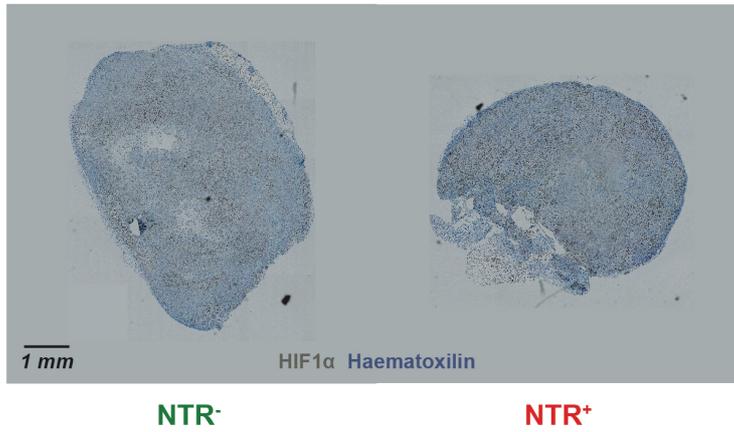
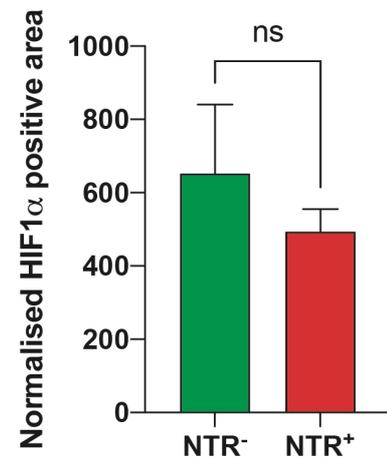




