

Figure S1

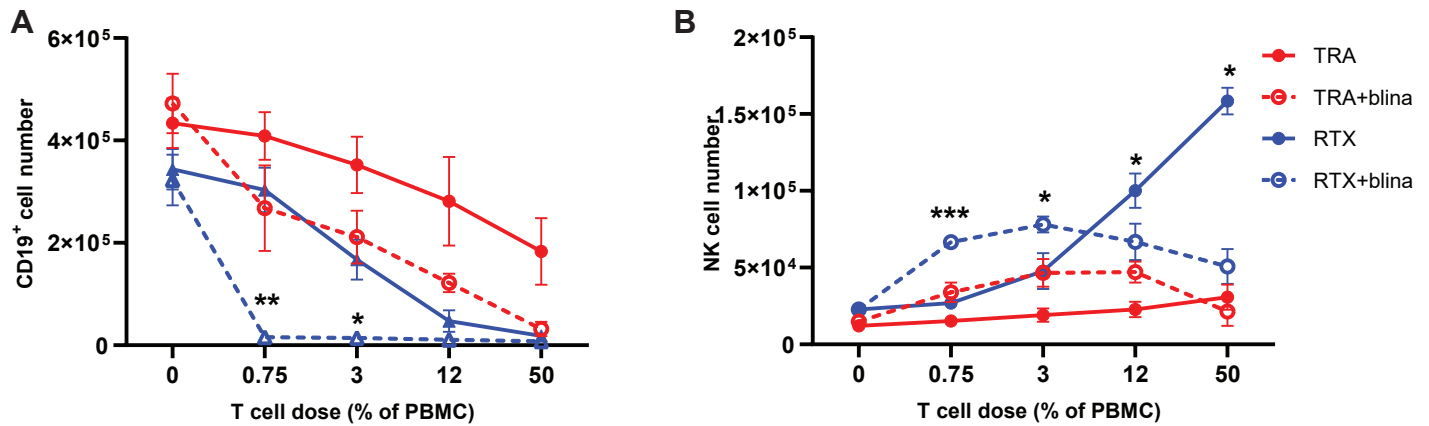


Figure S1. Blinatumomab enhances RTX-mediated NK cell response in Daudi cells.

PBMCs depleted of T cells were cocultured with Daudi cells and RTX or TRA for 7 days. Serial dilutions (from 0.75% to 50% of PBMCs) of autologous resting or blinatumomab (1ng/mL)-activated T cells were added to the coculture. RTX-mediated NK cell cytotoxicity (**A**) and viability (**B**) are T cell dose-dependent and further enhanced by blinatumomab at low T cell concentrations. Student's t-test was used to calculate statistical significance. n=4. * p<0.05, ** p<0.01, *** p<0.001 indicate RTX+blina versus RTX.

Figure S2

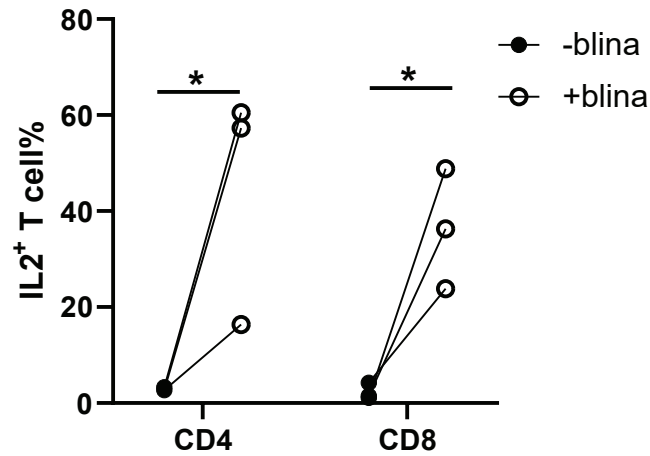


Figure S2. CD4⁺ and CD8⁺ T cells produce IL-2 in response to blinatumomab.

PBMCs were cocultured with Raji cells in the presence (+) or absence (-) of blinatumomab (1ng/mL) for 24 hours. Both CD4⁺ and CD8⁺ T cells activated by blinatumomab are able to produce IL-2. n=3.

* p<0.05. blina: blinatumomab.

