Supplementary Information

Near infrared fluorescent nanoparticles derived from hyaluronic acid improve tumor contrast for image-guided surgery

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Supplementary Methods

Dye Release

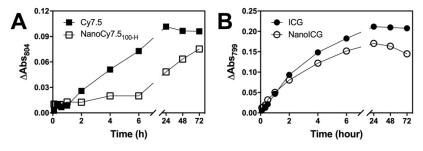
Release of ICG and Cy7.5 from their respective HA NP formulations (lead NPs based on contrast enhancement studies) was determined in release media, which is constituted from BSA dissolved in PBS to 42.5 mg/ml BSA. NanoICG_{PBA}, ICG, NanoCy7.5_{100-H}, or Cy7.5, were dissolved in release media to 20 μ M, 20 μ M, 13.8 μ M, and 20 μ M, respectively, based on dye content. Release of free ICG and Cy7.5 from NPs relative to dye alone was examined via dialysis. Solutions containing NP dye formulation or dye alone (1 ml) was placed in 100 kDa MWCO dialysis tubing and immersed in 10 mL of release media in 15 ml conical tubes, sealed, and placed on a rocker. Dye released into release media was measured at 5, 10, 20, and 30 min and 1, 2, 4, 6, 24, 48, and 72 h by taking 600 μ l from the conical tube and absorbance spectra were obtained with a 220 UV-Vis Spectrophotometer (Thermo Scientific). Release media was subtracted using Thermo

INSIGHT software. After spectra acquisition the sample was returned to the tube. Release of dye from NP was and transport of free dye was measured as appearance of dye in the release media outside the dialysis tubing. For ICG and NanoICG_{PBA}, this was measured as Δ abs₇₉₉ = abs₇₉₉ aliquot – abs₇₉₉ release media, while for Cy7.5 and NanoCy7.5, Δ abs₈₀₄ = abs₈₀₄ aliquot – abs₈₀₄ release media.

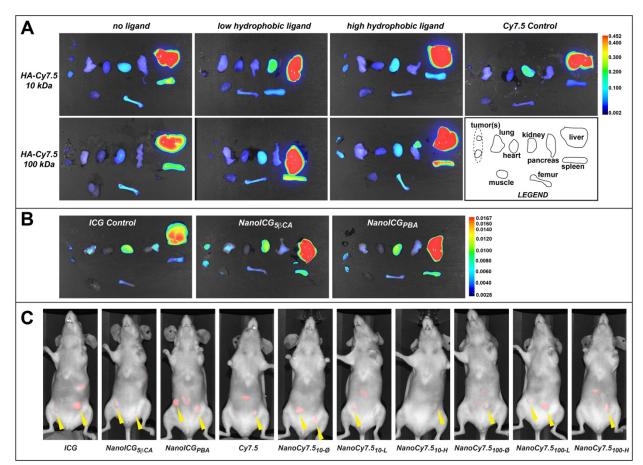
Supplementary Results

Dye Release

The release of Cy7.5 or ICG from NP formulations was compared to the respective dye alone. Albumin was required both inside and outside the bag due to the poor solubility the NIR dyes. The presence of serum albumin also more accurately reflects the conditions that the NPs developed in the work interact with upon systemic administration. Supplemental Figure 1 shows that both free Cy7.5 and ICG had rapid transport across the dialysis membrane via albumin with the majority of peak dye concentration occurring within the first 6 hours. HA-Cy7.5 conjugate more slowly released compared to Cy7.5, which is likely due to direct chemical conjugation of Cy7.5 to HA. ICG that as physically entrapped in HA-based NPs rapidly released into albumin. It is not likely that NanoICG diffused across the membrane. We have previously reported that ICG entrapped in HA NPs has broad scattering due to close packing [26]. The ICG spectra collected from the conical tubes is consistent with albumin bound ICG [36].



Supplemental Figure 1. Release of Cy7.5 and ICG from NP formulations. (A) NanoCy7.5_{100-H} (open squares) and Cy7.5 (filled squares). (B) NanoICG_{PBA} (open circles) and ICG (filled circles).



Supplemental Figure 2. Representative fluorescence images of (A) NanoCy7.5 NPs and Cy7.5 alone and (B) NanoICG and ICG alone. All images are from the 24 h group of mice. All images are the "800 nm" channel overlaid onto the brightfield photograph on the Pearl Trilogy imaging system. The legend to organ location in the images is given in (A). All NanoCy7.5 NPs were processed identically and all NanoICG agents were processed identically. However, due the dramatically different signals from NanoCy7.5 and NanoICG, the images in (A) and (B) were processed independently. Otherwise, it would not have been possible to signal in the 800 nm channel for the NanoICG agents. The color bars in (A) and (B) show the scaling for both series of NPs. Please see **Figure 2J** in the main manuscript for the comparison of the images from all tumor with identical colormap scale. (C) iRFP-labeled MDA-MB-231 tumors in nude mice. The red is NIR fluorescence from the 700 nm channel in the LI-COR animal imaging system and is overlaid onto the brightfield image. Yellow arrowheads highlight the presence of tumors, while other remaining NIR (700 nm) fluorescence is due to fluorescence in the mouse chow.

Supplemental Tables

Supplemental Table 1. Values and significance levels for organ SNR in nude mice for all NP formulations at 4, 24, and 72 h.

NanoICG	4 h			24 h			72 h		
Test details	Ӯ 1	<u></u> У2	Sig.	Ӯ 1	Ӯ 2	Sig.	Ӯ 1	Ӯ 2	Sig.

