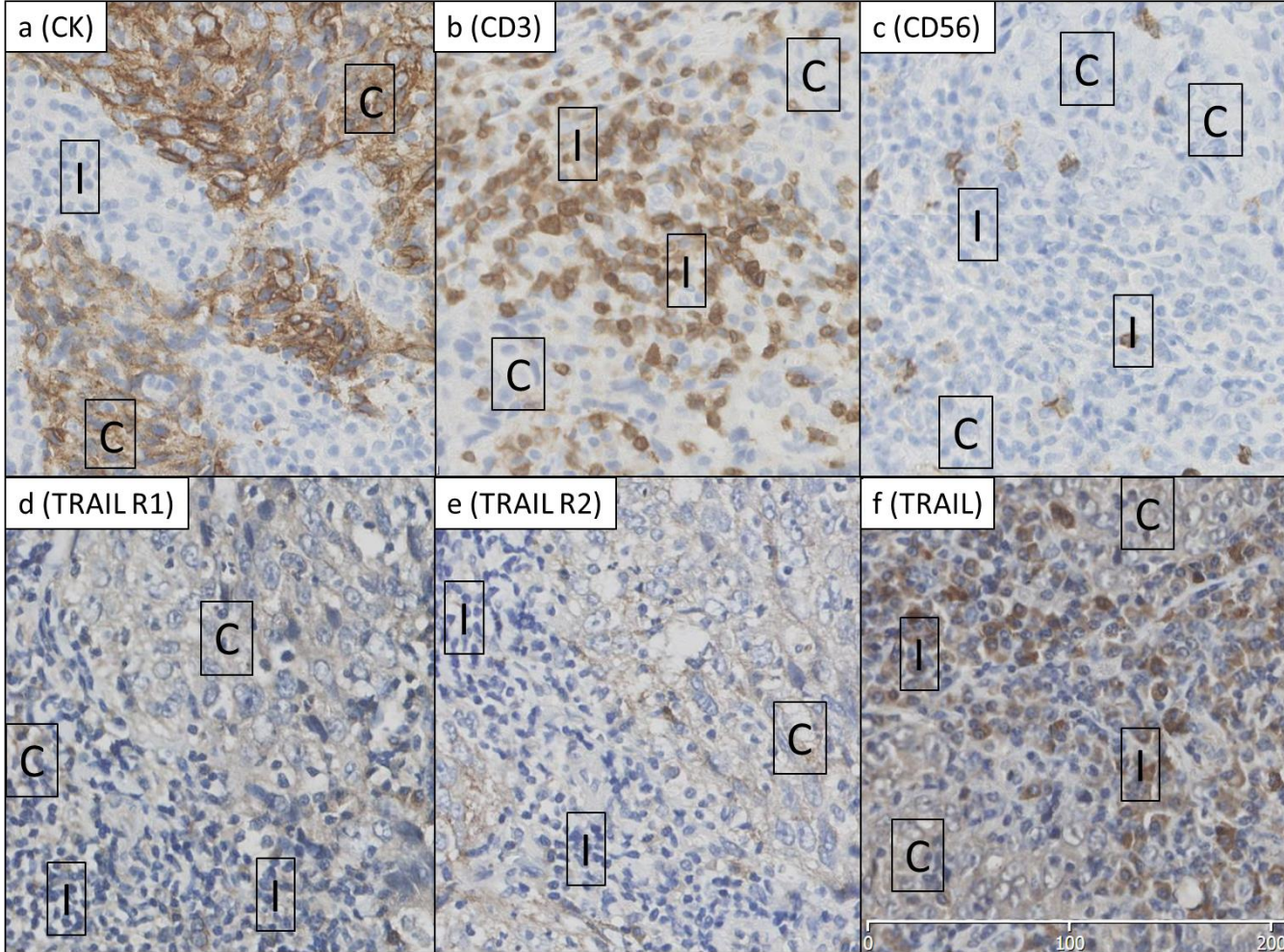


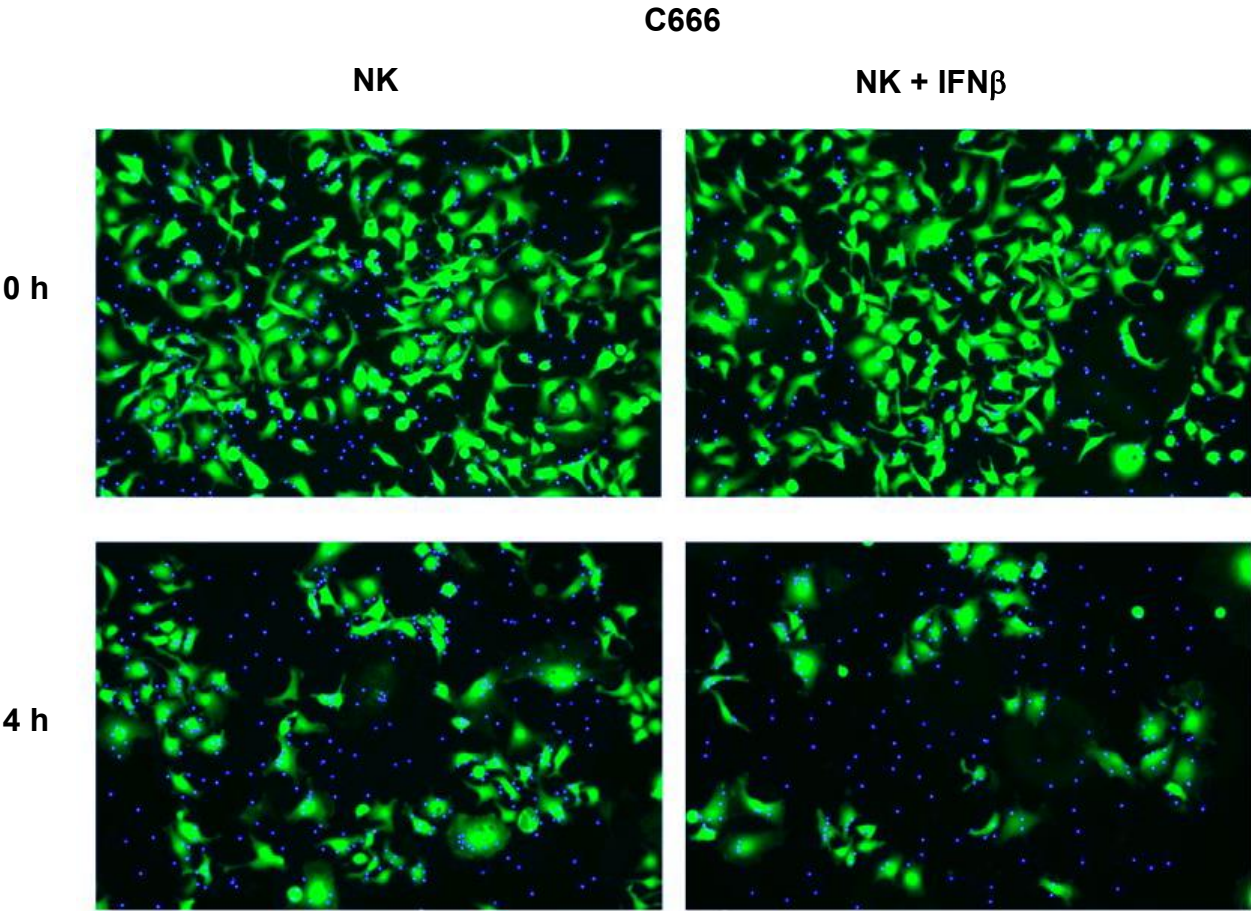
Supplementary Figure 1

Immunohistochemical staining of patient 1's tumor. **a** Carcinoma cells (C) stain positive for pan-Keratin, whereas inflammatory infiltrates (I) are negative. **b** Staining of T lymphocytes by anti-CD3, demonstrating an infiltration within the carcinoma with a relation of tumor cells (TC) to lymphocytes (TL) (TC : TL) of 3:1. **c** CD56 staining of natural killer cells (NK cells) with a relation of tumor cells (TC) to NK cells (TC : NK) of 15:1. **d** Low to moderate membranous staining for TRAIL-R1 in carcinoma and histiocytic cells. **e** TRAIL-R2 is low to moderately expressed in carcinoma cells and single histiocytic cells. **f** TRAIL stains positive, mainly in lymphocytes and NK cells. 200 x magnification in all stains.



Supplementary Figure 2

Increased NK cell cytotoxicity against NPC cells after administration of IFN β .
Immunofluorescent imaging of IFN β -stimulated or unstimulated NK cells from a healthy donor and NPC cells C666-1 at the beginning or 4h after coculture at an E:T ratio of 6:1. NK cells were stained by DAPI (blue), NPC cells by calcein (green).



Supplementary Table 1: Upregulation of TRAIL mRNA in NK cells from NPC patients treated with IFN β .

	TRAIL		
	0h	6h	24h
Patient 1	2.84981	1.99956	10.9406
Patient 2	3.10478	6.09973	16.1526
Healthy Donor 1	1.44607	15.0968	11.6360
Healthy Donor 2	1.09508	21.4286	26.5041

Values are given as TPM (transcripts per kilobase million). mRNA expression was analysed by RNAseq before, 6 h and 24 h after subcutaneous administration of 3 M U IFN β