

Supplementary Information

for

Transforming Stealthy to Sticky Nanocarriers: A Potential Application for Tumor Therapy

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Table 1. Switching time of charge conversion (zeta potential) of chameleon-like nanoparticles

No.	Time (min)	Before		After		Ref.
		pH	zeta (mV)	pH	zeta (mV)	
1.	240	7.4	-25	5	+5.8	[21]
2.	240	7.4	-18.43	6.5	+7.69	[22]
3.	60	7.4	-18.2	6.8	+10.4	[37]
4.	60	7.4	-18.3	6.5	+4.4	[40]
5.	10	7.4	-20	6.8	+3	[61]
6.	90	7.4	0	6.8	+17	[63]
7.	10	7.4	-15	6.8	+15	[77]
8.	2	7.4	-8.52	6.5	+4.31	[84]
9.	5	7.4	-19.5	5.8	+ (unkown)	[85]
10.	90	7.4	-23	6	+5	[90]
11.	120	7.4	-20	6	+8	[91]
12..	120	7.4	-7.9	6.8	+7.2	[92]
13.	150	7.4	-11	6.8	+11	[93]
14.	480	7.4	-25	6.4	+10	[94]

Table 2. Selected data of biodistribution profiles of chameleon-like nanoparticles (a potential application for clinical translation)

No.	Type of charge-switchable NCs	Biodistribution in tumor and other major organs						Unit	Distribution ratio of tumor:liver (x)	Distribution ratio of tumor:other organs (x)	Ref.
		Tumor	Liver	Spleen	Lung	Kidney	Heart				
1.	Active NCs: Hybrid	4 x 10 ⁸	1 x 10 ⁸	0.1 x 10 ⁸	0.1 x 10 ⁸	0.2 x 10 ⁸	0.1 x 10 ⁸	FI*	4	8.00	[23]
2.	Active NCs: shrinkable/stretchable polymers	1,200	600	300	500	500	300	FI*	2	0.75	[24]
3.	Passive NCs: cleavable bonds	17	5	3	1	4	2	%ID/g	3.40	1.89	[95]
4.	Passive NCs: cleavable bonds	7,000	1,600	100	300	1,000	300	FI*	4.38	4.12	[96]
5.	Passive NCs: protonation/deprotonation	14 x 10 ⁶	9 x 10 ⁶	5 x 10 ⁶	5 x 10 ⁶	6 x 10 ⁶	5 x 10 ⁶	FI*	1.56	0.67	[97]

Note : FI* means mean fluorescence intensity.