	34.9	18.29	ns	6.95	15.9	****	4.624	14.43	****
	34.9	16.1	ns	6.95	14.2	****	4.624	9.167	***
vs.	18.29	16.1	ns	15.9	14.2	ns	14.43	9.167	****
	22.1	4 984	ns	2 13	2 13	ns	0.653	1 628	ns
						1			ns
VS.	4.984	10.6	ns	2.13	2.78	ns	1.628	1.711	ns
	43	23.18	ns	10.3	9.41	ns	2.281	7.017	*
	43	23.3	ns	10.3	9.77	ns	2.281	7.202	**
vs.	23.18	23.3	ns	9.41	9.77	ns	7.017	7.202	ns
	18.8	13.67	ns	3.65	5.04	ns	1.518	3.958	ns
	18.8	9.73	ns	3.65	7.19	ns	1.518	4.1	ns
VS.	13.67	9.73	ns	5.04	7.19	ns	3.958	4.1	ns
	10.0	15.07		7.00	10		2 202	7 5 47	*
									**
						1			
VS.	15.07	12.7	ns	10	9.52	ns	7.547	8.472	ns
	177	54.55	****	21.4	23.3	ns	10.11	30.36	****
			****						****
vs.	54.55	74.2	ns	23.3	20.8	ns	30.36	30.48	ns
	40	0.0 =1					1.0.1.		-
			ns			ns			*
	49 20.71		ns			ns			*
VS.		35.4	ns	7.98	7.58	ns	5.846	6.33	ns
	VS. VS. VS.	34.9 vs. 18.29 vs. 22.1 22.1 22.1 vs. 4.984 vs. 4.984 vs. 23.18 vs. 23.18 vs. 23.18 vs. 13.67 vs. 13.67 vs. 13.67 vs. 15.07 vs. 15.07 vs. 177 177 177	34.9 16.1 vs. 18.29 16.1 vs. 18.29 16.1 22.1 10.6 22.1 10.6 vs. 4.984 10.6 vs. 4.984 10.6 vs. 4.984 10.6 vs. 4.984 10.6 vs. 23.18 23.18 43 23.3 23.3 vs. 23.18 23.3 vs. 23.18 23.3 vs. 18.8 13.67 18.8 9.73 9.73 vs. 13.67 9.73 vs. 13.67 9.73 vs. 15.07 12.7 vs. 15.07 12.7 vs. 15.07 12.7 vs. 54.55 74.2 vs. 54.55 74.2 vs. 54.55 74.2 vs. 54.55 74.2 vs. 54.55 74.2	34.9 16.1 ns vs. 18.29 16.1 ns vs. 18.29 16.1 ns vs. 22.1 4.984 ns 22.1 4.984 ns set vs. 4.984 10.6 ns vs. 4.984 10.6 ns vs. 4.984 10.6 ns vs. 23.18 ns ns vs. 23.18 23.3 ns vs. 23.18 23.3 ns vs. 23.18 13.67 ns vs. 18.8 13.67 ns vs. 13.67 9.73 ns vs. 13.67 9.73 ns vs. 15.07 ns 13.67 vs. 15.07 ns 14.9	34.9 16.1 ns 6.95 vs. 18.29 16.1 ns 15.9 vs. 18.29 16.1 ns 15.9 vs. 22.1 4.984 ns 2.13 22.1 10.6 ns 2.13 vs. 4.984 10.6 ns 2.13 vs. 4.984 10.6 ns 2.13 vs. 4.984 10.6 ns 2.13 vs. 23.18 23.18 ns 10.3 vs. 23.18 23.3 ns 10.3 vs. 23.18 23.3 ns 9.41 vs. 18.8 13.67 ns 3.65 vs. 13.67 9.73 ns 5.04 vs. 13.67 9.73 ns 7.23 vs. 15.07 1s 7.23 10 vs. 15.07 12.7 ns 10 vs. 15.07	34.9 16.1 ns 6.95 14.2 vs. 18.29 16.1 ns 15.9 14.2 us. 12.1 10.6 ns 2.13 2.13 vs. 4.984 10.6 ns 2.13 2.78 vs. 4.984 10.6 ns 10.3 9.41 43 23.18 ns 10.3 9.77 vs. 23.18 23.3 ns 10.3 9.77 vs. 23.18 23.3 ns 10.3 9.77 vs. 23.18 23.3 ns 3.65 5.04 18.8 13.67 ns 3.65 7.19 vs. 13.67 9.73 ns 5.04 7.19 vs.<	34.9 16.1 ns 6.95 14.2 **** vs. 18.29 16.1 ns 15.9 14.2 ns vs. 18.29 16.1 ns 15.9 14.2 ns vs. 18.29 16.1 ns 15.9 14.2 ns 20.1 10.6 ns 2.13 2.13 ns 22.1 10.6 ns 2.13 2.78 ns vs. 4.984 10.6 ns 2.13 2.78 ns vs. 4.984 10.6 ns 1.13 2.78 ns vs. 4.984 10.6 ns 1.13 2.78 ns vs. 4.984 10.6 ns 1.13 2.78 ns vs. 2.3.18 23.3 ns 10.3 9.41 ns vs. 23.18 23.3 ns 10.3 9.77 ns vs. 18.8 13.67 ns 3.65 5.04 ns vs. 18.8 9.73 <t< td=""><td>34.9 16.1 ns 6.95 14.2 ***** 4.624 vs. 18.29 16.1 ns 15.9 14.2 ns 14.43 22.1 4.984 ns 2.13 2.13 ns 0.653 vs. 4.984 10.6 ns 2.13 2.78 ns 1.628 vs. 4.984 10.6 ns 2.13 2.78 ns 1.628 vs. 23.18 ns 10.3 9.41 ns 2.281 vs. 23.18 23.3 ns 10.3 9.71 ns 1.518 vs. 13.67 ns 3.65 5.04 ns 1.518 <tr< td=""><td>34.9 16.1 ns 6.93 1.93 4.024 14.43 34.9 16.1 ns 6.95 14.2 **** 4.624 9.167 vs. 18.29 16.1 ns 15.9 14.2 ns 14.43 9.167 vs. 18.29 16.1 ns 15.9 14.2 ns 14.43 9.167 vs. 18.29 16.1 ns 15.9 14.2 ns 14.43 9.167 vs. 43 23.1 16.6 ns 2.13 2.13 ns 0.653 1.628 vs. 4.984 10.6 ns 2.13 2.78 ns 1.628 1.711 vs. 4.984 10.6 ns 2.13 2.78 ns 1.628 1.711 vs. 23.18 23.3 ns 10.3 9.41 ns 2.281 7.017 vs. 23.18 23.3 ns 3.65 5.04 n</td></tr<></td></t<>	34.9 16.1 ns 6.95 14.2 ***** 4.624 vs. 18.29 16.1 ns 15.9 14.2 ns 14.43 22.1 4.984 ns 2.13 2.13 ns 0.653 vs. 4.984 10.6 ns 2.13 2.78 ns 1.628 vs. 4.984 10.6 ns 2.13 2.78 ns 1.628 vs. 23.18 ns 10.3 9.41 ns 2.281 vs. 23.18 23.3 ns 10.3 9.71 ns 1.518 vs. 13.67 ns 3.65 5.04 ns 1.518 <tr< td=""><td>34.9 16.1 ns 6.93 1.93 4.024 14.43 34.9 16.1 ns 6.95 14.2 **** 4.624 9.167 vs. 18.29 16.1 ns 15.9 14.2 ns 14.43 9.167 vs. 18.29 16.1 ns 15.9 14.2 ns 14.43 9.167 vs. 18.29 16.1 ns 15.9 14.2 ns 14.43 9.167 vs. 43 23.1 16.6 ns 2.13 2.13 ns 0.653 1.628 vs. 4.984 10.6 ns 2.13 2.78 ns 1.628 1.711 vs. 4.984 10.6 ns 2.13 2.78 ns 1.628 1.711 vs. 23.18 23.3 ns 10.3 9.41 ns 2.281 7.017 vs. 23.18 23.3 ns 3.65 5.04 n</td></tr<>	34.9 16.1 ns 6.93 1.93 4.024 14.43 34.9 16.1 ns 6.95 14.2 **** 4.624 9.167 vs. 18.29 16.1 ns 15.9 14.2 ns 14.43 9.167 vs. 18.29 16.1 ns 15.9 14.2 ns 14.43 9.167 vs. 18.29 16.1 ns 15.9 14.2 ns 14.43 9.167 vs. 43 23.1 16.6 ns 2.13 2.13 ns 0.653 1.628 vs. 4.984 10.6 ns 2.13 2.78 ns 1.628 1.711 vs. 4.984 10.6 ns 2.13 2.78 ns 1.628 1.711 vs. 23.18 23.3 ns 10.3 9.41 ns 2.281 7.017 vs. 23.18 23.3 ns 3.65 5.04 n

