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 (H₂O, 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 (H₂O, 37 °C). Lines are guidelines to the eye.