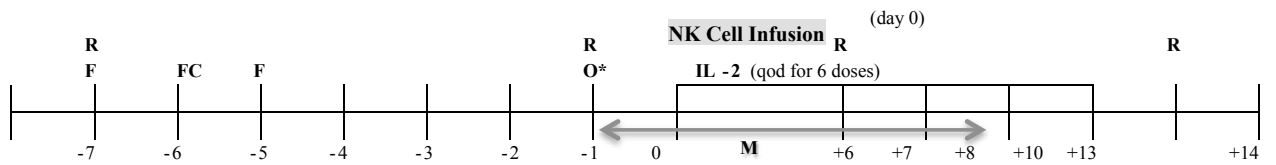


Supplementary Figure 1.

Scheme

R – Rituximab, F- Fludarabine O – Ontak (Denileukin Diftitox) C - Cyclophosphamide M-Methylprednisolone

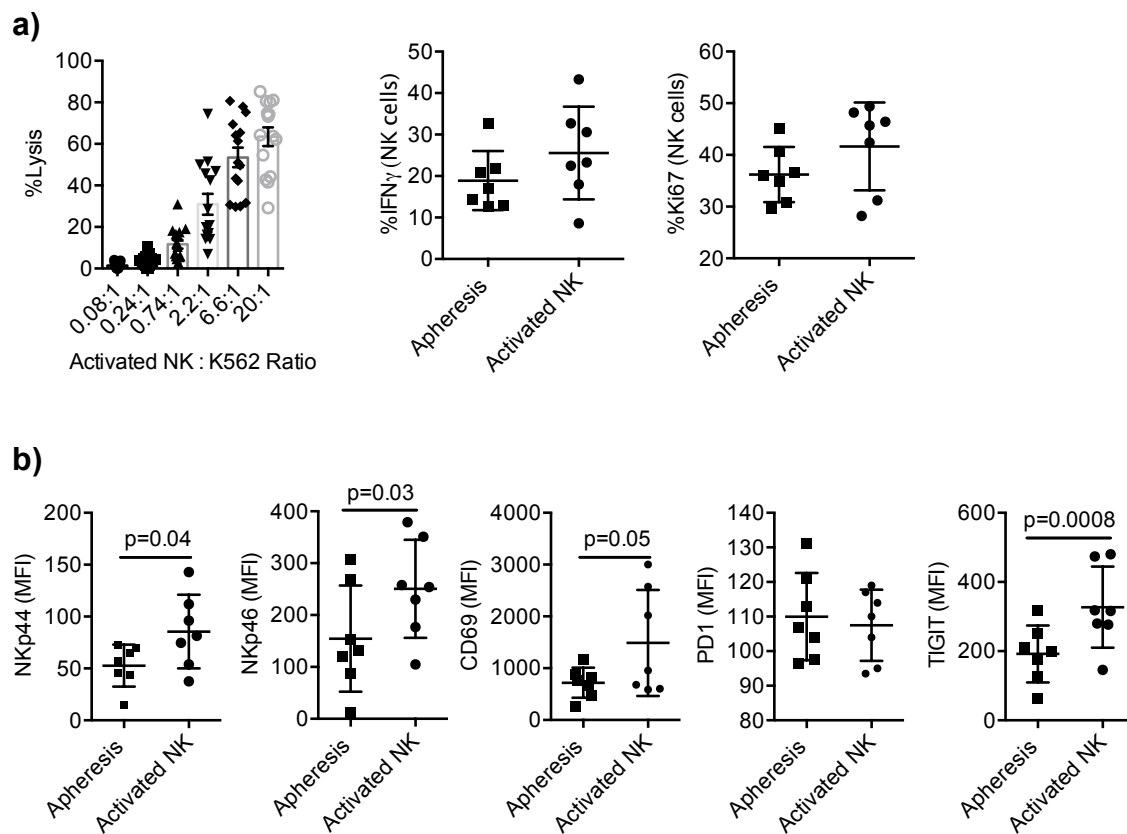


after first 5 patients, the denileukin dose was increased to 3 days on day -4, -3, -2; Pentostatin was used instead of Fludarabine in first 6 patients

Supplementary Figure 1.

Treatment scheme.

