

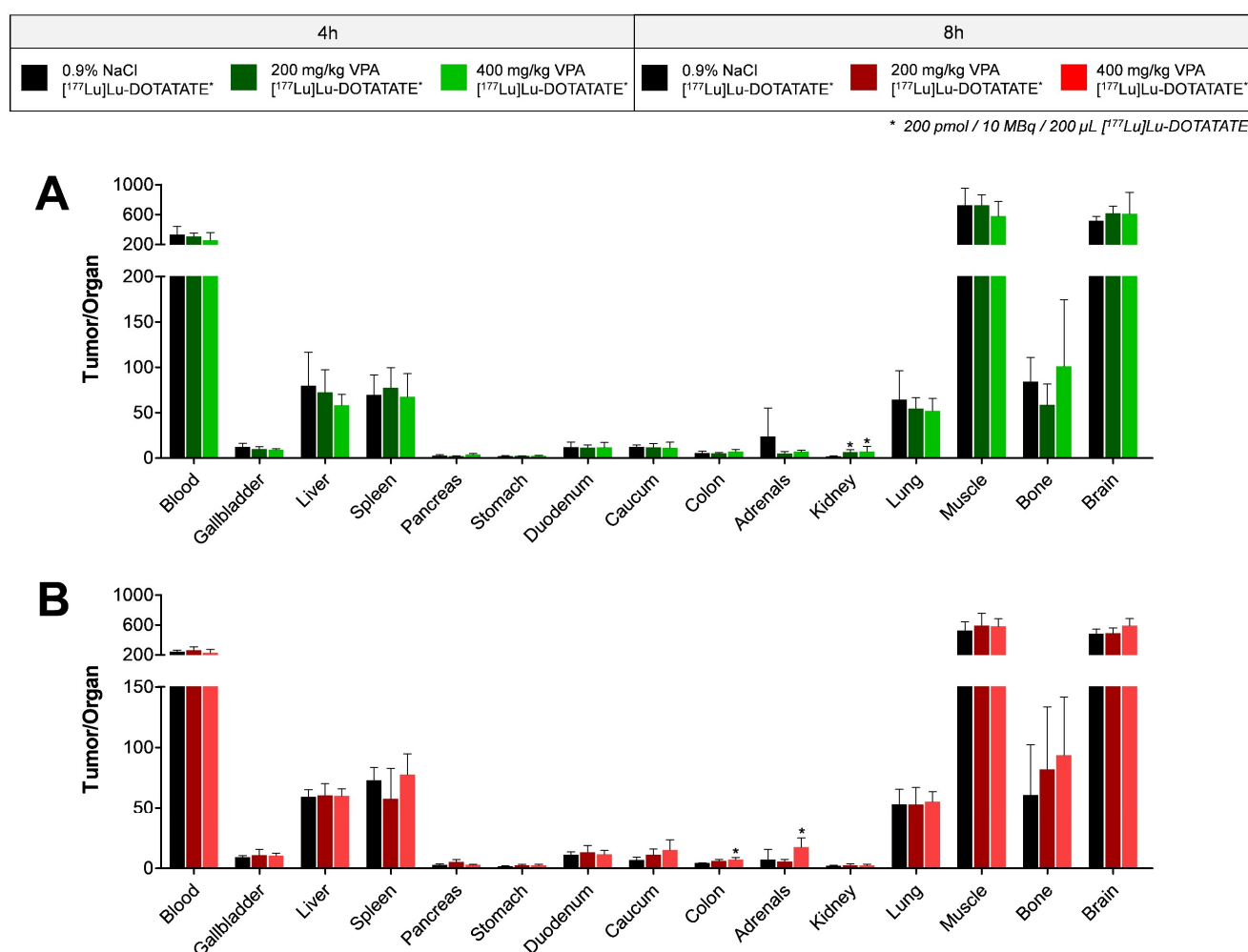
## Supplementary Materials

# The Effect of VPA Treatment on Radiolabeled DOTATATE Uptake: Differences Observed In Vitro and In Vivo

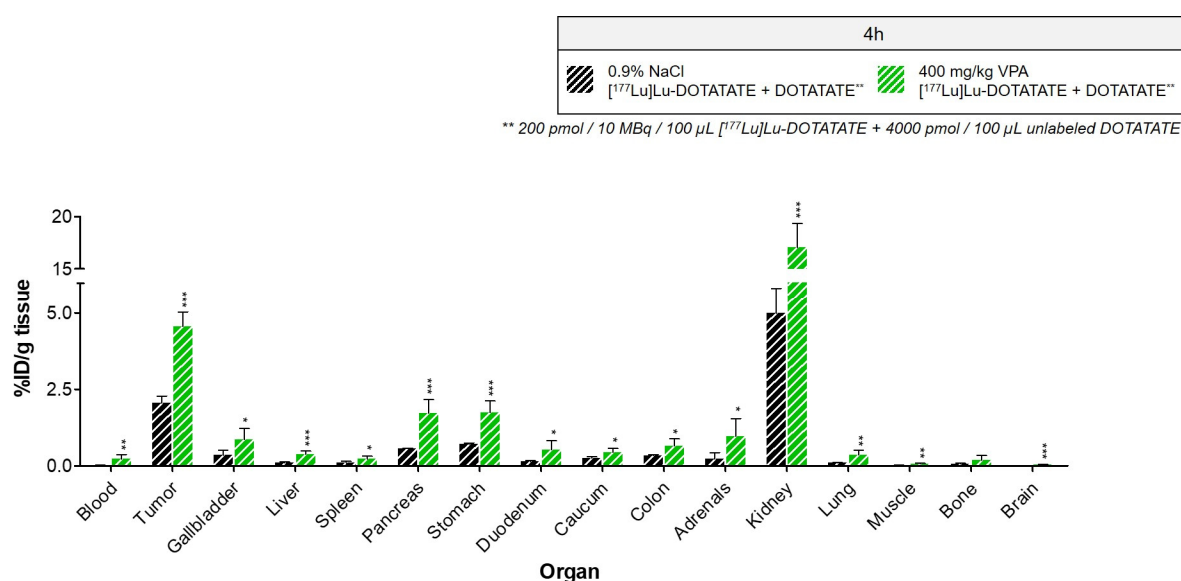
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**Table S1. – Animal characteristics** Number of mice (n), body weight (g) and tumor volume (mm<sup>3</sup>) of all experimental groups, measured one day before VPA and [<sup>177</sup>Lu]Lu-DOTATATE administration. Body weight and tumor volume data are represented as mean ± standard deviation.

	N	Body weight (g)	Tumor volume (mm <sup>3</sup> )
No VPA (4 h)	5	34.1 ± 2.6	407.1 ± 201.3
200 mg/kg VPA (4 h)	5	34.5 ± 1.7	419.2 ± 195.0
400 mg/kg VPA (4 h)	5	35.4 ± 1.2	420.1 ± 197.6
No VPA (4 h, block)	4	34.2 ± 2.3	398.2 ± 221.7
400 mg/kg VPA (4 h, block)	4	35.0 ± 2.4	413.7 ± 236.4
No VPA (8 h)	5	35.7 ± 2.3	425.8 ± 237.7
200 mg/kg VPA (8 h)	5	34.1 ± 1.1	419.6 ± 193.4
400 mg/kg VPA (8 h)	5	34.6 ± 2.5	398.1 ± 203.8