Liver										
ICG vs. NanoICG _{PBA}		95	100.3	ns	21.2	53.2	****	7.405	32.13	****
ICG vs. NanoICG _{5bCA}		95	73.7	ns	21.2	40.4	****	7.405	37.08	****
NanoICG _{PBA} NanoICG _{5bCA}	VS.	100.3	73.7	ns	53.2	40.4	***	32.13	37.08	**
Spleen										
ICG vs. NanoICG _{PBA}		28.8	19.75	ns	9.14	16.3	**	3.643	15.71	****
ICG vs. NanoICG _{5bCA}		28.8	17.7	ns	9.14	14	ns	3.643	17.19	****
NanoICG _{PBA} NanoICG _{5bCA}	vs.	19.75	17.7	ns	16.3	14	ns	15.71	17.19	ns

NanoCy7.510		4 h			24 h			72 h		
Test details		Ӯ 1	<u></u> У2	Sig.	<u></u> У1	<u></u> У2	Sig.	<u></u> У1	<u></u> У2	Sig.
Tumor										
Cy7.5 vs. NanoCy7.5 _{10-Ø}		11.81	51.23	ns	13.55	55.71	ns	21.88	42.77	ns
Cy7.5 vs. NanoCy7.5 _{10-L}		11.81	24.28	ns	13.55	45.44	ns	21.88	109.3	***
Су7.5 vs. NanoСу7.5 _{10-Н}		11.81	68.25	ns	13.55	70.08	ns	21.88	72.36	ns
NanoCy7.5 _{10-Ø} NanoCy7.5 _{10-L}	vs.	51.23	24.28	ns	55.71	45.44	ns	42.77	109.3	*
NanoCy7.5 _{10-∅} NanoCy7.5 _{10-H}	VS.	51.23	68.25	ns	55.71	70.08	ns	42.77	72.36	ns
NanoCy7.5 _{10-L} NanoCy7.5 _{10-H}	vs.	24.28	68.25	ns	45.44	70.08	ns	109.3	72.36	ns
Muscle										
Cy7.5 vs. NanoCy7.5 _{10-Ø}		23.8	29.63	ns	12.18	16.85	ns	18.89	9.338	ns
Cy7.5 vs. NanoCy7.5 _{10-L}		23.8	29.78	ns	12.18	29.45	ns	18.89	15.77	ns
Cy7.5 vs. NanoCy7.5 _{10-H}		23.8	45	ns	12.18	33.11	ns	18.89	15.7	ns
NanoCy7.5 _{10-Ø} NanoCy7.5 _{10-L}	vs.	29.63	29.78	ns	16.85	29.45	ns	9.338	15.77	ns
NanoCy7.5 _{10-Ø} NanoCy7.5 _{10-H}	VS.	29.63	45	ns	16.85	33.11	ns	9.338	15.7	ns
NanoCy7.5 _{10-L} NanoCy7.5 _{10-H}	VS.	29.78	45	ns	29.45	33.11	ns	15.77	15.7	ns
Lung										
Cy7.5 vs. NanoCy7.5 $_{10-\emptyset}$		112.6	251.8	*	67.21	52.78	ns	68.06	30.71	ns
Cy7.5 vs. NanoCy7.5 _{10-L}		112.6	202.2	ns	67.21	85.96	ns	68.06	70.83	ns
Су7.5 vs. NanoCy7.5 _{10-H}		112.6	325.5	***	67.21	95.18	ns	68.06	64.26	ns
NanoCy7.5 _{10-∅} NanoCy7.5 _{10-L}	vs.	251.8	202.2	ns	52.78	85.96	ns	30.71	70.83	ns

