Characterization of polymers

Table S1. Number-Average Molecular Weight (M_n) and Molecular Weight Distribution (M_w/M_n) of the Block Copolymers

Polymers	M_v $\times 10^{-4}$	M_w(SLS) $\times 10^{-4}$	M_n(NMR) $\times 10^{-4}$	M_n(GPC) $\times 10^{-4}$	M_w/M_n
PAMPS275	4.30	5.70			1.18
PMPC20-*b*-PAMPS198			4.72	2.29	1.25
PAMPS48-*b*-PEG227-*b*-PAMPS48			3.26	2.32	1.42
PEG47-*b*-PAMPS108			2.71	2.30	1.17
PEG47-*b*-PAMPS27			0.90	0.67	1.15

Table S2. ^{1}H NMR data

Polymer	Chemical shifts
PAMPS275	^{1}H NMR (500 MHz, D_2O): δ ppm, 3.14-3.61 (m, 2H), 1.89-2.29 (m, 1H), 1.14-2.28 (m, 8H)
PMPC20-*b*-PAMPS198	^{1}H NMR (500 MHz, D_2O): δ ppm, 4.32 (m, 40H), 4.23 (m, 40H), 4.10 (m, 40H), 3.69 (m, 40H), 3.08-3.52 (m+s, 576H), 1.89-2.29 (m, 198H), 1.14-2.28 (m, 1624H), 0.28-1.14 (m, 60H)
PAMPS48-*b*-PEG227-*b*-PAMPS48	^{1}H NMR (500 MHz, D_2O): δ ppm, 3.72 (m, 908H), 3.14-3.61 (m, 192H), 1.89-2.29 (m, 96H), 1.14-2.28 (m, 576H)
PEG47-*b*-PAMPS108	^{1}H NMR (500 MHz, D_2O): δ ppm, 3.72 (m, 188H), 3.14-3.61 (m, 216H), 1.89-2.29 (m, 108H), 1.14-2.28 (m, 864H)
PEG47-*b*-PAMPS27	^{1}H NMR (500 MHz, D_2O): δ ppm, 3.72 (m, 188H), 3.14-3.61 (m, 54H), 1.89-2.29 (m, 27H), 1.14-2.28 (m, 216H)

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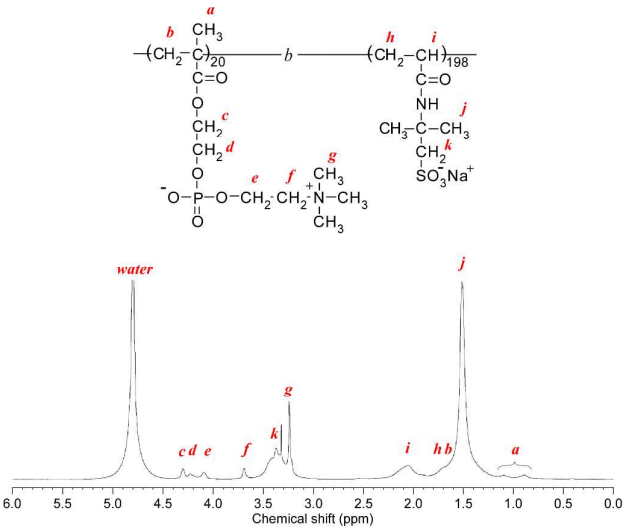

Figure S1. ^{1}H NMR spectrum for PMPC20-*b*-PAMPS198 in D_2O at 20°C.

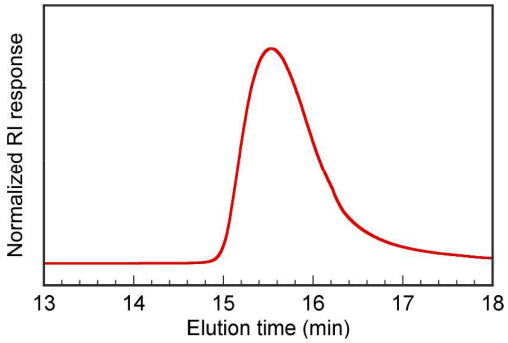

Figure S2. GPC elution curve for PMPC20-*b*-PAMPS198 using phosphate buffer (50 mM, pH 9) containing 10 vol % acetonitrile as eluent.

