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Article:

Contreras, A, Raxworthy, MJ, Wood, S et al. (2 more authors) (2019) Photodynamically Active Electrospun Fibers for Antibiotic-Free Infection Control. *ACS Applied Bio Materials*, 2 (10). pp. 4258-4270. ISSN 2576-6422

<https://doi.org/10.1021/acsabm.9b00543>

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Supporting Information

Photodynamically Active Electrospun Fibres for Antibiotic-Free Infection Control

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Table S1. Loading efficiency (LE) and percent release measured in PCL and PLGA scaffolds electrospun in the presence of either MB or ER.

Sample ID	PCL-MB	PCL-ER	PLGA-MB	PLGA-ER
LE /wt. %	103±16	103±31	110±16	97±30
% release /wt. % ⁽¹⁾	114±4	28±2	7±4	2±1

⁽¹⁾ Percent release following 8-week sample incubation (PBS, 37 °C).

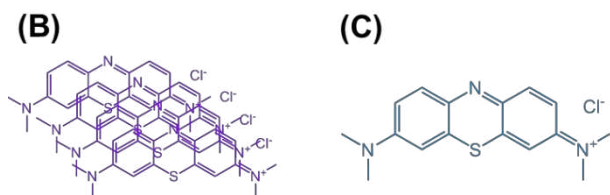


Figure S1. (A) Macroscopic images of PS-free and PS-encapsulated scaffolds. (B) Aggregation of MB molecules results in a purple colour of PS-encapsulated fibres. (C) Encapsulation of MB in the monomeric state results in a blue colour of respective fibres.

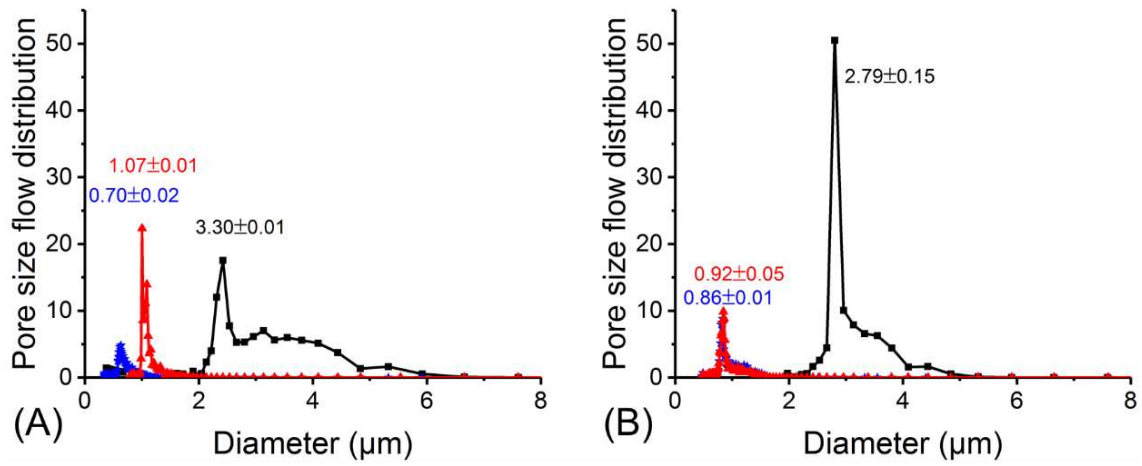


Figure S2. Typical pore size flow distribution measured via porometry in electrospun scaffolds of PCL (A) and PLGA (B). (■): PS-free (ND); (★): MB-encapsulated; (▲): ER-encapsulated.