vs.	251.8	325.5	ns	52.78	95.18	ns	30.71	64.26	ns
vs.	202.2	325.5	ns	85.96	95.18	ns	70.83	64.26	ns
	82.04	143.2	ns	47.51	38.84	ns	49.6	19.09	ns
	82.04	119.5	ns	47.51	58.73	ns	49.6	39.73	ns
	82.04	199.7	ns	47.51	74.86	ns	49.6	38.27	ns
vs.	143.2	119.5	ns	38.84	58.73	ns	19.09	39.73	ns
vs.	143.2	199.7	ns	38.84	74.86	ns	19.09	38.27	ns
vs.	119.5	199.7	ns	58.73	74.86	ns	39.73	38.27	ns
	67.04	122.9	ns	44.86	170.7	ns	37.62	101.2	ns
	67.04	78.56	ns	44.86	98.05	ns	37.62	73.13	ns
	67.04	101.8	ns	44.86	112.5	ns	37.62	89.25	ns
vs.	122.9	78.56	ns	170.7	98.05	ns	101.2	73.13	ns
VS.	122.9	101.8	ns	170.7	112.5	ns	101.2	89.25	ns
VS.	78.56	101.8	ns	98.05	112.5	ns	73.13	89.25	ns
	370	318.3	ns	286.5	160	ns	361.6	123.9	****
	370	379.6	ns	286.5	375.1	ns	361.6	315.9	ns
	370	459.9	ns	286.5	300.6	ns	361.6	243	****
vs.	318.3	379.6	ns	160	375.1	****	123.9	315.9	****
vs.	318.3	459.9	*	160	300.6	*	123.9	243	***
vs.	379.6	459.9	ns	375.1	300.6	ns	315.9	243	*
	59.98	130.5	ns	45.04	44.38	ns	68.86	48.8	ns
	59.98	95.09	ns	45.04	72.75	ns	68.86	80.88	ns
	59.98	175	ns	45.04	76.58	ns	68.86	66.64	ns
vs.	130.5	95.09	ns	44.38	72.75	ns	48.8	80.88	ns
	VS. VS. VS. VS. VS. VS. VS. VS. VS. VS.	vs. 202.2 vs. 202.2 82.04 82.04 82.04 82.04 vs. 143.2 vs. 143.2 vs. 143.2 vs. 119.5 vs. 119.5 vs. 112.9 vs. 122.9 vs. 122.9 vs. 122.9 vs. 78.56 u 370 370 370 vs. 318.3 vs. 318.3 vs. 379.6 sp.98 59.98 sp.998 59.98	vs. 202.2 325.5 vs. 202.2 325.5 x x x x x	N. 202.2 325.5 ns vs. 202.2 325.5 ns a a a a a a a a a 82.04 143.2 ns b 82.04 199.7 ns vs. 143.2 199.7 ns vs. 143.2 199.7 ns vs. 143.2 199.7 ns vs. 143.2 199.7 ns vs. 119.5 199.7 ns vs. 122.9 ns ns vs. 122.9 78.56 ns vs. 78.56 101.8 ns vs. 370 318.3 ns vs. 370 318.3	vs. 202.2 325.5 ns 85.96 vs. 202.2 325.5 ns 85.96 82.04 143.2 ns 47.51 82.04 199.7 ns 47.51 82.04 199.7 ns 47.51 vs. 143.2 199.7 ns 38.84 vs. 143.2 199.7 ns 38.84 vs. 143.2 199.7 ns 38.84 vs. 119.5 199.7 ns 58.73 vs. 119.5 199.7 ns 58.73 vs. 119.5 199.7 ns 44.86 vs. 119.5 199.7 ns 44.86 vs. 122.9 78.56 ns 170.7 vs. 122.9 78.56 ns 170.7 vs. 122.9 78.56 ns 170.7 vs. 78.56 101.8 ns 286.5 370 379.6 ns 286.5 370 379.6 ns 286.5	No. 202.2 325.5 ns 85.96 95.18 vs. 202.2 325.5 ns 85.96 95.18 u u u u u u 82.04 143.2 ns 47.51 38.84 82.04 199.7 ns 47.51 58.73 82.04 199.7 ns 47.51 74.86 vs. 143.2 199.7 ns 38.84 58.73 vs. 143.2 199.7 ns 38.84 74.86 vs. 119.5 199.7 ns 38.84 74.86 vs. 119.5 199.7 ns 58.73 74.86 vs. 119.5 199.7 ns 44.86 170.7 67.04 122.9 ns 44.86 98.05 vs. 122.9 78.56 ns 170.7 98.05 vs. 122.9 78.56 ns 286.5 300.6 <t< td=""><td>vs. 202.2 325.5 ns 85.96 95.18 ns vs. 202.2 325.5 ns 85.96 95.18 ns 82.04 143.2 ns 47.51 38.84 ns 82.04 119.5 ns 47.51 58.73 ns 82.04 199.7 ns 47.51 74.86 ns vs. 143.2 119.5 ns 38.84 58.73 ns vs. 143.2 199.7 ns 38.84 74.86 ns vs. 119.5 199.7 ns 58.73 74.86 ns vs. 119.5 199.7 ns 58.73 74.86 ns vs. 119.5 199.7 ns 44.86 170.7 ns vs. 122.9 ns 44.86 170.7 ns vs. 122.9 78.56 ns 170.7 98.05 ns vs. 122.9 1</td><td>No. 202.2 325.5 ns 85.96 95.18 ns 70.83 vs. 202.2 325.5 ns 85.96 95.18 ns 70.83 vs. 202.2 325.5 ns 47.51 38.84 ns 49.6 82.04 143.2 ns 47.51 58.73 ns 49.6 82.04 199.7 ns 47.51 74.86 ns 49.6 vs. 143.2 199.7 ns 38.84 58.73 ns 19.09 vs. 119.5 199.7 ns 58.73 74.86 ns 39.73 vs. 119.5 199.7 ns 58.73 74.86 ns 39.73 vs. 119.5 199.7 ns 44.86 170.7 ns 37.62 vs. 122.9 ns 44.86 170.7 ns 37.62 vs. 122.9 78.56 ns 170.7 18.05 ns</td><td>vs. 202.2 325.5 ns 85.96 95.18 ns 70.83 64.26 vs. 202.2 325.5 ns 47.51 38.84 ns 49.6 19.09 82.04 143.2 ns 47.51 58.73 ns 49.6 39.73 82.04 199.7 ns 47.51 58.73 ns 49.6 38.27 vs. 143.2 119.5 ns 47.51 74.86 ns 49.6 38.27 vs. 143.2 119.7 ns 38.84 58.73 ns 19.09 38.27 vs. 143.2 199.7 ns 58.73 74.86 ns 19.09 38.27 vs. 119.5 199.7 ns 58.73 74.86 ns 39.73 38.27 vs. 119.5 199.7 ns 58.73 74.86 ns 39.73 38.27 vs. 119.5 199.7 ns 44.86 170.7 ns 37.62 101.2 67.04 78.56 ns <</td></t<>	vs. 202.2 325.5 ns 85.96 95.18 ns vs. 202.2 325.5 ns 85.96 95.18 ns 82.04 143.2 ns 47.51 38.84 ns 82.04 119.5 ns 47.51 58.73 ns 82.04 199.7 ns 47.51 74.86 ns vs. 143.2 119.5 ns 38.84 58.73 ns vs. 143.2 199.7 ns 38.84 74.86 ns vs. 119.5 199.7 ns 58.73 74.86 ns vs. 119.5 199.7 ns 58.73 74.86 ns vs. 119.5 199.7 ns 44.86 170.7 ns vs. 122.9 ns 44.86 170.7 ns vs. 122.9 78.56 ns 170.7 98.05 ns vs. 122.9 1	No. 202.2 325.5 ns 85.96 95.18 ns 70.83 vs. 202.2 325.5 ns 85.96 95.18 ns 70.83 vs. 202.2 325.5 ns 47.51 38.84 ns 49.6 82.04 143.2 ns 47.51 58.73 ns 49.6 82.04 199.7 ns 47.51 74.86 ns 49.6 vs. 143.2 199.7 ns 38.84 58.73 ns 19.09 vs. 119.5 199.7 ns 58.73 74.86 ns 39.73 vs. 119.5 199.7 ns 58.73 74.86 ns 39.73 vs. 119.5 199.7 ns 44.86 170.7 ns 37.62 vs. 122.9 ns 44.86 170.7 ns 37.62 vs. 122.9 78.56 ns 170.7 18.05 ns	vs. 202.2 325.5 ns 85.96 95.18 ns 70.83 64.26 vs. 202.2 325.5 ns 47.51 38.84 ns 49.6 19.09 82.04 143.2 ns 47.51 58.73 ns 49.6 39.73 82.04 199.7 ns 47.51 58.73 ns 49.6 38.27 vs. 143.2 119.5 ns 47.51 74.86 ns 49.6 38.27 vs. 143.2 119.7 ns 38.84 58.73 ns 19.09 38.27 vs. 143.2 199.7 ns 58.73 74.86 ns 19.09 38.27 vs. 119.5 199.7 ns 58.73 74.86 ns 39.73 38.27 vs. 119.5 199.7 ns 58.73 74.86 ns 39.73 38.27 vs. 119.5 199.7 ns 44.86 170.7 ns 37.62 101.2 67.04 78.56 ns <