### A Hypoxia of MDA-MB-231 xenografts

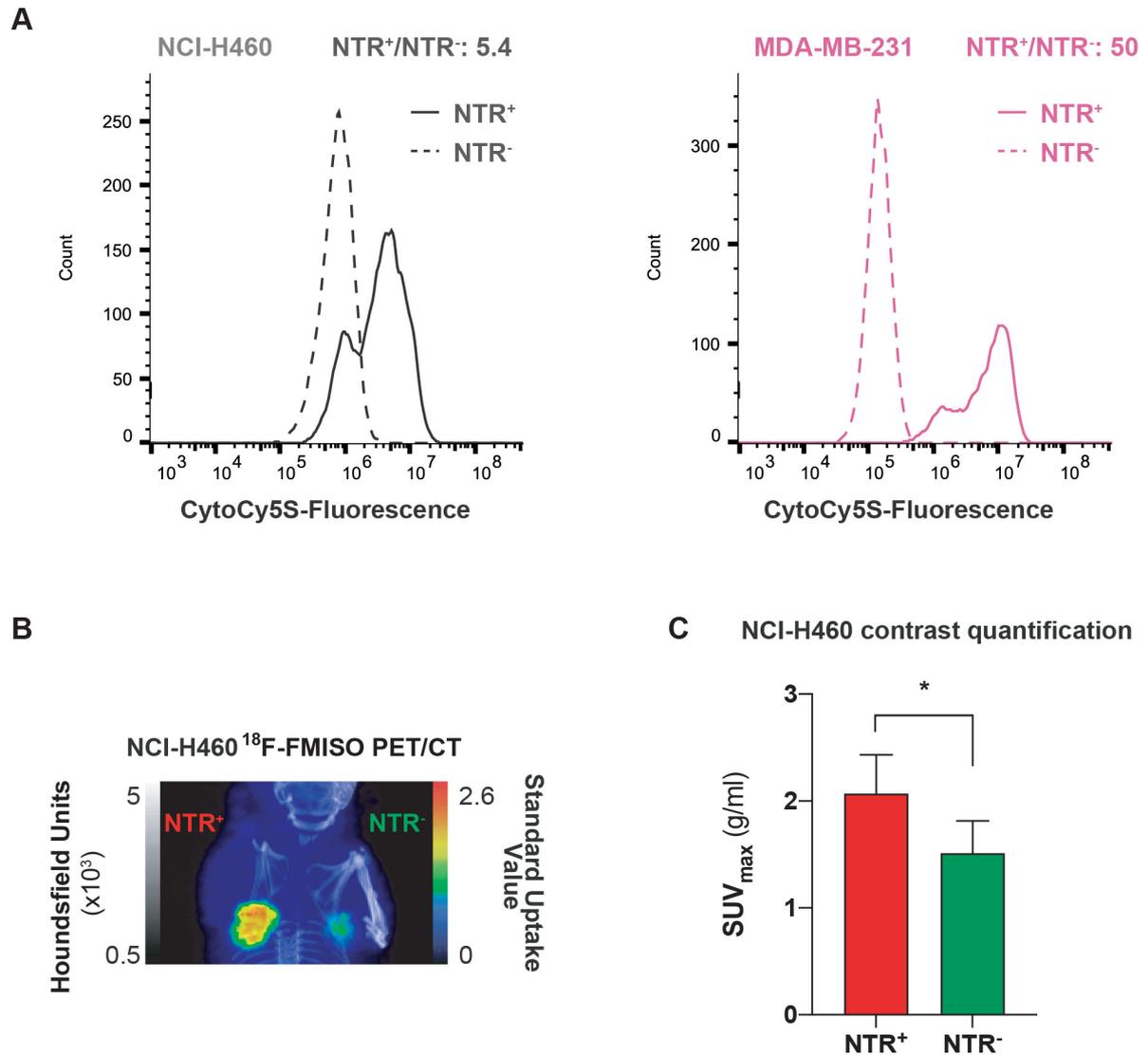


### B HIF1 $\alpha$ quantification



### FIGURE S2

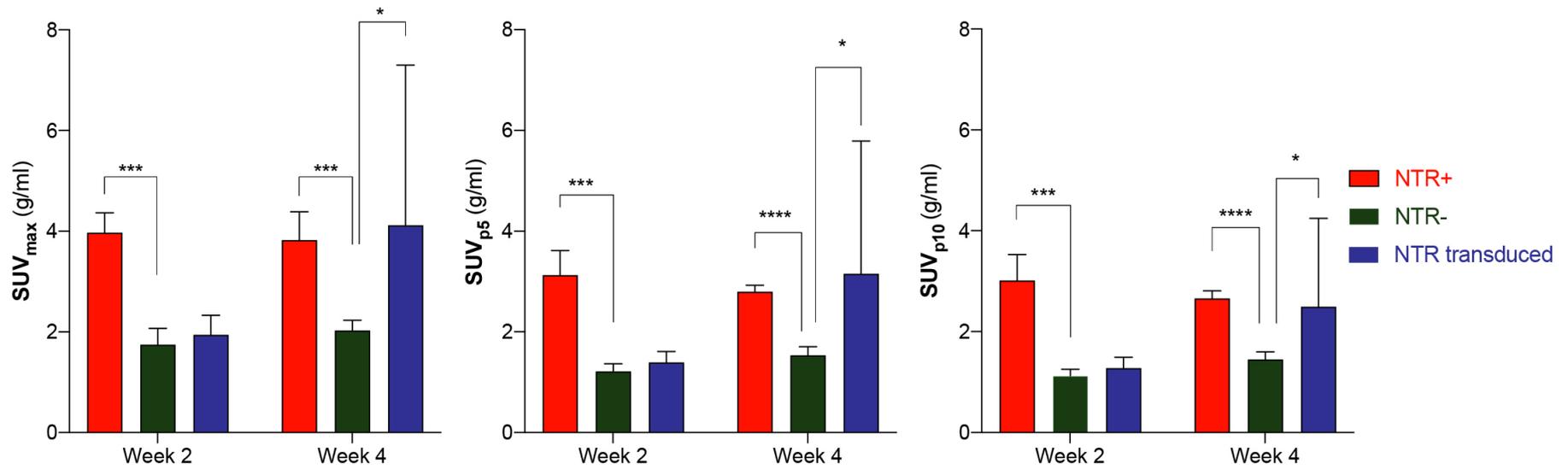
(A) Example of HIF1 $\alpha$  IHC in NTR<sup>-</sup> and NTR<sup>+</sup> MDA-MB-231 xenografts. (B) No significant difference was observed in the normalised area positive for HIF1 $\alpha$  between NTR<sup>-</sup> and NTR<sup>+</sup> MDA-MB-231 xenografts (n = 3, per group).