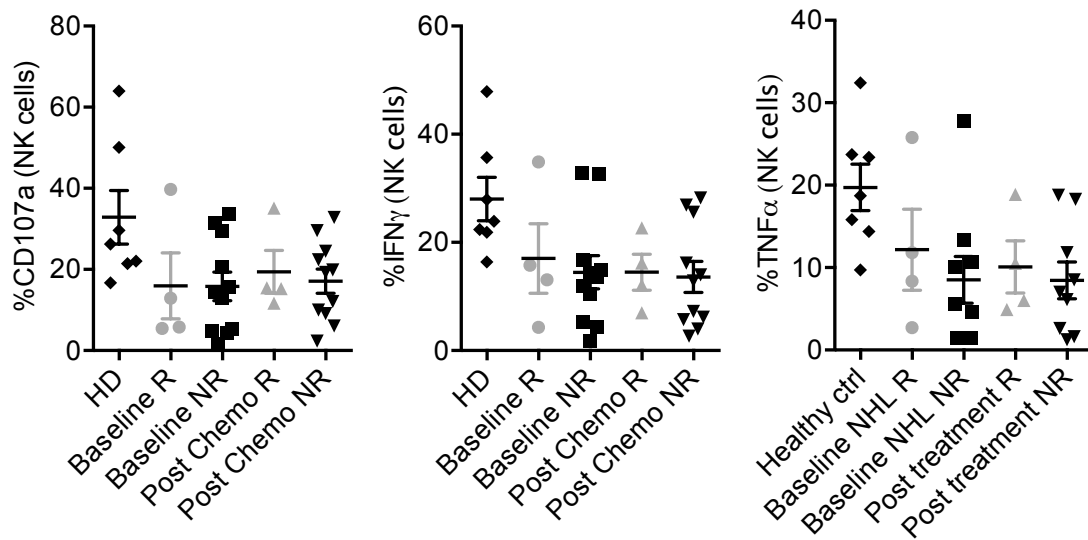
Supplementary Figure 2.



Supplementary Figure 2.

Donor NK cells were evaluated for **a)** cytotoxicity against K562 at different effector to target ratios and **b)** the expression of activating and inhibitory receptors following 24-hour activation compared to apheresis products. Data are shown as mean \pm SEM, and statistical analyses were done on pooled data using the Student's paired t test. Each symbol represents individual donor.

Supplementary Figure 3.



Supplementary Figure 3.

PBMC from NHL patients (n=14) and healthy controls (n=7) were rested overnight in medium and stimulated with target cells (K562) and cytokines 6 hours prior staining. NK cell degranulation (CD107a), IFN γ and TNF α production were evaluated in responders (R) and non-responders (NR) by flow cytometry. Data are shown as mean \pm SEM, and statistical analyses were done on pooled data using the Student's unpaired t test. Each symbol represents different individuals.

Supplementary Table 1.

Marker	Clone	Fluorochrome	Manufactory
CD3	OKT3	APC/CY7	Biolegend
CD3	OKT3	BV785	Biolegend
CD3	7D6	PE-Texas Red	Invitrogen
CD56	NCAM	APC/CY7	Biolegend
CD56	NCAM	PE/CY7	Biolegend
CD45	HI30	BV711	Biolegend
HLA-DR	L243	AF488	Biolegend
CD11b	ICRF44	PE	Biolegend
CD33	WM53	APC	Biolegend
CD14	M5E2	Pacific B	BD Biosciences
CD14	M5E2	APC/CY7	BD Biosciences
CD19	HIB19	APC/CY7	BD Biosciences
CD16	3G8	AF700	Biolegend
NKp44	P44-8	APC	Biolegend
NKp46	9.00E+02	PerCP-eFluor® 710	BD Biosciences
NKp30	P30-15	PE	Biolegend
CD107a	H4A3	PerCP/Cy5.5	Biolegend
IFN γ	4S.B3	BV650	Biolegend
Ki67	B56	AF700	BD Biosciences
TIGIT	741182	APC	R&D systems
PD-1	MIH4	APC	eBiosciences
TIM-3	F38-2E2	PerCP-eFluor® 710	eBiosciences
KIR3DL1	DX9	AF700	Biolegend
CD57	HCD57	Pacific B	Biolegend
KIR2DL2	CH-L	FITC	BD Biosciences
KIR2DL1	HP-MA4	PerCP/Cy5.5	eBiosciences
NKG2A	Z199	APC	Beckman Coulter
NKG2C	134591	PE	R&D systems
Fixable dead cell marker		Near-IR	Invitrogen

Supplementary Table 1.

Antibodies and fluorescent dyes used in different experiments.

Supplementary Table 2.

Product number	%CD57	%KIR2DL1	%KIR2DL2/ DL3	%KIR3DL1	%NKG2A	%NKG2C	CD57+NKG2C+
1	30	35.6	21	31.9	64.3	8.16	2.33
2	39.8	19.2	27.3	36.9	44.9	30.9	25
3	47.4	26.7	30.6	17.5	79.3	15.9	8.21
4	53	39.4	40.2	45	56.8	6	3.1
5	53.3	6.26	5.02	73.1	20.4	53.5	37.5
6	24.2	13.7	11.2	6.11	47.3	0.93	0.21
7	31.4	33.3	8.22	37.5	68.6	1.38	0.44
8	41.9	20.2	31.1	13.8	39.1	5.08	1.11
9	67.5	21.6	28.5	32.9	51.7	23	17.6
10	29.8	24.9	40.9	21.4	44	5.64	1.3
11	36.5	30.1	12.8	24.7	50.2	0.43	0.12
12	48.9	7.2	49.9	13.4	47.9	1.23	1.03
13	70.4	26.3	13.1	32	72.5	1.59	1.4
14	54.3	16	46.4	42.8	79.9	3.11	2.21
15	20.5	21.6	22	13.5	61	7.5	2.47
Median	42%	22%	27%	32%	52%	6%	2.2%

Supplementary Table 2.

Product NK cell phenotype following 24 hour activation with IL-2.