NanoCy7.5 _{10-Ø}	VS.	130.5	175	ns	44.38	76.58	ns	48.8	66.64	ns
NanoCy7.5 _{10-H}										
NanoCy7.5 _{10-L}	VS.	95.09	175	ns	72.75	76.58	ns	80.88	66.64	ns
NanoCy7.5 _{10-H}										
Liver										
Cy7.5 vs. NanoCy7.5 _{10-Ø}		1432	1128	****	834.6	1270	****	474.5	865.2	****
Cy7.5 vs. NanoCy7.5 _{10-L}		1432	1602	**	834.6	1217	****	474.5	1264	****
Cy7.5 vs. NanoCy7.5 _{10-H}		1432	1715	****	834.6	1468	****	474.5	1098	****
NanoCy7.5 _{10-Ø}	VS.	1128	1602	****	1270	1217	ns	865.2	1264	****
NanoCy7.5 _{10-L}										
NanoCy7.5 _{10-Ø}	vs.	1128	1715	****	1270	1468	***	865.2	1098	****
NanoCy7.5 _{10-H}										
NanoCy7.5 _{10-L}	vs.	1602	1715	ns	1217	1468	****	1264	1098	****
NanoCy7.5 _{10-H}										
Spleen										
Cy7.5 vs. NanoCy7.5 _{10-Ø}		96.33	225.6	ns	78.27	314	****	46.76	138	**
Cy7.5 vs. NanoCy7.5 _{10-L}		96.33	138.7	ns	78.27	149.8	ns	46.76	243.4	****
Cy7.5 vs. NanoCy7.5 _{10-H}		96.33	201.6	ns	78.27	223.5	*	46.76	172.1	****
NanoCy7.5 _{10-Ø}	VS.	225.6	138.7	ns	314	149.8	**	138	243.4	***
NanoCy7.5 _{10-L}										
NanoCy7.5 _{10-Ø}	vs.	225.6	201.6	ns	314	223.5	ns	138	172.1	ns
NanoCy7.5 _{10-H}										
NanoCy7.5 _{10-L}	vs.	138.7	201.6	ns	149.8	223.5	ns	243.4	172.1	*
NanoCy7.5 _{10-H}										

NanoCy7.5 ₁₀₀		4 h			24 h			72 h		
Test details		Ӯ 1	<u></u> У2	Sig.	Ӯ 1	<u></u> У2	Sig.	<u></u> У1	<u></u> У2	Sig.
Tumor										
Cy7.5 vs. NanoCy7.5 $_{100-\emptyset}$		11.81	33.98	ns	13.55	18.13	ns	21.88	34.84	ns
Cy7.5 vs. NanoCy7.5 _{100-L}		11.81	63.97	ns	13.55	43.79	ns	21.88	35.99	ns
Су7.5 vs. NanoCy7.5 _{100-H}		11.81	38.04	ns	13.55	118.4	ns	21.88	34.01	ns
NanoCy7.5 _{100-∅} NanoCy7.5 _{100-L}	vs.	33.98	63.97	ns	18.13	43.79	ns	34.84	35.99	ns
NanoCy7.5 _{100-Ø} NanoCy7.5 _{100-H}	vs.	33.98	38.04	ns	18.13	118.4	ns	34.84	34.01	ns
NanoCy7.5 _{100-L} NanoCy7.5 _{100-H}	vs.	63.97	38.04	ns	43.79	118.4	ns	35.99	34.01	ns
Muscle										
Cy7.5 vs. NanoCy7.5 $_{100- \emptyset}$		23.8	19.3	ns	12.18	7.648	ns	18.89	10	ns

Cy7.5 vs. NanoCy7.5 _{100-L}		23.8	22.61	ns	12.18	25.94	ns	18.89	11.87	ns
Су7.5 vs. NanoCy7.5 _{100-н}		23.8	35.04	ns	12.18	16.45	ns	18.89	9.885	ns
	vs.	19.3	22.61	ns	7.648	25.94	ns	10	11.87	ns
NanoCy7.5 _{100-L}										
J 100 2	vs.	19.3	35.04	ns	7.648	16.45	ns	10	9.885	ns
NanoCy7.5 _{100-H}		00.61				1648		11.05	0.005	
,	vs.	22.61	35.04	ns	25.94	16.45	ns	11.87	9.885	ns
NanoCy7.5 _{100-H}										
Lung										
Cy7.5 vs. NanoCy7.5 _{100-Ø}		112.6	156.8	ns	67.21	27.88	ns	68.06	36.18	ns
Cy7.5 vs. NanoCy7.5 _{100-L}		112.6	231.6	ns	67.21	75	ns	68.06	67.72	ns
Cy7.5 vs. NanoCy7.5 _{100-H}		112.6	233.3	ns	67.21	84.62	ns	68.06	47.64	ns
	vs.	156.8	231.6	ns	27.88	75	ns	36.18	67.72	ns
NanoCy7.5 _{100-\emptyset}	۰۵.	120.0	231.0	115	27.00	, 5	115	20.10	01.12	115
	vs.	156.8	233.3	ns	27.88	84.62	ns	36.18	47.64	ns
NanoCy7.5 _{100-Н}										
J 100 E	vs.	231.6	233.3	ns	75	84.62	ns	67.72	47.64	ns
NanoCy7.5 _{100-H}										
Heart										
Heart		02.04	70.42		47.51	12.00		40.6	22.94	
Cy7.5 vs. NanoCy7.5 _{100-\emptyset}		82.04	79.42	ns	47.51	13.88	ns	49.6	22.84	ns
Cy7.5 vs. NanoCy7.5 _{100-L}		82.04	138.9	ns	47.51	56.86	ns	49.6	40.88	ns
Су7.5 vs. NanoСу7.5 _{100-н}		82.04	154.1	ns	47.51	51.25	ns	49.6	28.33	ns
J 100 2	vs.	79.42	138.9	ns	13.88	56.86	ns	22.84	40.88	ns
NanoCy7.5 _{100-L}		79.42	154.1	n 0	13.88	51.25	n G	22.84	28.33	20
NanoCy7.5 _{100-Ø} NanoCy7.5 _{100-H}	vs.	/9.42	134.1	ns	15.00	51.25	ns	22.04	20.33	ns
	vs.	138.9	154.1	ns	56.86	51.25	ns	40.88	28.33	ns
NanoCy7.5 _{100-H}										
Bone										
Cy7.5 vs. NanoCy7.5 _{100-Ø}		67.04	156.3	ns	44.86	141.7	ns	37.62	165.4	****
Cy7.5 vs. NanoCy7.5 _{100-L}		67.04	149.2	ns	44.86	205.6	ns	37.62	140.2	****
Су7.5 vs. NanoСу7.5 _{100-н}		67.04	148.2	ns	44.86	221.8	ns	37.62	144.6	****
	vs.	156.3	149.2	ns	141.7	205.6	ns	165.4	140.2	ns
NanoCy7.5 _{100-L}						-				
	vs.	156.3	148.2	ns	141.7	221.8	ns	165.4	144.6	ns
NanoCy7.5 _{100-H}	VC	149.2	110 7	na	205 4	221 0	nc	140.2	1116	nc
NanoCy7.5 _{100-L} NanoCy7.5 _{100-H}	vs.	149.2	148.2	ns	205.6	221.8	ns	140.2	144.6	ns
Таносуто 100-н										
Kidney										
Cy7.5 vs. NanoCy7.5 _{100-∅}		370	253	ns	286.5	78.22	ns	361.6	144.4	****
- ,				l			l			

