Supporting Information

Highly photocytotoxic 1,4-dipegylated zinc(II) phthalocyanines. Effects of the chain length on the *in vitro* photodynamic activities

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Fig. S1 Electronic absorption spectra of 5a (solid line) and 5f (dash line) in thin solid films.



Fig. S2 Comparison of the rates of decay of DPBF in DMF, as monitored spectroscopically at 411 nm, using phthalocyanines **5a-5c** and **5e-5f** as the photosensitisers and ZnPc as the reference.



Fig. S3 Electronic absorption spectra of $ZnPc[O(CH_2CH_2O)_nMe]_2 [n = 2 (5a) (black), 4 (5b) (red), 6 (5e) (green), 8 (5f) (blue) and ca. 12 (5c) (cyan)], formulated with Cremophor EL, in the RPMI culture medium (all at 8 <math>\mu$ M).

In all of the following spectra, residual solvent (for ¹H NMR) or solvent (for ¹³C NMR) signals are marked with asterisks



 $^{13}C\{^{1}H\}$ NMR spectrum of **3a** in CDCl₃.



140 120 100 80 60 40

20



ррт

160



¹H NMR spectrum of **3c** in CDCl₃.

S6



¹H NMR spectrum of **3d** in CDCl₃.



 $^{13}C{^{1}H}$ NMR spectrum of **3d** in CDCl₃.



 1 H NMR spectrum of **5a** in CDCl₃ with a trace amount of pyridine-d₅.



 $^{13}C\{^1H\}$ NMR spectrum of **5a** in DMSO-d_6.



 1 H NMR spectrum of **5b** in CDCl₃ with a trace amount of pyridine-d₅.



 $^{13}C\{^1H\}$ NMR spectrum of 5b in CDCl_3 with a trace amount of pyridine-d_5.



 1H NMR spectrum of 5c in CDCl3 with a trace amount of pyridine-d5.



 1 H NMR spectrum of **5d** in CDCl₃ with a trace amount of pyridine-d₅.



 $^{13}C\{^{1}H\}$ NMR spectrum of **5d** in CDCl₃.



 1 H NMR spectrum of **5e** in CDCl₃ with a trace amount of pyridine-d₅.

 $^{13}C\{^1H\}$ NMR spectrum of 5e in CDCl_3 with a trace amount of pyridine-d_5.

 1 H NMR spectrum of **5f** in CDCl₃ with a trace amount of pyridine-d₅.

 $^{13}C{^{1}H}$ NMR spectrum of **5f** in CDCl₃ with a trace amount of pyridine-d₅.