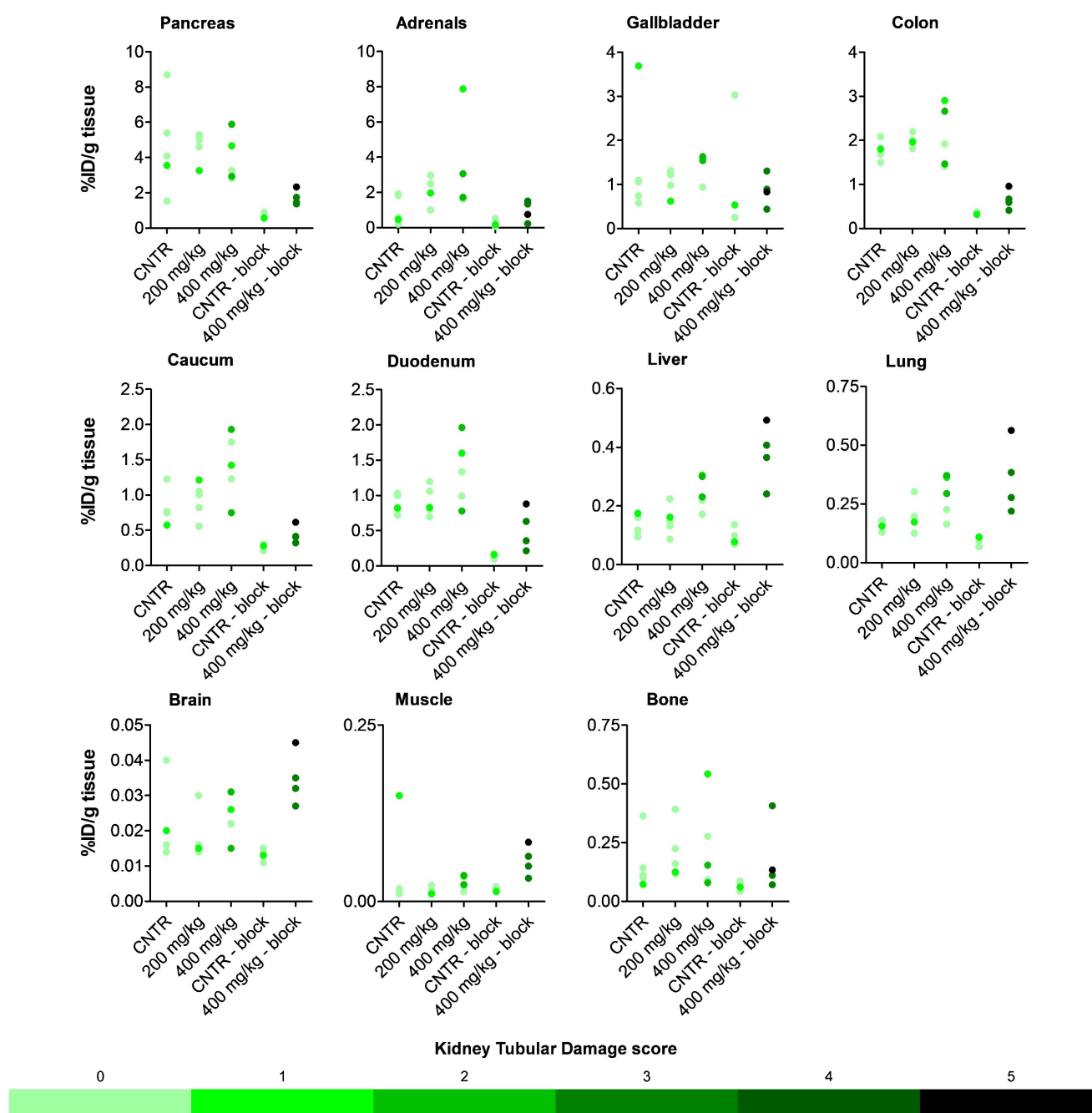


**Figure S1. – Tumor-to-organ ratios** Tumor-to-organ ratios of mice treated with vehicle or VPA (200 mg/kg or 400 mg/kg) four (A) or eight (B) hours prior to [<sup>177</sup>Lu]Lu-DOTATATE administration. All data are represented as mean ± standard deviation. \*  $p < 0.05$ ; \*\*  $p < 0.01$ ; \*\*\*  $p < 0.001$ .