CY.7.5 vs. NanoCy7.5 _{100-H} 370 313.8 ns 286.5 193.4 ns 361.6 194.9 ***** NanoCy7.5 ₁₀₀₋₀ vs. 253 374.9 ns 78.22 275.5 ns 144.4 26.4 **** NanoCy7.5 ₁₀₀₋₁ vs. 253 313.8 ns 78.22 193.4 ns 144.4 194.9 ns NanoCy7.5 _{100-H} vs. 374.9 313.8 ns 78.22 193.4 ns 144.4 194.9 ns NanoCy7.5 _{100-H} vs. 374.9 313.8 ns 275.5 193.4 ns 144.4 194.9 ns NanoCy7.5 _{100-H} vs. 374.9 313.8 ns 275.5 193.4 ns 286.6 114.9 ns Cy7.5 vs. NanoCy7.5 _{100-L} 59.98 75.62 ns 45.04 48.84 ns 68.86 65.6 ns NanoCy7.5 ₁₀₀₋₀ vs. 75.62 116.4 ns 23.05 48.84 ns 41.94 65.6 ns NanoCy7.5 ₁₀₀₋₁ vs.	Cy7.5 vs. NanoCy7.5 _{100-L}		370	374.9	ns	286.5	275.5	ns	361.6	226.4	****
NanoCy7.5 _{100-Ø} vs. 253 374.9 ns. 78.22 275.5 ns. 144.4 226.4 **** NanoCy7.5 _{100-Ø} vs. 253 313.8 ns 78.22 193.4 ns 144.4 194.9 ns NanoCy7.5 _{100-H} vs. 374.9 313.8 ns 275.5 193.4 ns 144.4 194.9 ns NanoCy7.5 _{100-H} vs. 374.9 313.8 ns 275.5 193.4 ns 226.4 194.9 ns NanoCy7.5 _{100-H} vs. 374.9 313.8 ns 275.5 193.4 ns 226.4 194.9 ns NanoCy7.5 _{100-H} 59.98 161.4 ns 45.04 65.66 ns 68.86 67.27 ns NanoCy7.5 _{100-Ø} vs. 75.62 116.4 ns 23.05 65.66 ns 41.94 65.6 ns NanoCy7.5 _{100-Ø} vs. 75.62 149.5 ns 65.66 <	· ·		370	313.8	ns	286.5	193.4	ns	361.6	194.9	****
NanoCy7.5100_L vs. 253 313.8 ns 78.22 193.4 ns 144.4 194.9 ns NanoCy7.5100_L vs. 374.9 313.8 ns 275.5 193.4 ns 124.4 194.9 ns NanoCy7.5100_L vs. 374.9 313.8 ns 275.5 193.4 ns 226.4 194.9 ns Pancreas Cy7.5 vs. NanoCy7.5100-0 59.98 116.4 ns 45.04 48.84 ns 68.86 67.27 ns Cy7.5 vs. NanoCy7.5100-0 vs. 75.62 116.4 ns 23.05 65.6 ns 41.94 77.27 ns NanoCy7.5100-0 vs. 75.62 149.5 ns 23.05 48.84 ns 41.94 65.6 ns NanoCy7.5100-0 vs. 116.4 149.5 ns 65.66 48.84 ns <t< td=""><td></td><td>vs.</td><td>253</td><td>374.9</td><td>ns</td><td>78.22</td><td>275.5</td><td>ns</td><td>144.4</td><td>226.4</td><td>***</td></t<>		vs.	253	374.9	ns	78.22	275.5	ns	144.4	226.4	***
NanoCy7.5106.11 NanoCy7.5106.11 NanoCy7.5106.11 VS. VS. 374.9 313.8 NS 13.8 P P 275.5 P 193.4 P NS 226.4 P 194.9 P NS Pancreas I											
NanoCy7.5100-L NanoCy7.5100-L vs. 374.9 313.8 ns 275.5 193.4 ns 226.4 194.9 ns Pancreas </td <td>NanoCy7.5_{100-Ø}</td> <td>vs.</td> <td>253</td> <td>313.8</td> <td>ns</td> <td>78.22</td> <td>193.4</td> <td>ns</td> <td>144.4</td> <td>194.9</td> <td>ns</td>	NanoCy7.5 _{100-Ø}	vs.	253	313.8	ns	78.22	193.4	ns	144.4	194.9	ns
NanoCy7.5100-H Image: Constraint of the second											
Pancreas Image: space of the s		vs.	374.9	313.8	ns	275.5	193.4	ns	226.4	194.9	ns
Cy7.5 vs. NanoCy7.5 _{100-Ø} 59.98 75.62 ns 45.04 23.05 ns 68.86 41.94 ns Cy7.5 vs. NanoCy7.5 _{100-H} 59.98 116.4 ns 45.04 65.66 ns 68.86 77.27 ns Cy7.5 vs. NanoCy7.5 _{100-Ø} vs. 75.62 116.4 ns 23.05 65.66 ns 41.94 77.27 ns NanoCy7.5 ₁₀₀₋₀ vs. 75.62 149.5 ns 23.05 48.84 ns 41.94 65.6 ns NanoCy7.5 _{100-H} vs. 75.62 149.5 ns 65.66 48.84 ns 41.94 65.6 ns NanoCy7.5 _{100-H} vs. 116.4 149.5 ns 65.66 48.84 ns 77.27 65.6 ns NanoCy7.5 _{100-H} vs. 116.4 149.5 ns 834.6 681.1 ns 474.5 858 **** Cy7.5 vs. NanoCy7.5 _{100-Ø} 1432 1348 ns 834.6 1079 * 474.5 1041 **** NanoCy7.5 _{100-Ø} vs. <td>NanoCy/.5_{100-H}</td> <td></td>	NanoCy/.5 _{100-H}										
Cy7.5 vs. NanoCy7.5 _{100-Ø} 59.98 75.62 ns 45.04 23.05 ns 68.86 41.94 ns Cy7.5 vs. NanoCy7.5 _{100-H} 59.98 116.4 ns 45.04 65.66 ns 68.86 77.27 ns Cy7.5 vs. NanoCy7.5 _{100-Ø} vs. 75.62 116.4 ns 23.05 65.66 ns 41.94 77.27 ns NanoCy7.5 _{100-D} vs. 75.62 149.5 ns 23.05 48.84 ns 41.94 65.6 ns NanoCy7.5 _{100-H} vs. 75.62 149.5 ns 65.66 48.84 ns 77.27 65.6 ns NanoCy7.5 _{100-H} vs. 116.4 149.5 ns 65.66 48.84 ns 77.27 65.6 ns NanoCy7.5 _{100-H} vs. 116.4 149.2 1348 ns 834.6 681.1 ns 474.5 858 **** Cy7.5 vs. NanoCy7.5 _{100-D} 1432 1288 ns 681.	Demonstra										
System System<			50.00	75.(2)		45.04	22.05		(0.0(41.04	
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	•										
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NanoCy7.5100_L vs. 75.62 149.5 ns 23.05 48.84 ns 41.94 65.6 ns NanoCy7.5100_L vs. 116.4 149.5 ns 65.66 48.84 ns 77.27 65.6 ns NanoCy7.5100_L vs. 116.4 149.5 ns 65.66 48.84 ns 77.27 65.6 ns Liver	Су7.5 vs. NanoСу7.5 _{100-н}		59.98	149.5	ns	45.04	48.84	ns	68.86	65.6	ns
$\begin{array}{c c c c c c c c c c c c c c c c c c c $		vs.	75.62	116.4	ns	23.05	65.66	ns	41.94	77.27	ns
$\begin{array}{ c c c c c c c c c c c c c c c c c c c$							10.01				
$\begin{array}{c c c c c c c c c c c c c c c c c c c $		vs.	75.62	149.5	ns	23.05	48.84	ns	41.94	65.6	ns
$\begin{array}{c c c c c c c c c c c c c c c c c c c $		MC	116.4	140.5	na	65 66	18.81	na	77 27	65.6	nc
LiverImage: constraint of the second systemImage: constraint of the second systemImage: constraint of the second systemImage: constraint of the second systemCy7.5 vs. NanoCy7.5 $_{100-L}$ 14321348ns834.6681.1ns474.5858****Cy7.5 vs. NanoCy7.5 $_{100-L}$ 14321288ns834.61079****474.51041****Cy7.5 vs. NanoCy7.5 $_{100-L}$ 14321222*834.61079*474.51041****NanoCy7.5 $_{100-L}$ vs.13481288ns681.11773****8581205****NanoCy7.5 $_{100-L}$ vs.13481232ns681.11079***8581041****NanoCy7.5 $_{100-L}$ vs.12881232ns17731079***1041****NanoCy7.5 $_{100-L}$ vs.12881232ns17731079***1041****NanoCy7.5 $_{100-L}$ vs.12881232ns17731079***1041****Spleen </td <td></td> <td>vs.</td> <td>110.4</td> <td>149.5</td> <td>115</td> <td>05.00</td> <td>40.04</td> <td>115</td> <td>11.21</td> <td>05.0</td> <td>115</td>		vs.	110.4	149.5	115	05.00	40.04	115	11.21	05.0	115
