

**$^{86/90}\text{Y}$ -based theranostics targeting angiogenesis in a murine breast cancer model**

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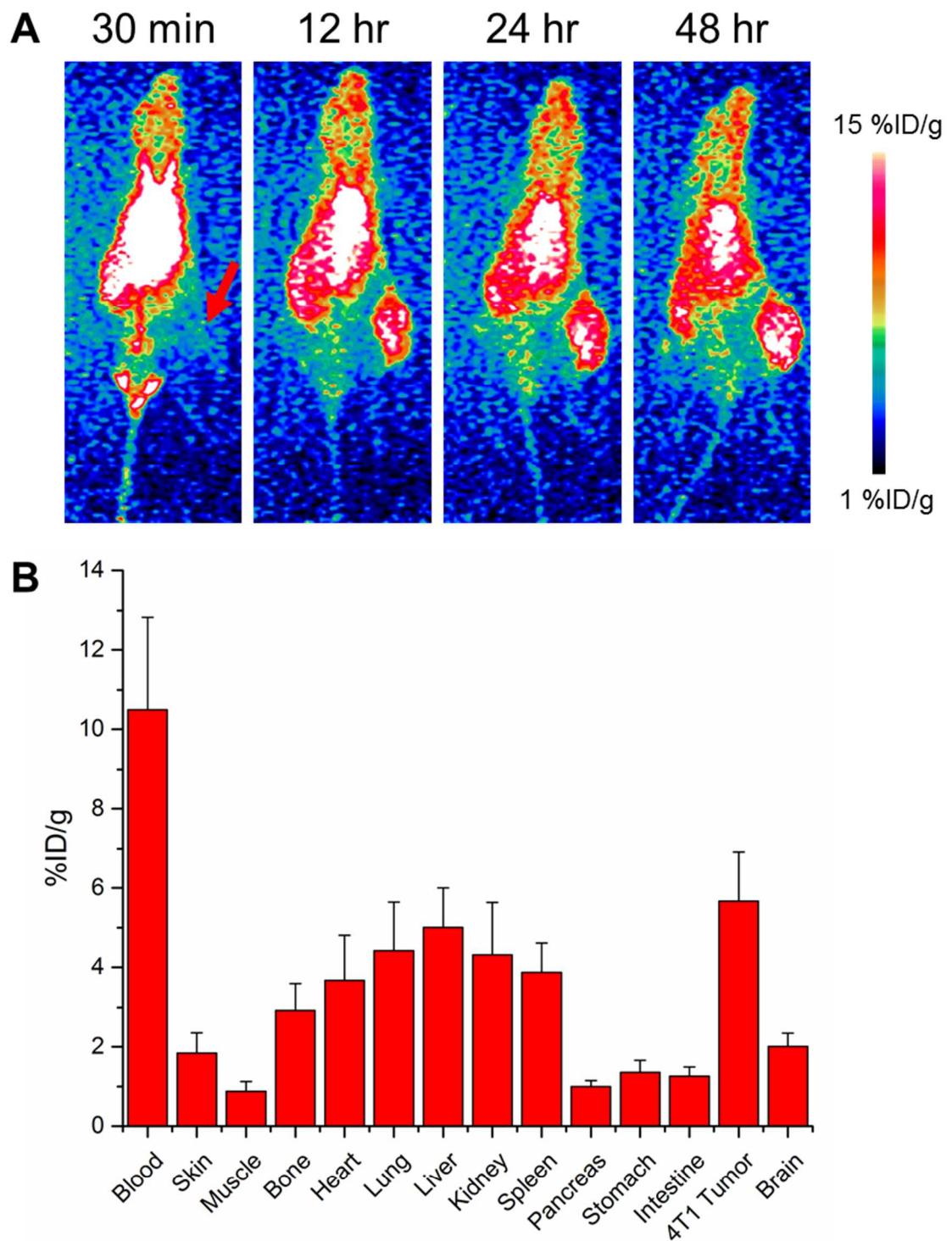
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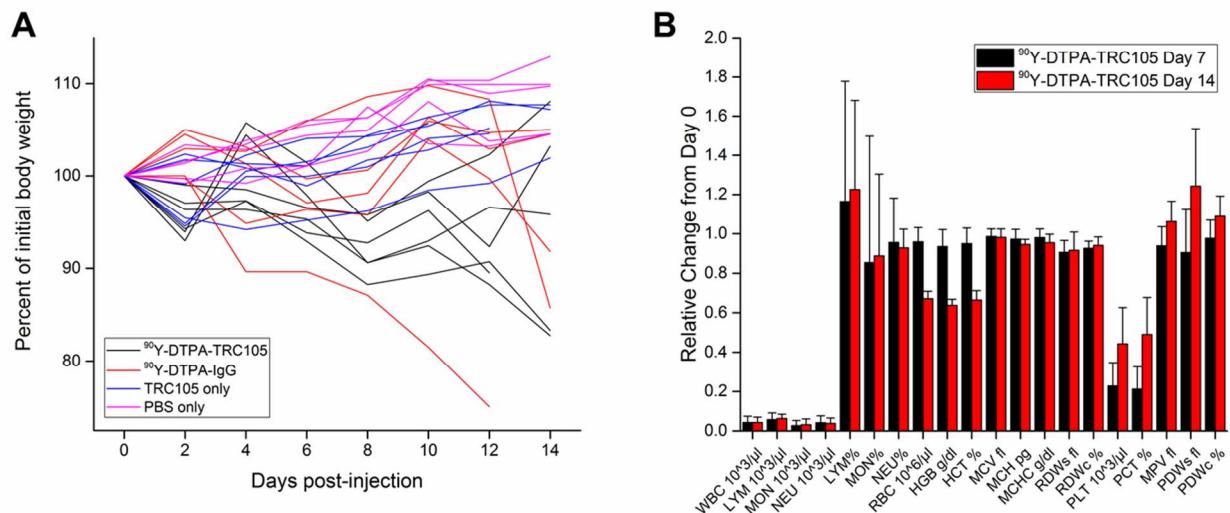
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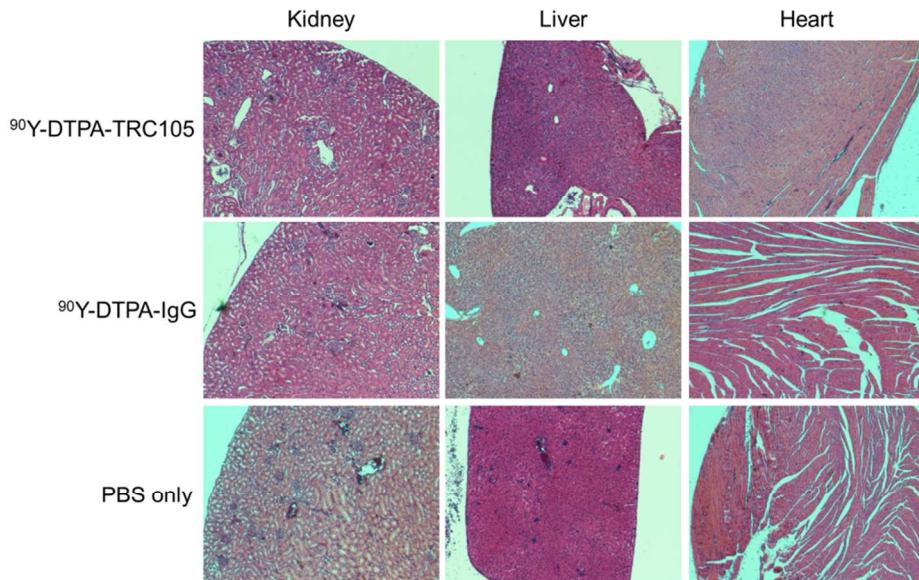
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**Figure S1.** PET imaging of  $^{86}\text{Y}$ -DTPA-IgG. (A) Serial representative MIP images. (B) *Ex vivo* biodistribution results, n=4.



