

Supplementary Information: Hydrophobic Modification of Poly(γ -Glutamic Acid) by Grafting 4-Phenyl-butyl Side Groups for the Encapsulation and Release of Doxorubicin

Porochista Dorost¹, Montserrat García-Alvarez^{1, *} and Antxon Martínez de Ilarduya^{1, *}

¹Departament d'Enginyeria Química, Universitat Politècnica de Catalunya, ETSEIB, Diagonal 647, 08028 Barcelona, Spain

* Correspondence: montserrat.garcia@upc.edu, antxon.martinez.de.ilarduia@upc.edu

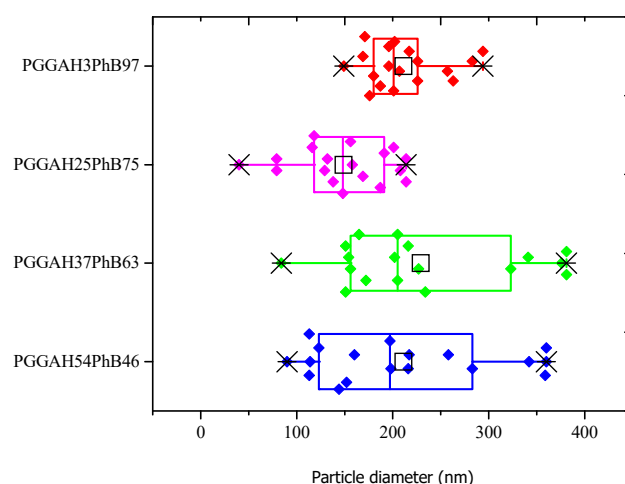


Figure S1. Size distributions and average particle diameters (\square) of PGGAH_xPhB_y copolymers determined via SEM.

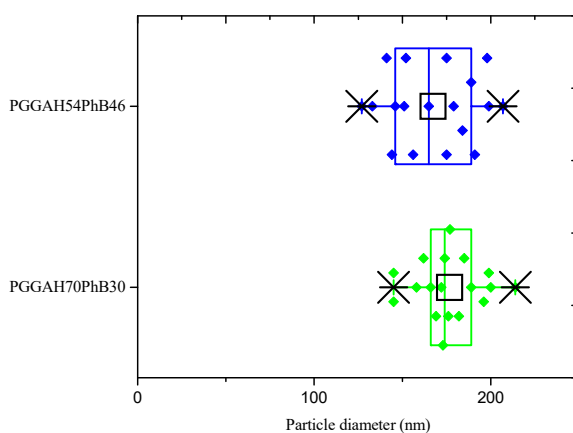


Figure S2. Size distributions and average particle diameters (\square) of DOX-loaded PGGAH_xPhB_y copolymers determined via SEM.

Table S1. Comparison of mathematical models of the 24-h release profiles of Doxorubicin from PGGAH_xPhB_y copolymers at different pHs.

Copolymer	pH	Zero-order model		First-order model		Higuchi model		Korsmeyer–Peppas model ¹		
		<i>K</i>	<i>r</i> ²	<i>K</i>	<i>r</i> ²	<i>K</i>	<i>r</i> ²	<i>K</i>	<i>n</i>	<i>r</i> ²
PGGAH ₇₀ PhB ₃₀	7.4	0.022	0.81	-0.038	0.91	0.123	0.96	0.211	0.35	0.98
	4.2	0.028	0.78	-0.066	0.93	0.159	0.95	0.295	0.33	0.99
PGGAH ₅₄ PhB ₄₆	7.4	0.021	0.92	-0.032	0.97	0.132	0.97	0.055	0.74	0.95
	4.2	0.029	0.52	-0.079	0.78	0.145	0.69	0.208	0.65	0.97

¹Only data from the first 60% of DOX release were used to statistically analyze the results.