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	тчино су 7.5 100-п										
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	Liver										
Cy7.5 vs. NanoCy7.5 _{100-L} 1432 1288 ns 834.6 1773 **** 474.5 1205 **** Cy7.5 vs. NanoCy7.5 _{100-H} 1432 1232 * 834.6 1079 * 474.5 1041 **** NanoCy7.5 _{100-Ø} vs. 1348 1288 ns 681.1 1773 **** 858 1205 **** NanoCy7.5 _{100-L} vs. 1348 1282 ns 681.1 1079 ** 858 1041 **** NanoCy7.5 _{100-L} vs. 1348 1232 ns 681.1 1079 *** 858 1041 **** NanoCy7.5 _{100-L} vs. 1288 1232 ns 1773 1079 *** 1205 1041 **** NanoCy7.5 _{100-L} vs. 1288 1232 ns 1773 1079 *** 1205 1041 **** NanoCy7.5 _{100-L} vs. 1288 1232 ns 1773 1079 **** 1205 1041 **** Cy7.5 vs. NanoCy7.5 _{100-Ø} 96.33			1432	1348	ns	834.6	681.1	ns	474.5	858	****
Cy7.5 vs. NanoCy7.5 _{100-H} 1432 1232 * 834.6 1079 * 474.5 1041 **** NanoCy7.5 _{100-Ø} vs. 1348 1288 ns 681.1 1773 **** 858 1205 **** NanoCy7.5 _{100-U} vs. 1348 1232 ns 681.1 1773 **** 858 1205 **** NanoCy7.5 _{100-U} vs. 1348 1232 ns 681.1 1079 *** 858 1041 **** NanoCy7.5 _{100-H} vs. 1288 1232 ns 681.1 1079 *** 858 1041 **** NanoCy7.5 _{100-H} vs. 1288 1232 ns 1773 1079 **** 1205 1041 **** NanoCy7.5 _{100-H} vs. 1288 1232 ns 1773 1079 **** 1205 1041 **** Spleen			1432	1288	ns	834.6	1773	****	474.5	1205	****
NanoCy7.5100-Ø NanoCy7.5100-L vs. 1348 1288 ns 681.1 1773 **** 858 1205 **** NanoCy7.5100-L vs. 1348 1232 ns 681.1 1079 *** 858 1041 **** NanoCy7.5100-L vs. 1348 1232 ns 681.1 1079 *** 858 1041 **** NanoCy7.5100-L vs. 1288 1232 ns 1773 1079 **** 1205 1041 **** NanoCy7.5100-L vs. 1288 1232 ns 1773 1079 **** 1205 1041 **** Spleen <t< td=""><td>•</td><td></td><td>1432</td><td>1232</td><td>*</td><td>834.6</td><td>1079</td><td>*</td><td>474.5</td><td>1041</td><td>****</td></t<>	•		1432	1232	*	834.6	1079	*	474.5	1041	****
$\begin{array}{c c c c c c c c c c c c c c c c c c c $		VS			ns			****			****
NanoCy7.5100-Ø NanoCy7.5100-H vs. 1348 1232 ns 681.1 1079 *** 858 1041 **** NanoCy7.5100-H vs. 1288 1232 ns 1773 1079 **** 1205 1041 **** NanoCy7.5100-L vs. 1288 1232 ns 1773 1079 **** 1205 1041 **** NanoCy7.5100-H vs. 1288 1232 ns 1773 1079 **** 1205 1041 **** Spleen vs. 1288 603.3 vs. 78.27 316.7 * 46.76 263.4 **** Cy7.5 vs. NanoCy7.5100-L 96.33 594.7 **** 78.27 703.9 **** 46.76 247.6 **** NanoCy7.5100-Ø vs. 603.3 594.7 ns 316.7 703.9 **** 263.4 423.8 **** NanoCy7.5100-Ø vs. 603.3 594.7 ns 316.7 703.9 *** 263.4 423.8 **** NanoCy7.5100-Ø	-		10.10	1200	110	00111	1110		000	1200	
$\begin{array}{c c c c c c c c c c c c c c c c c c c $		vs.	1348	1232	ns	681.1	1079	***	858	1041	****
NanoCy7.5100-H Image: ManoCy7.5100-H Image: ManoCy7.5100-H <td>NanoCy7.5_{100-Н}</td> <td></td>	NanoCy7.5 _{100-Н}										
SpleenImage: Splee		vs.	1288	1232	ns	1773	1079	****	1205	1041	****
Cy7.5 vs. NanoCy7.5 $_{100-\varnothing}$ 96.33603.3****78.27316.7*46.76263.4****Cy7.5 vs. NanoCy7.5 $_{100-L}$ 96.33594.7****78.27703.9****46.76423.8****Cy7.5 vs. NanoCy7.5 $_{100-H}$ 96.33795.2****78.27641.8****46.76247.6****NanoCy7.5 $_{100-\Box}$ vs.603.3594.7ns316.7703.9***263.4423.8****NanoCy7.5 $_{100-L}$ vs.603.3795.2ns316.7641.8**263.4247.6nsNanoCy7.5 $_{100-H}$ vs.603.3795.2ns316.7641.8**263.4247.6nsNanoCy7.5 $_{100-H}$ vs.594.7795.2*703.9641.8ns423.8247.6****	NanoCy7.5 _{100-H}										
Cy7.5 vs. NanoCy7.5 $_{100-\varnothing}$ 96.33603.3****78.27316.7*46.76263.4****Cy7.5 vs. NanoCy7.5 $_{100-L}$ 96.33594.7****78.27703.9****46.76423.8****Cy7.5 vs. NanoCy7.5 $_{100-H}$ 96.33795.2****78.27641.8****46.76247.6****NanoCy7.5 $_{100-\Box}$ vs.603.3594.7ns316.7703.9***263.4423.8****NanoCy7.5 $_{100-L}$ vs.603.3795.2ns316.7641.8**263.4247.6nsNanoCy7.5 $_{100-H}$ vs.603.3795.2ns316.7641.8**263.4247.6nsNanoCy7.5 $_{100-H}$ vs.594.7795.2*703.9641.8ns423.8247.6****	Salaan										
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Cy7.5 vs. NanoCy7.5100-H96.33795.2****78.27641.8****46.76247.6****NanoCy7.5100-Øvs.603.3594.7ns316.7703.9***263.4423.8****NanoCy7.5100-Dvs.603.3795.2ns316.7641.8**263.4423.8****NanoCy7.5100-Bvs.603.3795.2ns316.7641.8**263.4247.6nsNanoCy7.5100-Hvs.594.7795.2*703.9641.8ns423.8247.6****	•										
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$\begin{array}{c c c c c c c c c c c c c c c c c c c $		vs.	603.3	594.7	ns	316.7	703.9	***	263.4	423.8	****
NanoCy7.5 _{100-H} vs. 603.5 795.2 iis 510.7 641.8 203.4 247.6 iis NanoCy7.5 _{100-L} vs. 594.7 795.2 * 703.9 641.8 ns 423.8 247.6 ****			(02.2	705.2		2167	(41.0	**	262.4	247.6	
NanoCy7.5 _{100-L} vs. 594.7 795.2 * 703.9 641.8 ns 423.8 247.6 ****		vs.	603.3	795.2	ns	316.7	641.8	ጥጥ	263.4	247.6	ns
1000 y (5) 0010 y		Ve	59/7	795.2	*	703.0	641.8	ne	423.8	247.6	****
	NanoCy7.5 _{100-L} NanoCy7.5 _{100-H}	v 5.	554.7	195.2		103.9	0-11.0	115	723.0	277.0	