**Figure S2.** Results of toxicity monitoring. (A) Body weights of all mice were measured every other day. (B) Complete blood count analyses from mice injected with <sup>90</sup>Y-DTPA-TRC105. N=5-6 per group.



**Figure S3.** Histological evaluation of tissues from therapeutic groups at 14 days post-injection.

**Table S1.** PET ROI data following injection of  $^{86}\text{Y}$ -DTPA-TRC105, in %ID/g, n=4.

Organ	30 min	12 h	24 h	48 h
<b>Heart</b>	19.53 $\pm$ 4.10	12.10 $\pm$ 2.52	12.60 $\pm$ 0.10	9.13 $\pm$ 1.73
<b>Liver</b>	14.25 $\pm$ 3.36	8.75 $\pm$ 1.19	9.80 $\pm$ 0.30	7.13 $\pm$ 0.93
<b>Spleen</b>	9.03 $\pm$ 2.01	6.90 $\pm$ 1.38	8.00 $\pm$ 1.40	6.43 $\pm$ 1.61
<b>Tumor</b>	2.28 $\pm$ 0.55	8.10 $\pm$ 0.95	9.60 $\pm$ 0.30	9.13 $\pm$ 1.05
<b>Muscle</b>	1.53 $\pm$ 0.31	1.58 $\pm$ 0.18	1.95 $\pm$ 0.05	1.48 $\pm$ 0.19
<b>Brain</b>	2.08 $\pm$ 0.41	1.65 $\pm$ 0.46	1.55 $\pm$ 0.05	1.35 $\pm$ 0.33

**Table S2.** PET ROI data following injection of  $^{86}\text{Y}$ -DTPA-IgG, in %ID/g, n=4.

Organ	30 min	12 h	24 h	48 h
<b>Heart</b>	22.08 $\pm$ 3.51	14.58 $\pm$ 2.97	12.43 $\pm$ 2.43	10.90 $\pm$ 2.60
<b>Liver</b>	15.43 $\pm$ 2.57	9.83 $\pm$ 1.66	9.20 $\pm$ 1.59	8.10 $\pm$ 1.43
<b>Spleen</b>	7.98 $\pm$ 2.06	7.60 $\pm$ 1.63	7.20 $\pm$ 1.69	6.70 $\pm$ 1.74
<b>Tumor</b>	2.55 $\pm$ 0.81	7.98 $\pm$ 1.14	8.58 $\pm$ 1.31	8.63 $\pm$ 1.59
<b>Muscle</b>	1.65 $\pm$ 0.35	1.78 $\pm$ 0.57	1.75 $\pm$ 0.63	1.65 $\pm$ 0.48
<b>Brain</b>	2.80 $\pm$ 0.29	2.05 $\pm$ 0.54	2.15 $\pm$ 0.30	1.80 $\pm$ 0.32