Electronic Supplementary Material (ESI) for Photochemical & Photobiological Sciences.

Supplementary data: figure captions

Fig. S1. PDT-induced cell death is inhibited by FB and zVAD in SCC22A cells. FB and zVAD (10 μM each) were added 1 h prior to PDT (100 nM or 250 nM Pc4 + 200 mJ cm^{-2}). Colonies were stained with crystal violet (0.1%) and counted 21 days after treatments. The data are shown as the average ± SEM (n = 3 samples). Differences were significant between untreated control and treatments (#) or between PDT and PDT + inhibitor (*). Untreated controls had 0% loss of clonogenicity.

Fig. S2. PDT-induced mitochondrial ceramide accumulation is inhibited by FB. SCC17B cells were treated with FB (10 μM) 1 h prior to PDT (20 nM Pc4 + 200 mJ cm^{-2}; LD20), incubated for 10 h and immunostained with anti-TOM20 (1:100, Abcam, Cambridge, MA, USA) and anti-ceramide antibodies. Nuclei were visualized with DAPI. All images were acquired by confocal microscopy with identical settings. Con, untreated control.

Fig. S3. PDT-induced caspase-3 (casp3) activation is dose- and time-dependent. SCC17B cells were treated with PDT (250 and 500 nM Pc4 + 200 mJ cm^{-2}; LD43 and LD87, respectively), incubated for indicated periods of time, collected and processed for DEVDase assay as described in.[1] The data are shown as the average ± SEM (n = 3-9 samples). Differences were significant between untreated control and treatments (#) or between PDT doses (*). Con, untreated control.

Fig. S4. PDT-induced casp3 activation is inhibited by FB. FB was used at a non-toxic dose (10 μM) and was added 1 h prior to PDT (250 nM Pc4 + 200 mJ cm^{-2}; LD43). Twenty four hours after treatments, SCC17B cells were collected and processed for DEVDase assay. The data are shown as the average ± SEM (n = 3-9 samples). Differences were significant between untreated control and treatments (#) or between PDT and PDT + FB (*). Con, untreated control.

Reference:

1 D. Separovic, P. Breen, N. B. Boppana, E. Van Buren, N. Joseph, J. M. Kraveka, M. Rahmaniyan, L. Li, T. I. Gudz, A. Bielawska, A. Bai, J. Bielawski, J. S. Pierce, and M. Korbelik, Increased killing of SCCVII squamous cell carcinoma cells after the combination of Pc 4 photodynamic therapy and dasatinib is associated with enhanced caspase-3 activity and ceramide synthase 1 upregulation, *Int. J. Oncol.,* **43**, 2013, 2064-2072.