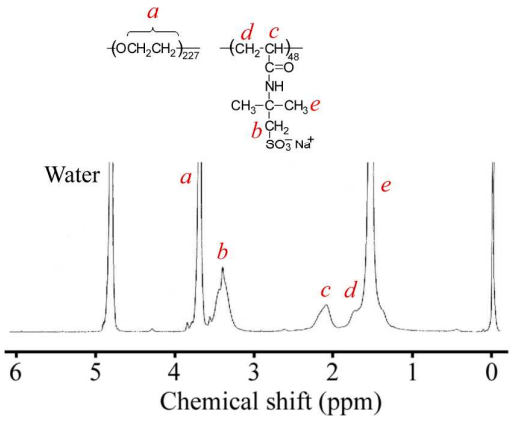

Figure S3. ^{1}H NMR spectrum for PAMPS48-*b*-PEG227-*b*-PAMPS48 in D_2O at 20°C.

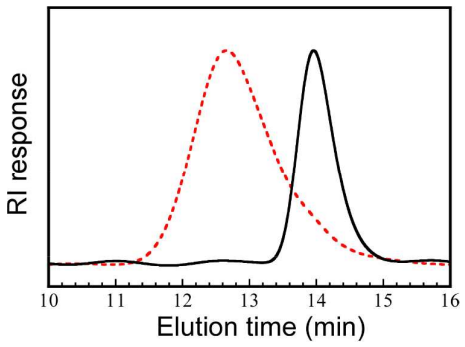

Figure S4. GPC elution curves for HO-PEG-OH (—) and PAMPS48-*b*-PEG227-*b*-PAMPS48 (----) using phosphate buffer (50 mM, pH 9) containing 10 vol % acetonitrile as eluentical structures of the block copolymers.

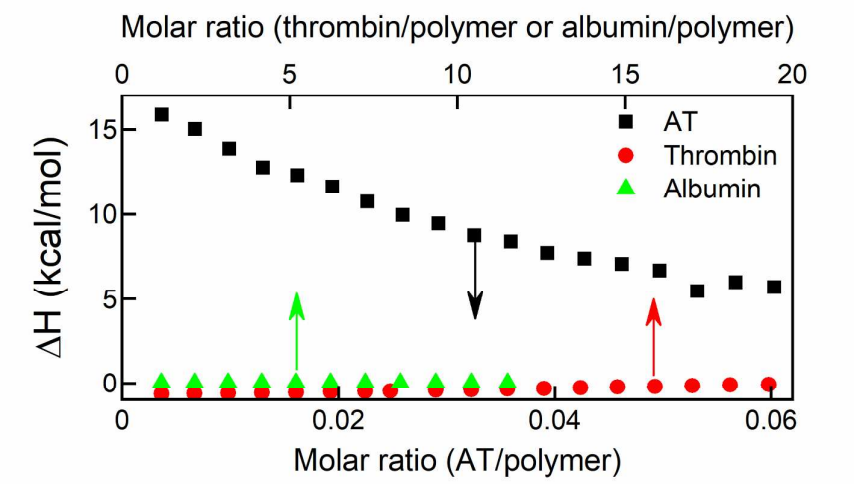

Figure S5. The heat of interaction between PEG47-*b*-PAMPS108 polymer with AT and thrombin. Albumin was used as a non-interacting reference protein ($c_{PEG47\text{-}b\text{-}PAMPS108}$=1.35 mg/mL).

