Supplementary Information

Injectable Hydrogels Self-assembled from Oligopeptide-Poly(2-methacryloyloxyethyl phosphorylcholine) Hybrid Graft Copolymers for Cell Scaffolds and Controlled Release Applications

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Figure S1. (a) ¹H-NMR spectrum of PEG-attached peptide macromonomer (MA- β A-A₈-PEG) in DMSO-d₆ at 25°C. (b) MALDI TOF MS spectrum of MA- β A-A₈-PEG. Matrix: DHBA.



Figure S2. ¹H-NMR spectrum of $\mathbf{1}_m$ (m = 10) in D₂O containing TFA at 25°C.



Figure S3. The cytotoxicity of hybrid graft copolymers towards NIH/3T3 cells evaluated using MTT assay. Errors indicate standard deviation.



Figure S4. CD spectra of $\mathbf{1}_m$ [m = 6 (a), 10 (b), 20 (c), 32 (d), and 40 (d)] in water at various pH levels and 25°C. [peptide] = 250 μ M.



Figure S5. Temperature dependency of CD spectra of $\mathbf{1}_m$ [m = 6 (a), 10 (b), 20 (c), 32 (d), and 40 (d)] in water at pH 5.6 and 25°C. [peptide] = 250 μ M.



Figure S6. Storage modulus G' and loss modulus G'' of $\mathbf{1}_m$ in aqueous media [m = 6 (a), 10 (b), 20 (c), 32 (d), and 40 (e)] (15 wt%) as a function of frequency at 1% strain, 25°C.



Figure S7. Recovery profiles of $\mathbf{1}_m$ (m = 32) hydrogel (15 wt%) at 1% strain amplitude after large-amplitude oscillatory breakdown in the absence (blue circle) and presence (red circle) of urea (8M).