

Supplemental Table 1 Biodistribution results of ¹¹¹In-labeled POZ derivatives in nude mice 1 day

after intratumoral injection of probe. Results are expressed as means (%ID) ± SD (n=3).

Organ	EtPOZ	IspPOZ	Isp-PrPOZ	PrPOZ
Heart	0.18 ± 0.05	0.09 ± 0.07	0.02 ± 0.01	0.01 ± 0.00
Lungs	0.23 ± 0.04	0.15 ± 0.06	0.08 ± 0.11	0.05 ± 0.03
Liver	1.14 ± 0.10	1.40 ± 0.43	3.28 ± 3.88	2.36 ± 0.75
Kidneys	0.72 ± 0.06	1.36 ± 0.32	5.38 ± 0.74	1.07 ± 0.15
Stomach	0.25 ± 0.03	0.11 ± 0.05	0.27 ± 0.04	0.08 ± 0.02
Intestine	0.84 ± 0.08	1.52 ± 0.66	1.87 ± 0.62	0.50 ± 0.07
Pancreas	0.20 ± 0.05	0.09 ± 0.04	0.16 ± 0.07	0.06 ± 0.02
Spleen	0.17 ± 0.07	0.13 ± 0.08	0.30 ± 0.38	0.07 ± 0.02

Supplemental Table 2 Biodistribution results of $^{111}\text{In-EtPOZ}$ in nude mice after intravenous injection of probe. Results are expressed as means (%ID/g) \pm SD (n=3).

	1 h	6 h	24 h
Blood	10.36 \pm 0.26	5.54 \pm 0.29	2.25 \pm 0.31
Heart	2.49 \pm 0.67	1.18 \pm 0.17	0.71 \pm 0.06
Lungs	3.26 \pm 0.75	1.75 \pm 0.24	1.18 \pm 0.30
Liver	1.93 \pm 0.29	1.34 \pm 0.14	1.50 \pm 0.33
Kidneys	3.36 \pm 0.43	2.55 \pm 0.27	1.97 \pm 0.44
Stomach	1.49 \pm 0.65	0.70 \pm 0.44	0.35 \pm 0.12
Intestine	1.10 \pm 0.11	0.54 \pm 0.17	0.43 \pm 0.07
Pancreas	1.78 \pm 0.32	1.02 \pm 0.14	0.69 \pm 0.15
Spleen	1.43 \pm 0.31	1.04 \pm 0.14	1.03 \pm 0.25
Muscle	0.50 \pm 0.19	0.33 \pm 0.04	0.33 \pm 0.07

Supplemental Table 3 Biodistribution results of ^{111}In -IspPOZ in nude mice after intravenous injection of probe. Results are expressed as means (%ID/g) \pm SD (n=3).

	1 h	6 h	24 h
Blood	6.50 \pm 3.74	0.39 \pm 0.30	0.10 \pm 0.10
Heart	3.02 \pm 0.91	2.72 \pm 0.45	2.81 \pm 0.50
Lungs	2.98 \pm 0.82	1.47 \pm 0.27	1.57 \pm 0.22
Liver	10.78 \pm 5.74	14.57 \pm 4.95	11.31 \pm 4.28
Kidneys	29.91 \pm 1.85	18.62 \pm 1.20	15.97 \pm 2.46
Stomach	2.79 \pm 0.55	5.52 \pm 1.46	4.82 \pm 1.34
Intestine	2.02 \pm 0.14	2.79 \pm 1.35	3.52 \pm 0.32
Pancreas	3.10 \pm 0.27	4.07 \pm 0.33	4.31 \pm 0.12
Spleen	3.52 \pm 0.66	4.80 \pm 0.91	4.47 \pm 0.86
Muscle	0.61 \pm 0.14	0.62 \pm 0.20	0.56 \pm 0.16

Supplemental Table 4 Biodistribution results of ^{111}In -Isp-PrPOZ in nude mice after intravenous injection of probe. Results are expressed as means (%ID/g) \pm SD (n=3).

	1 h	6 h	24 h
Blood	0.25 \pm 0.05	0.06 \pm 0.01	0.03 \pm 0.02
Heart	0.40 \pm 0.05	0.35 \pm 0.01	0.39 \pm 0.06
Lungs	20.50 \pm 3.45	20.03 \pm 3.15	14.05 \pm 2.84
Liver	28.20 \pm 1.81	25.72 \pm 2.34	32.02 \pm 3.26
Kidneys	17.49 \pm 1.60	17.41 \pm 1.74	12.75 \pm 1.34
Stomach	1.42 \pm 0.55	0.74 \pm 0.30	0.96 \pm 0.18
Intestine	0.85 \pm 0.06	0.67 \pm 0.21	0.67 \pm 0.34
Pancreas	0.91 \pm 0.11	1.07 \pm 0.04	1.00 \pm 0.10
Spleen	19.87 \pm 3.70	16.45 \pm 1.88	20.75 \pm 0.67
Muscle	0.21 \pm 0.08	0.21 \pm 0.07	0.20 \pm 0.16

Supplemental Table 5 Biodistribution results for $^{111}\text{In-PrPOZ}$ in nude mice after intravenous injection of probe. Results are expressed as means (%ID/g) \pm SD (n=3).

	1 h	6 h	24 h
Blood	0.22 \pm 0.04	0.17 \pm 0.05	0.05 \pm 0.02
Heart	0.41 \pm 0.06	0.31 \pm 0.19	0.42 \pm 0.06
Lungs	3.57 \pm 0.46	3.59 \pm 1.10	3.04 \pm 0.49
Liver	56.29 \pm 4.78	58.27 \pm 6.39	52.24 \pm 8.60
Kidneys	7.02 \pm 0.60	7.33 \pm 1.27	5.10 \pm 0.49
Stomach	0.68 \pm 0.08	0.64 \pm 0.20	0.34 \pm 0.07
Intestine	0.56 \pm 0.04	0.54 \pm 0.02	0.52 \pm 0.02
Pancreas	1.09 \pm 0.10	1.32 \pm 0.14	0.99 \pm 0.04
Spleen	22.91 \pm 4.45	23.50 \pm 12.35	25.88 \pm 12.64
Muscle	0.16 \pm 0.09	0.35 \pm 0.24	0.15 \pm 0.06

Supplemental Video 1: Real-time observation of self-aggregation of POZ derivatives when heated at around body temperature (36.5°C).

Images were obtained after drop the solution of EtPOZ and Isp-PrPOZ (2000 μ M) on a plate heated at 36.5°C. Rapid aggregation of Isp-PrPOZ with Tt under body temperature was shown.