Fig. S1. PDT-induced cell death is inhibited by FB and zVAD in SCC22A cells

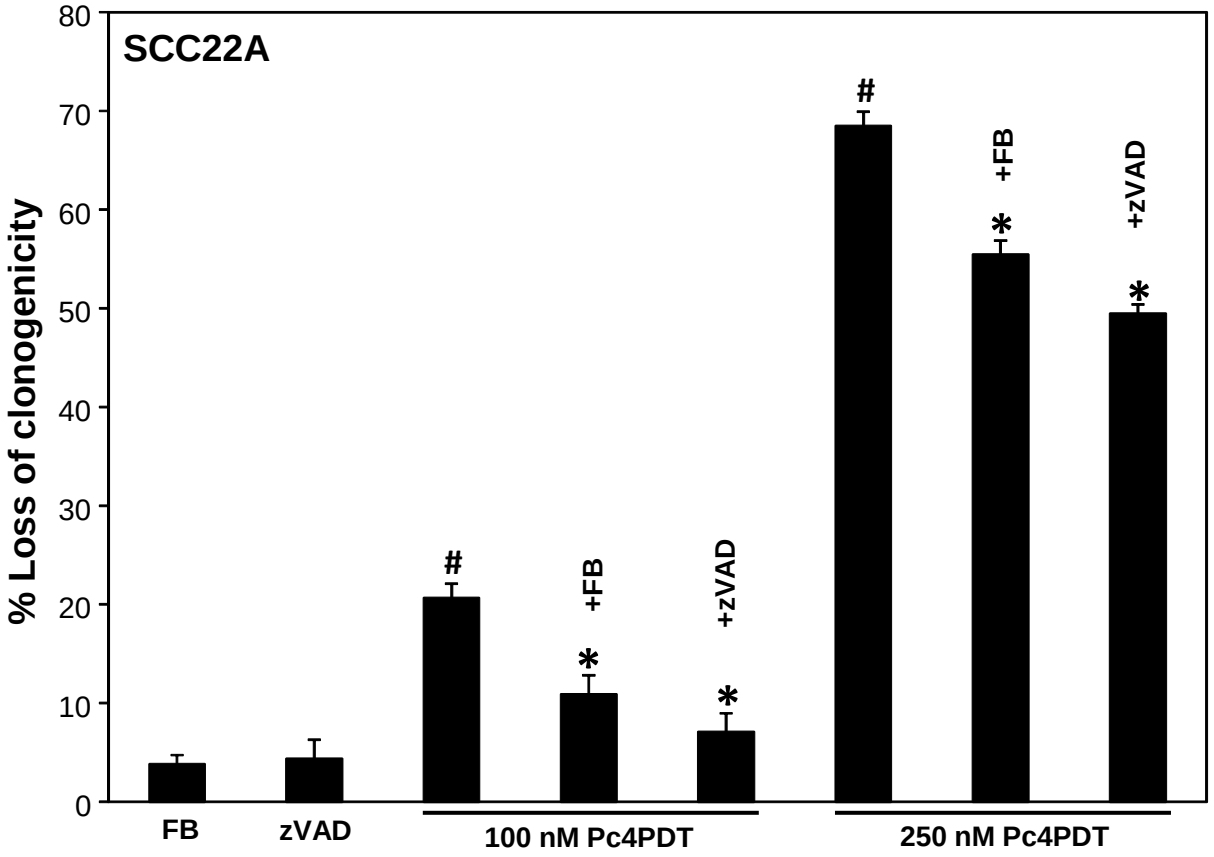

Fig. S2. PDT-induced mitochondrial ceramide accumulation is inhibited by FB