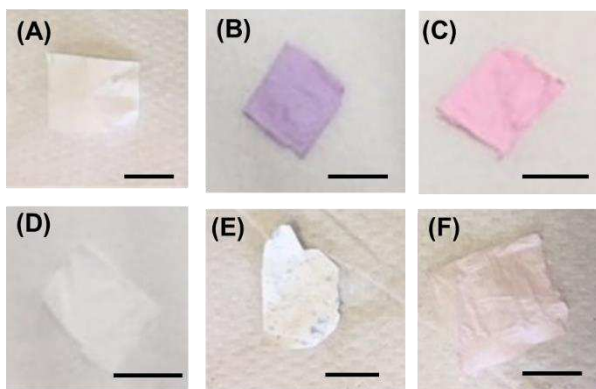


Figure S3. Macroscopic images of electrospun PCL scaffolds following electrospinning (A-C) and 8-week hydrolytic incubation (D-F) in 37 °C distilled water. (A, D): PCL-ND; (B, E): PCL-MB; (C, F): PCL-ER. Scale bar: ~ 1 cm.

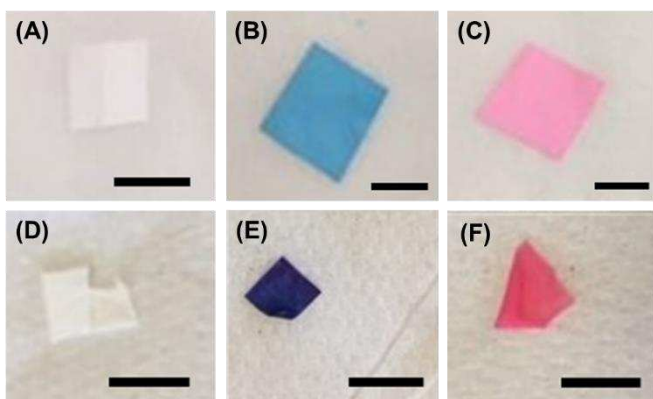


Figure S4. Macroscopic images of electrospun PLGA scaffolds following electrospinning (A-C) and 8-week hydrolytic incubation (D-F) in 37 °C distilled water. (A, D): PLGA-ND; (B, E): PLGA-MB; (C, F): PLGA-ER. Scale bar: ~ 1 cm.

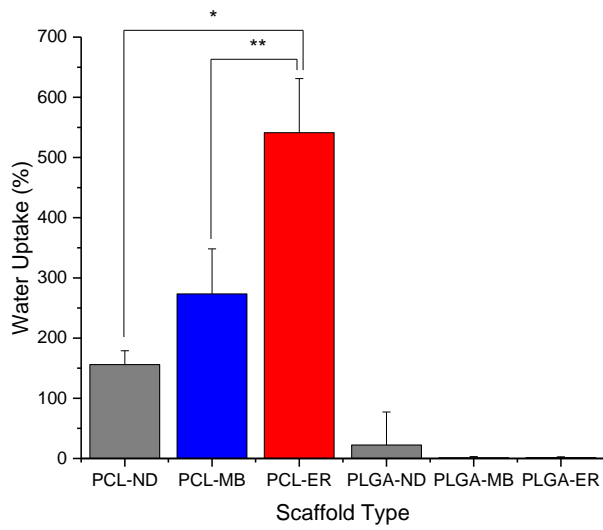


Figure S5. Water uptake measured gravimetrically following incubation (H_2O , 37°C) of either PS-loaded or electrospun control samples. '*' and '**' denote significantly different means ($p < 0.05$, t-test).