Supplemental Table 2. Values and significance levels for organ SNR in BALB/c mice for lead NP formulations at 4 and 24 h.

NanoICG 4 h	24 h
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	ICG	NanoICG	Sig.	ICG	NanoICG	Sig.
Tumor	53.68	46.46	ns	13.4	29.19	****
Muscle	5.144	6.447	ns	1.179	2.133	ns
Lung	29.05	27.42	ns	5.668	8.295	ns
Heart	10.57	10.7	ns	2.067	4.261	ns
Bone	12.68	17.62	ns	4.811	8.248	ns
Pancreas	24.91	48.86	ns	3.239	6.255	ns
Kidney	108.3	55.95	***	20.48	26.28	**
Liver	142.5	90.04	***	19.08	30.87	****
Spleen	12.07	23.83	ns	4.688	12.39	****

NanoCy7.5		4 h		24 h				
	Cy7.5	NanoCy7.5 _{100-H}	Sig.	Cy7.5	NanoCy7.5 _{100-H}	Sig.		
Tumor	47.77	231.3	***	29.02	270.3	****		
Muscle	26.72	43.52	ns	12.5	24.58	ns		
Lung	256.2	378.8	ns	73.86	100.8	ns		
Heart	74.34	164.5	ns	28.41	42.58	ns		
Bone	67.33	116.1	ns	34.02	102.6	*		
Pancreas	65.48	150.3	ns	38.6	77.58	ns		
Kidney	283.6	361.4	ns	180.6	170.9	ns		
Liver	1017	937.5	ns	467.8	744.3	****		
Spleen	329.1	347	ns	139.4	404.5	****		