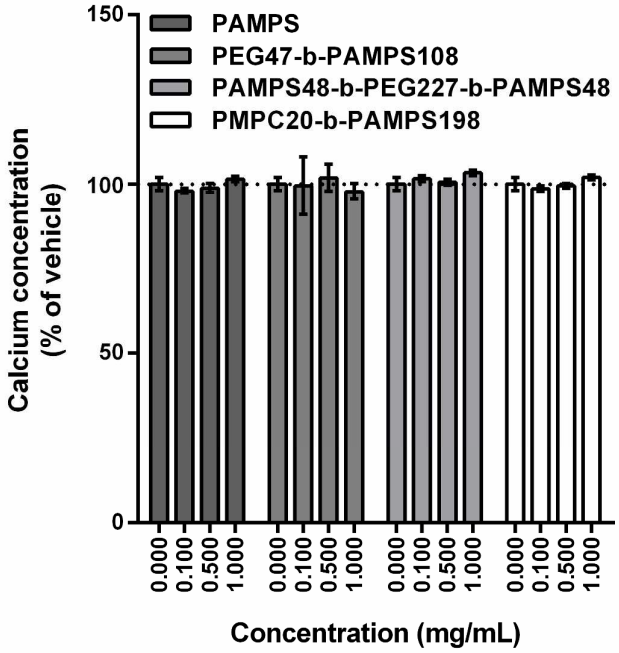

Figure S6. Effects of PAMPS-based polymers on calcium concentration. Results are shown as median with lower and upper limits, n = 5.

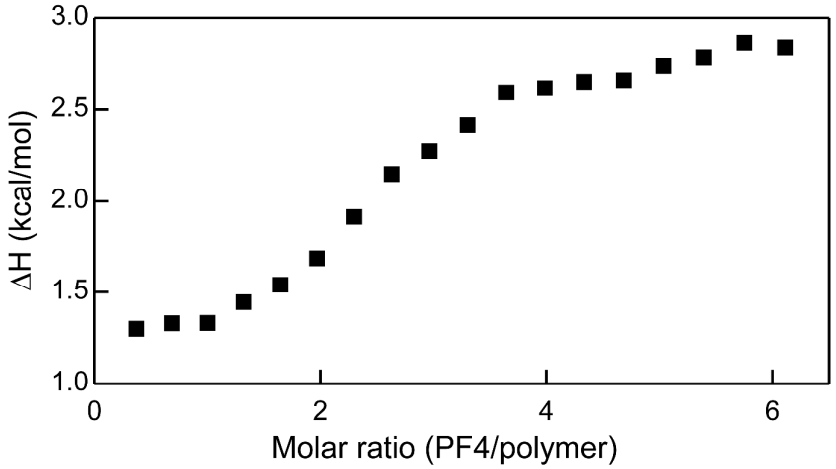

Figure S7. The heat of interaction between PEG47-*b*-PAMPS108 polymer and PF4. The concentration of PEG47-b-PAMPS108 was 1.35 mg/mL.

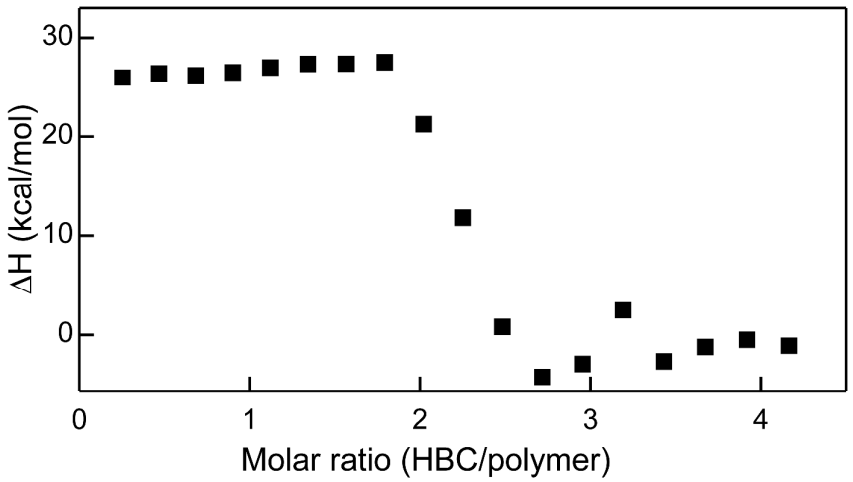

Figure S8. The heat of interaction between PEG47-*b*-PAMPS108 and HBC. The concentration of PEG47-b-PAMPS108 was 1.35 mg/mL.