Figure S3

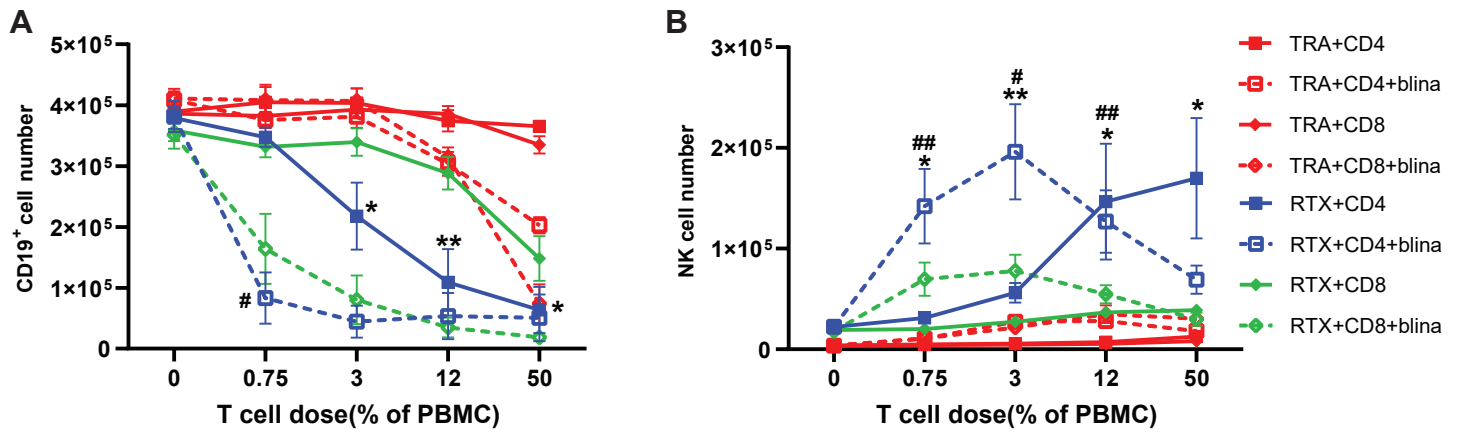


Figure S3. CD4⁺ is more efficient than CD8⁺ T cells in providing help to enhance RTX-mediated NK cell response.

PBMCs depleted of T cells were cocultured with Raji cells and RTX or TRA for 7 days. Serial dilutions (from 0.75% to 50% of PBMCs) of autologous CD4⁺ or CD8⁺ T cells were added back as was blinatumomab (1ng/mL) to select samples. Resting CD4⁺ cells were better than CD8⁺ cells in enhancing elimination of target cells (**A**) and maintaining NK viability (**B**). Both blinatumomab-activated CD4⁺ and CD8⁺ T cells were able to enhance RTX-mediated NK ADCC and viability, with CD4 being more efficient at low T cell concentrations. n=5. Student's t-test was used to calculate statistical significance. * p<0.05, ** p<0.01, *** p<0.001 indicate RTX + CD4 versus RTX + CD8; # p<0.05, ## p<0.01 indicate RTX + CD4 + blina versus RTX + CD8 + blina. blina: blinatumomab.

Figure S4

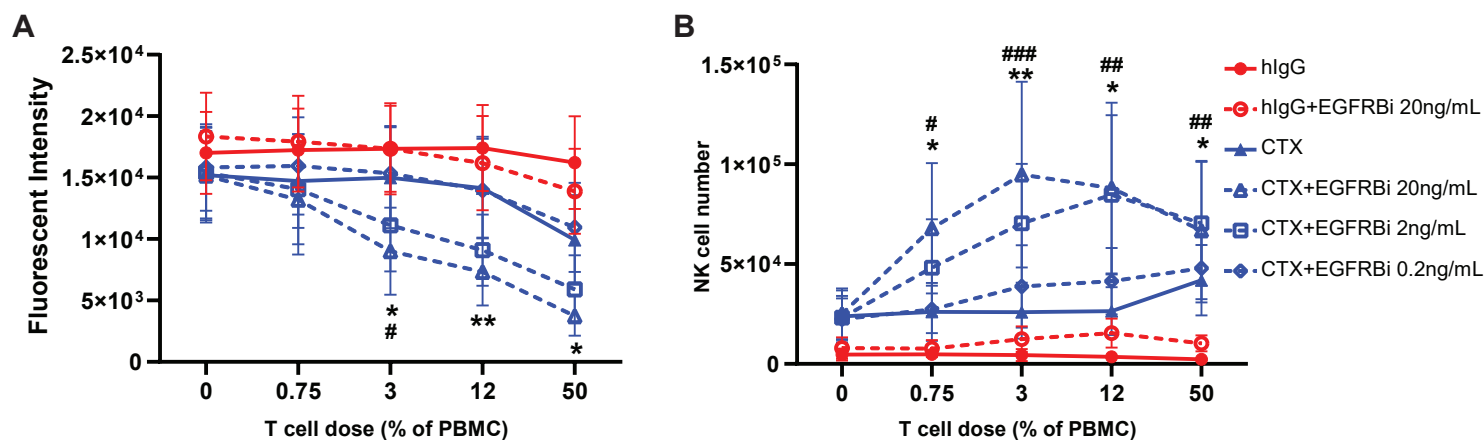


Figure S4. EGFRBi enhances cetuximab-mediated NK cell response.

PBMCs depleted of T cells were cocultured with SQ20B cells and cetuximab (CTX) or hlgG for 7 days. Serial dilutions (from 0.75% to 50% of PBMCs) of resting or EGFRBi (20, 2, 0.2ng/mL)-activated autologous T cells were added to the coculture. CTX-mediated NK cell cytotoxicity (**A**) as determined by the resazurin reduction assay and NK viability (**B**) are T cell dose dose-dependent and enhanced by EGFRBi at the concentration of 20ng/mL or 2ng/mL. n=5. Student's t-test was used to calculate statistical significance. * p<0.05, ** p<0.01 indicate CTX + bsAb 20ng/mL versus CTX; # p<0.05, ## p<0.01, ### p<0.001 indicate CTX + bsAb 2 ng/mL versus CTX.