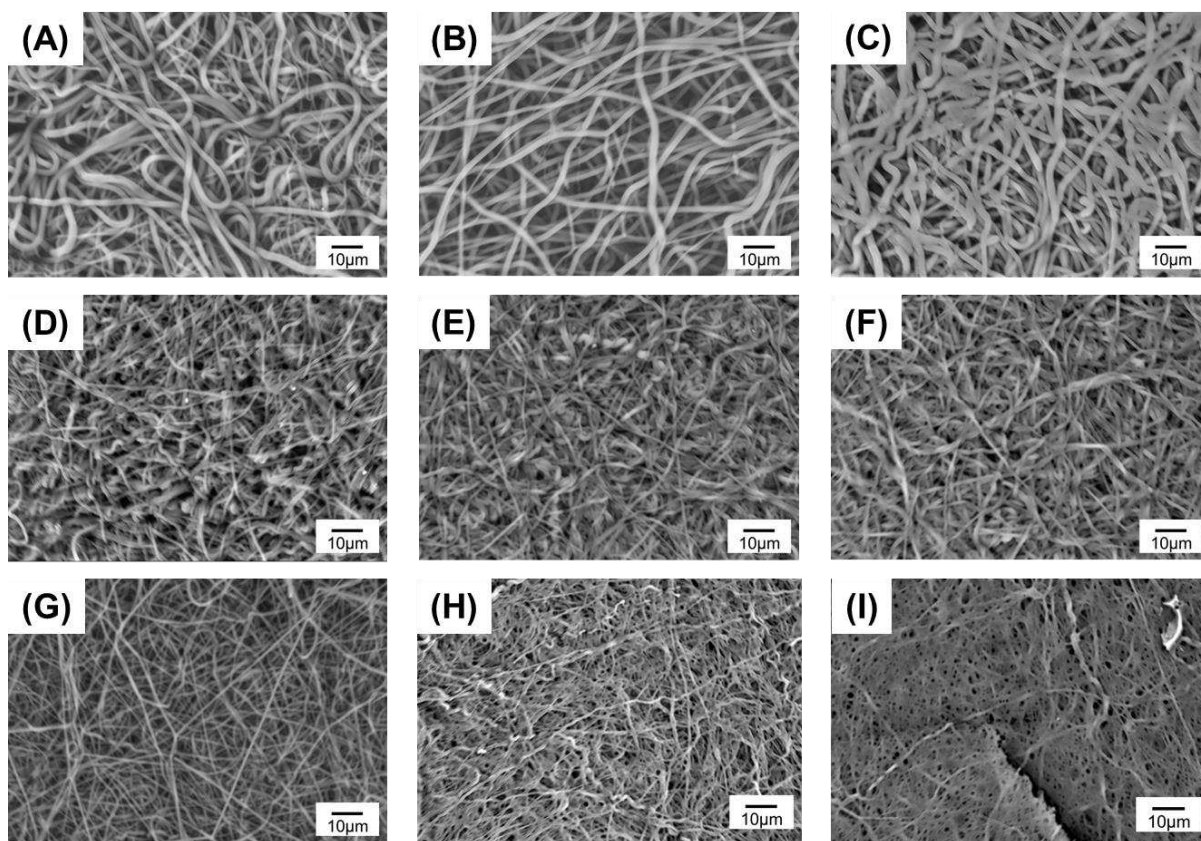


Figure S6. Scanning Electron Microscopy (SEM) of electrospun PLGA scaffolds following 8-week hydrolytic incubation (PBS, 37 °C). (A-C): samples PLGA-ND following 1 (A), 4 (B) and 8 (C) weeks. (D-F): samples PLGA-MB following 1 (D), 4 (E) and 8 (F) weeks. (G-I): samples PLGA-ER following 1 (G), 4 (H) and 8 (I) weeks.

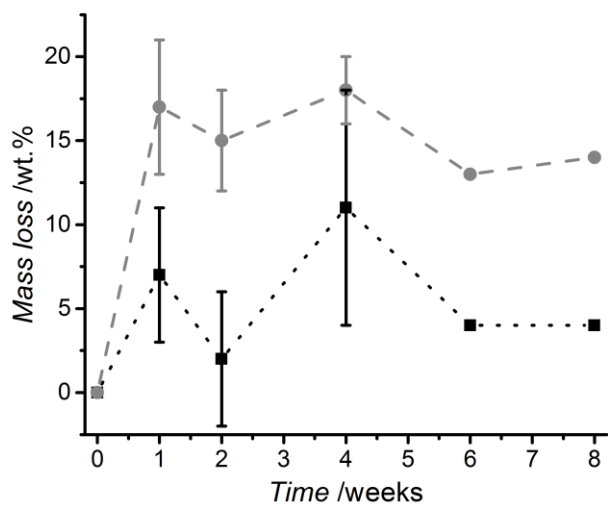


Figure S7. Mass loss measured on samples PCL-ND (black) and PLGA-ND (grey) following hydrolytic degradation (H_2O , $37\ ^\circ C$). Lines are guidelines to the eye.