells.

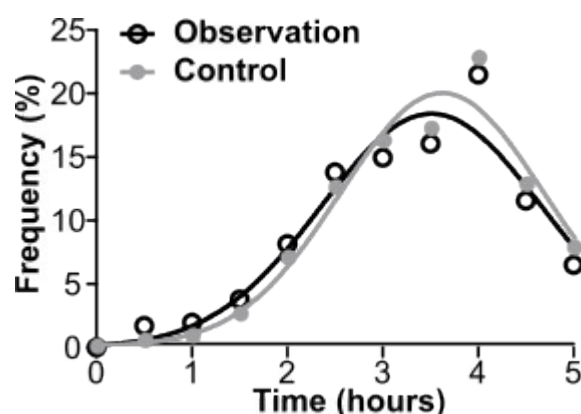


Fig. S2 The frequency distribution of the time duration from T cell contacted with C1498 cells to C1498 cells began to be killed by the T cell. The control group means that only one pair of effector-target cell killings occurred in a well. Observation group means at least 2 pairs of effector-target cell killings in a well. From this result, we did not observe a significant difference between the two groups regarding the time distribution of T cell killing leukemia cells. N = 500 killings per group.

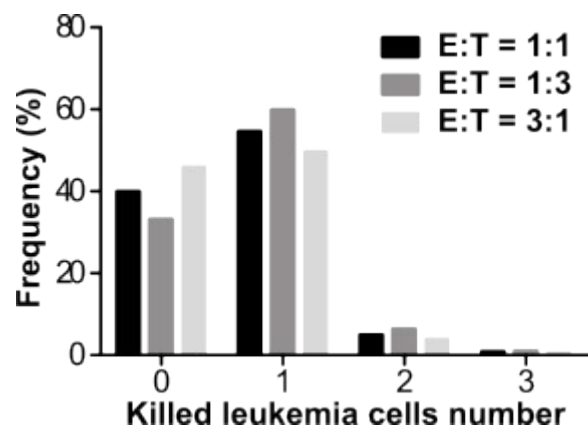


Fig. S3 The frequency distribution of the number of the C1498 cells killed by single T cell within 5 hours with different initial effector target cell ratios. E : T means OT-I : C1498.