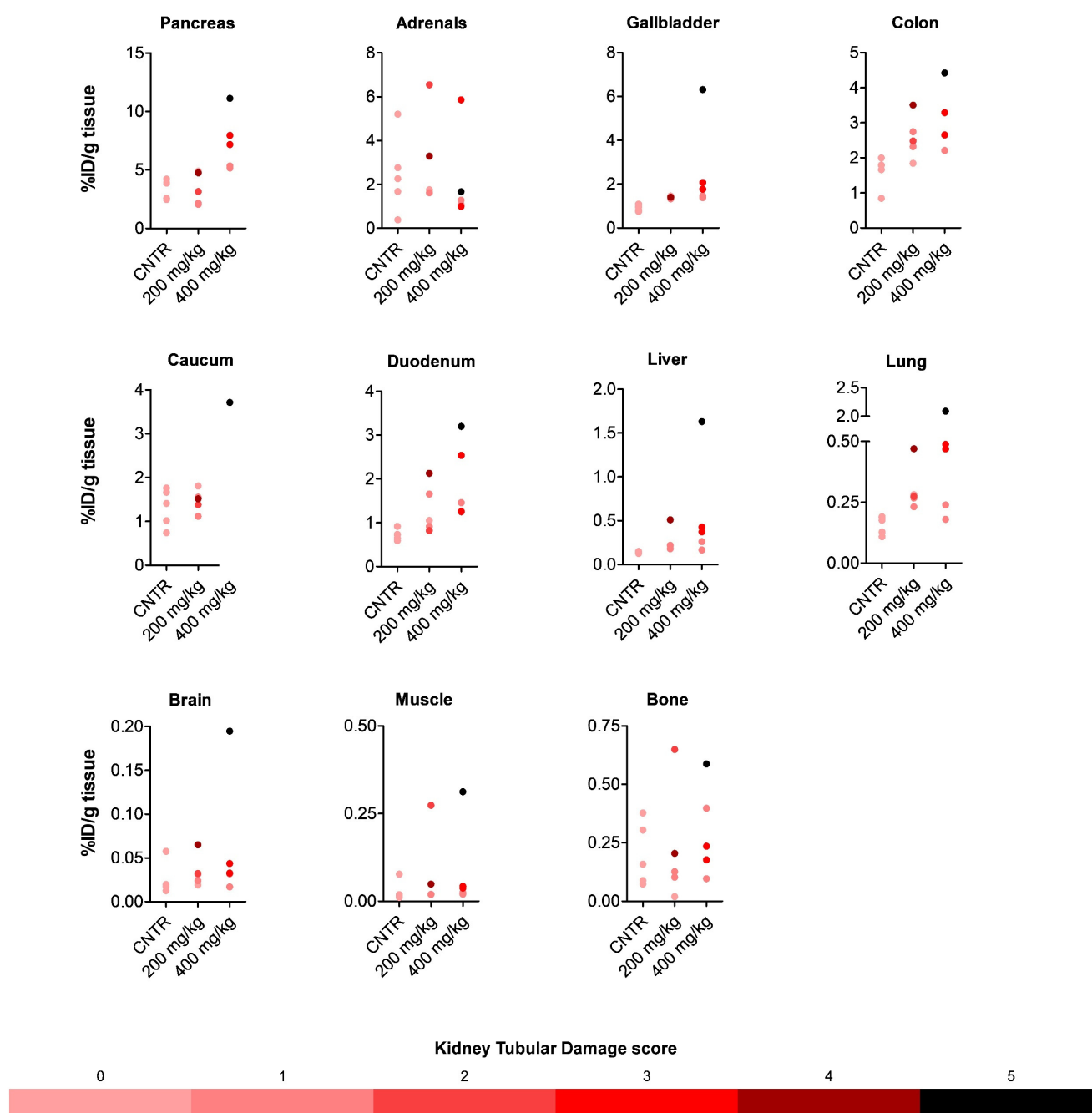


**Figure S2. – Biodistribution of [<sup>177</sup>Lu]Lu-DOTATATE after VPA treatment in animals co-injected with an excess of unlabeled DOTATATE (block study)** [<sup>177</sup>Lu]Lu-DOTATATE uptake expressed as percentage injected dose per gram tissue (%ID/g tissue) for

vehicle- and 400 mg/kg VPA-treated animals injected four hours prior to [ $^{177}\text{Lu}$ ]Lu-DOTATATE administration in presence of an excess of unlabeled DOTATATE. \*  $p < 0.05$ ; \*\*  $p < 0.01$ ; \*\*\*  $p < 0.001$ .



**Figure S3. – Biodistribution data correlated with the observed renal tubular damage (four hours)** The renal tubular damage score of mice receiving VPA four hours prior to [ $^{177}\text{Lu}$ ]Lu-DOTATATE administration was correlated with the biodistribution data. A color gradient is used to indicate the level of renal tubular damage. Each data point in these graphs represents a mouse. Outliers based on %ID/g tissue are included in this figure.



**Figure S4. – Biodistribution data correlated with the observed renal tubular damage (eight hours)** The renal tubular damage score of mice receiving VPA eight hours prior to [ $^{177}\text{Lu}$ ]Lu-DOTATATE administration was correlated with the biodistribution data. A color gradient is used to indicate the level of renal tubular damage. Each data point in these graphs represents a mouse. Outliers based on %ID/g tissue are included in this figure.