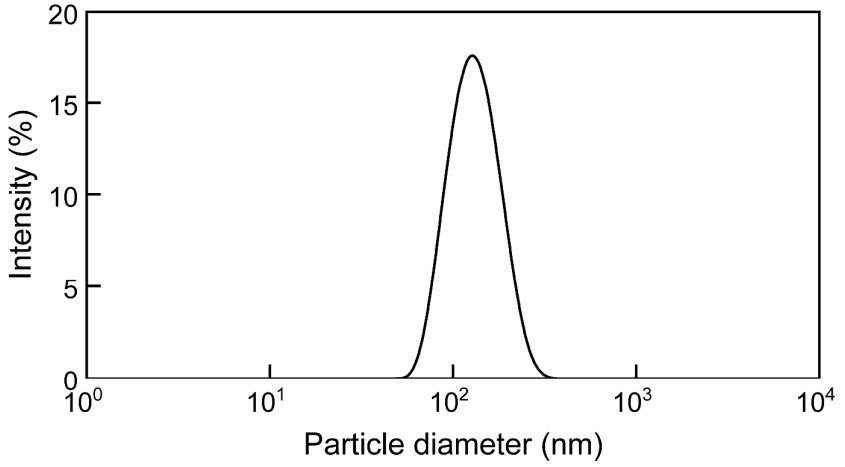

Figure S9. The size distribution of the PIC complexes formed by HBC (c=12 mg/mL) and PEG47-*b*-PMAPTAC108 (c=12 mg/mL) in PBS measured using DLS technique.

Table S3. Complete blood count results after incubation of blood with the polymers solution in the final concentration of 0.01-1 mg/mL.

	Conc. (mg/mL)	PAMPS275	PEG47-*b*-PAMPS108	PAMPS48-*b*-PEG227-*b*-PAMPS48	PMPC20-*b*-PAMPS198
PLT	0.01	101.8 (84.1-109.0)	93.7 (85.7-99.9)	96.7 (84.7-104.0)	101.0 (80.8-109.6)
	0.1	102.7 (87.7-109.0)	95.4 (85.1-99.9)	98.0 (89.4-102.5)	100.2 (79.9-107.1)
	1	93.8 (83.0-102.4)	95.6 (89.4-100.6)	88.7* (85.3-96.9)	91.6 (79.4-99.3)
ZZZW	0.01	104.6 (99.5-112.2)	98.4 (98.4-102.5)	102.5 (94.3-102.5)	104.6 (96.9-107.1)
	0.1	104.6 (99.5-109.7)	102.5 (90.2-106.6)	98.4 (94.3-102.5)	102.0 (99.5-107.1)
	1	99.5 (91.8-102.0)	98.4 (90.2-102.5)	98.4 (86.1-98.4)	102.0 (91.8-104.6)
RBC	0.01	99.7 (99.2-102.0)	98.8 (92.2-100.8)	100.5 (97.9-104.8)	100.9 (100.4-101.0)
	0.1	101.4 (100.9-102.5)	100.8 (93.7-104.5)	99.1 (97.4-102.5)	100.5 (97.9-103.5)
	1	104.4* (102.2-108.9)	99.3 (98.8-106.5)	102.7 (100.6-104.2)	104.4* (101.4-104.9)
HGB	0.01	101.3 (99.7-102.1)	99.5 (95.5-100.3)	102.8 (97.1-105.2)	100.5 (100.5-100.5)
	0.1	101.3 (101.3-103.7)	100.3 (97.1-104.4)	100.3 (97.1-102.8)	102.1 (97.3-102.1)
	1	105.3* (102.1-109.3)	100.3 (98.7-105.2)	102.8 (100.3103.6)	101.0* (100.4-101.5)
HCT	0.01	101.0 (98.6-101.5)	98.8 (92.1-100.9)	100.3 (97.9-105.3)	99.8 (97.4-103.6)
	0.1	101.8 (101.0-103.9)	100.9 (95.0-104.7)	99.1 (98.2-103.2)	94.8 (92.5-98.5)
	1	104.2* (102.4-110.5)	100.0 (97.7-106.7)	102.3 (100.9-104.7)	104.5* (100.1-105.7)
MCV	0.01	100.4 (100.4-102.2)	99.0 (99.0-99.0)	99.0 (99.0-100.7)	100.4 (100.4-100.4)
	0.1	100.4 (100.4-102.2)	100.7 (99.0-100.7)	100.7 (99.0-100.7)	100.4 (100.4-100.4)
	1	100.4 (100.4-102.2)	99.0 (99.0-100.7)	100.7 (99.0-100.7)	100.4 (98.6-100.4)
MCH	0.01	100.9 (99.9-101.8)	100.0 (99.5-103.8)	100.5 (99.5-101.9)	99.9 (99.4-100.4)
	0.1	100.4 (99.4-101.4)	100.5 (99.5-103.8)	101.0 (99.0-101.0)	100.9 (98.9-101.4)
	1	100.9 (99.9-100.9)	100.0 (99.0-101.0)	100.5 (97.6-101.4)	100.4 (99.4-101.4)
MCHC	0.01	100.6 (100.1-102.0)	100.3 (99.8-104.2)	100.6 (99.5-102.5)	99.8 (99.0-100.6)
	0.1	100.1 (99.6-100.9)	100.1 (98.9-102.6)	99.2 (98.4-102.3)	101.2 (98.8-102.3)
	1	100.1 (99.0-101.7)	99.5 (98.7-102.6)	100.1 (98.4-101.2)	100.4 (98.8-102.8)