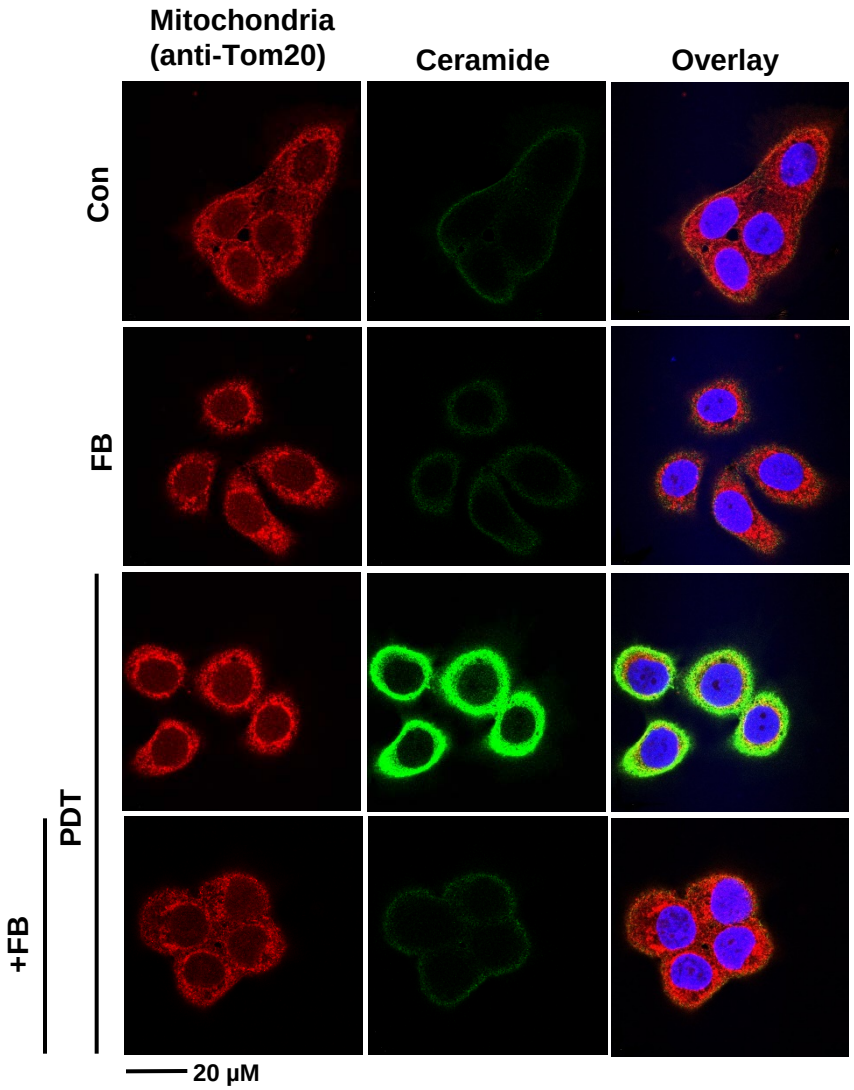

Fig. S3. PDT-induced casp3 activation is dose- and time-dependent

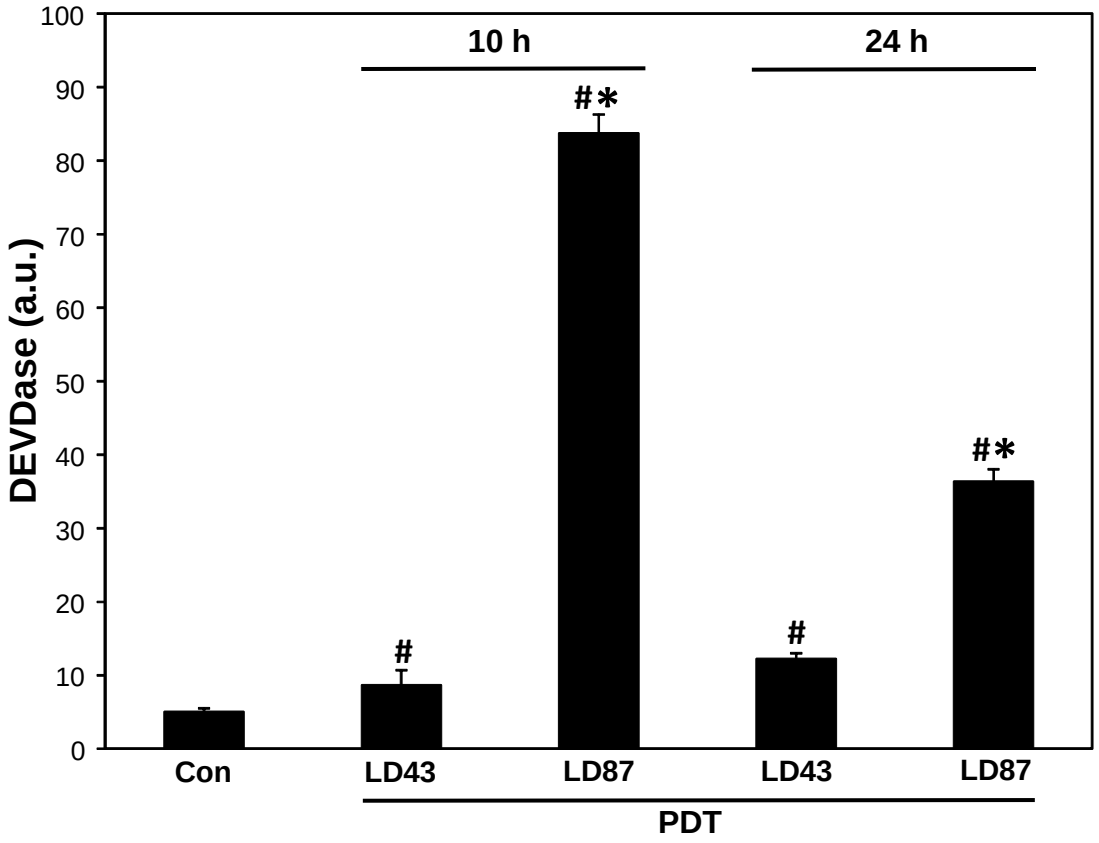

Fig. S4. PDT-induced casp3 activation is inhibited by FB