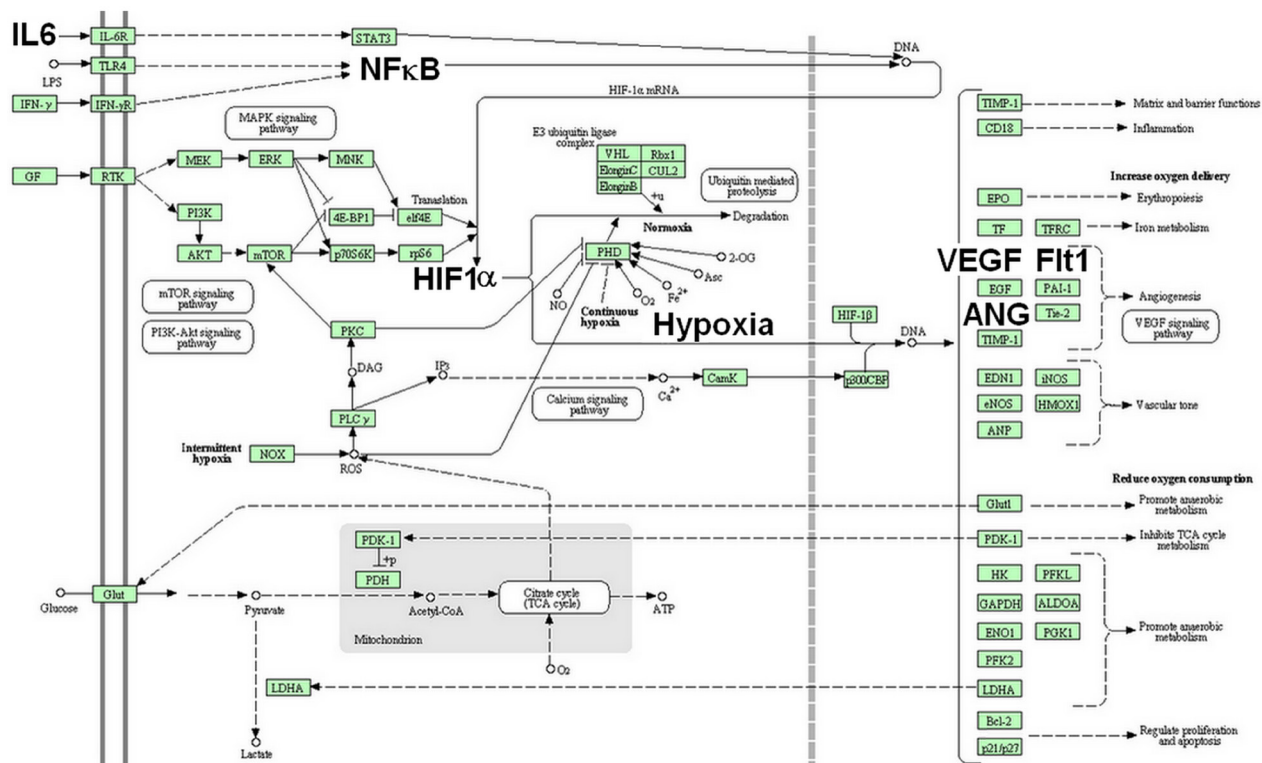


# Renal cell tumors convert natural killer cells to a proangiogenic phenotype

## SUPPLEMENTARY MATERIALS



**Supplementary Figure 1: HIF1 $\alpha$  signaling pathway.** Schematic diagram of the HIF1 $\alpha$  signaling pathway with genes and characteristics of direct significance to conversion of pNK to dNK-like cells in the tumor microenvironment highlighted in bold.

**Supplementary Table 1: Phenotype of patient-matched pNK and TiNK cells used for gene expression studies**

	Peripheral Blood (pNK)		RCC Tumor (TiNK)	
	CD56 <sup>+</sup> CD16 <sup>dim/neg</sup> #	VEGF mRNA <sup>†</sup>	CD56 <sup>+</sup> CD16 <sup>dim/neg</sup> #	VEGF mRNA <sup>†</sup>
	(%)	(% $\beta$ -actin)	(%)	(% $\beta$ -actin)
Pt. 1	20	0.294	89	8.379
Pt. 2	11	0.035	51	3.359
Pt. 3	4	0.076	19	0.645
Pt. 4	8	0.039	61	2.017

#Determined by multi-color flow cytometry and reported as percentage of total CD56<sup>+</sup> population.

†Determined by RT-qPCR and reported as percentage of  $\beta$ -actin internal control.

**Supplementary Table 2: Transcript levels in NK cells isolated from peripheral blood (pNK) or tumor tissue (TiNK) of patients with renal cancer. See Supplementary Table 2**

**Supplementary Table 3: Gene expression results for RCC NK cells versus dNK cells. See Supplementary Table 3**