Abbreviations: WBC, white blood cells; RBC, red blood cells; HGB, hemoglobin; HCT, hematocrit; MCV, mean corpuscular volume; MCH, mean corpuscular hemoglobin; MCHC, mean corpuscular hemoglobin concentration; PLT, blood platelets. *$p<0.05$ *vs* whole blood without studied polymers, Mann-Whitney test.

Results are expressed as a percentage of the control samples and shown as a median with lower and upper limits, n = 5.

Table S4. Complete blood count results in rats treated intravenously with PAMPS-based polymers administered at the dose of 6 mg/kg.

	Vehicle	**PAMPS**	**PEG47-*b*-PAMPS108**	**PAMPS48-*b*-PEG227-*b*-PAMPS48**	**PMPC20-*b*-PAMPS198**
WBC, 10^3/mm^3	2.5 ± 0.5	4.3 ± 0.9 ***	4.1 ± 1.0 ***	4.6 ± 0.9 ***	4.2 ± 1.0 ***
RBC, 10^6/mm^3	6.4 ± 0.7	6.3 ± 0.5	6.7 ± 0.8	6.6 ± 0.7	6.4 ± 0.5
HGB, g/dL	13.6 ± 0.7	13.3 ± 0.7	13.9 ± 1.0	13.7 ± 0.8	13.6 ± 0.7
HCT, %	40.0 ± 2.9	39.6 ± 2.3	41.4 ± 3.8	40.7 ± 3.0	40.4 ± 2.5
MCV, µm^3	62.3 ± 2.6	62.8 ± 2.6	62.3 ± 3.1	62.3 ± 2.1	62.0 ± 2.0
MCH, pg	21.3 ± 1.7	21.2 ± 1.4	21.0 ± 1.5	21.0 ± 1.4	21.2 ± 1.2
MCHC, g/dL	34.2 ± 1.5	33.7 ± 1.1	33.7 ± 1.2	33.7 ± 1.1	33.7 ± 0.9
PLT, 10^3/mm^3	667 ± 65	497 ± 79 ***	653 ± 68	665 ± 46	562 ± 103 *

Abbreviations: WBC, white blood cells; RBC, red blood cells; HGB, hemoglobin; HCT, hematocrit; MCV, mean corpuscular volume; MCH, mean corpuscular hemoglobin; MCHC, mean corpuscular hemoglobin concentration; PLT, blood platelets. *p<0.05, ***p<0.001 *vs* vehicle, unpaired Student's *t*-test. Results are shown as mean ± SD, n = 8-10.