**FIGURE S3**

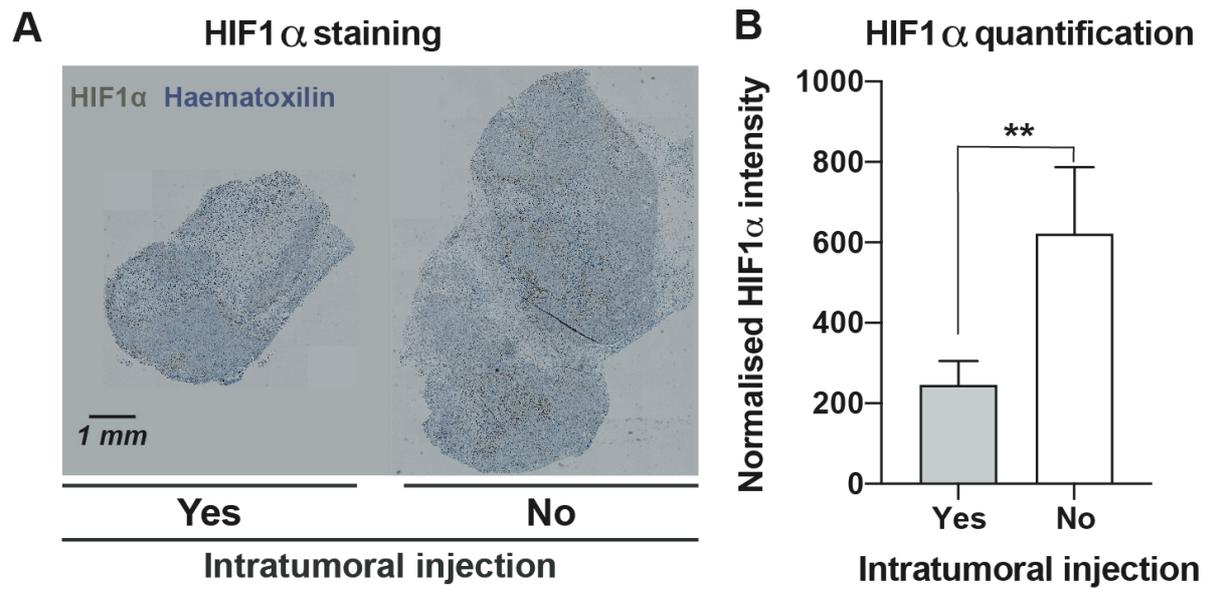
(A) NTR<sup>+</sup>/NTR<sup>-</sup> ratio was notably lower for NCI-H460 than for MDA-MB-231 cell line (B) Representative <sup>18</sup>F-FMISO PET/CT MIP images of NCI-H460 xenografts. NTR<sup>-</sup> tumour (right flank) and NTR<sup>+</sup> tumour (left flank). (C) SUV<sub>max</sub> values were significantly higher in NTR<sup>+</sup> xenografts. (\*,  $p < 0.05$ ,  $n = 4$ )

The p-values are represented as indicated: \*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$  and \*\*\*\*  $p < 0.0001$ .



**FIGURE S4**

SUV<sub>max</sub>, SUV<sub>p5</sub> and SUV<sub>p10</sub> analyses show similar results in the *in vivo* transduced tumours. The p-values are represented as indicated: \*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$  and \*\*\*\*  $p < 0.0001$ .



**FIGURE S5**

(A) The spatial pattern of HIF1 $\alpha$  accumulation was similar in both intratumorally injected and non-injected tumours MDA-MB-231 NTR<sup>-</sup> xenografts. (B) The normalised HIF1 $\alpha$  positive area was significantly lower in intratumorally injected xenografts (n = 4 per group).