

Supplementary Materials

Table S1. IC₅₀ values obtained in HCT116 and HT29 cell lines following 24h treatment with **CUR**, **HCurc I** and **HCurc II**, 30 min irradiation with halogen white light lamp, 24h incubation in drug-free medium and MTT assay (mean ± E.S. of 3/5 independent experiments).

IC ₅₀ (mM)	HCT116	HT29
HCurc I	1.06±0.23	1.59±0.27
1	3,75±1,21	5,25±1,31
2	15,76±1,85	3,58±0,61
3	4,11±0,81	5,80±1,15
HCurc II	1.91±0.14	3.36±0.74
4	6,97±1,36	10,610±1,51
5	6,62±1,51	8,154±1,53
6	10,03±0,89	10,651±1,15

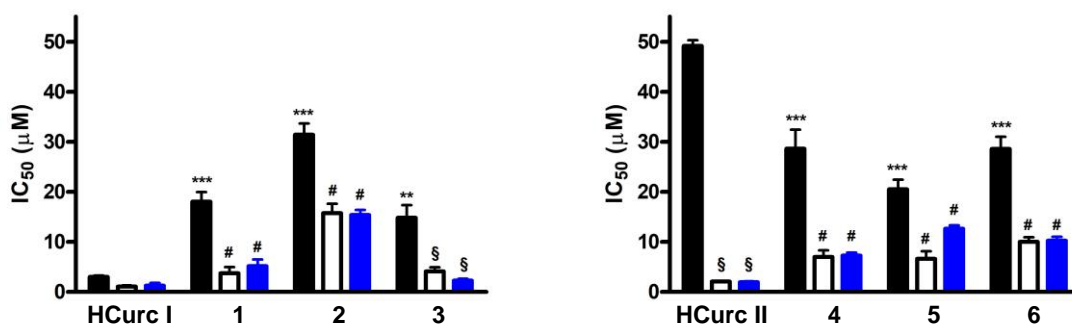


Figure S1. IC₅₀ values obtained in HCT116 cells following 24 h treatment with the studied compounds, 30 min irradiation under blue LED or white halogen lamp, 24 h incubation in drug-free medium and MTT assay (mean ± ES 3/4 independent experiments; *** p<0.001 vs HCurc@ same condition; # p<0.01 vs HCurc@ same condition and dark; ** p<0.01 vs HCurc@ and 2 same condition; § p<0.001 vs dark)

Table S2. Phototoxic index of **HCurc I**, **HCurc II** and their arene-Ru(II) derivatives in HCT116 E6 cells.

HCurc I	1	2	3	HCurc II	4	5	6
6.6	10.32	31.9	8.6	46.81	5.6	19.51	4.1

Table S3. Effects of **HCurc I, 1, 2 and 3** on Gm survival. d: days after treatment; C: control (PBS injection); D subscript: dark condition; L subscript: after PDT. (means \pm SD of four independent assays).

HCurc I and derivatives									
d	% survival <i>G. mellonella</i> (means \pm SD)								
	C	HCurc Id	HCurc IL	1D	1L	2D	2L	3D	3L
1	100 \pm 0	80 \pm 0	50 \pm 11.5	100 \pm 0	100 \pm 0	100 \pm 0	95 \pm 10	100 \pm 0	100 \pm 0
3	100 \pm 0	80 \pm 0	45 \pm 10	95 \pm 10	100 \pm 0	90 \pm 20	95 \pm 10	95 \pm 10	100 \pm 0
5	100 \pm 0	80 \pm 0	40 \pm 0	95 \pm 10	100 \pm 0	90 \pm 20	95 \pm 10	95 \pm 10	100 \pm 0
7	100 \pm 0	75 \pm 10	25 \pm 10	95 \pm 10	100 \pm 0	90 \pm 20	95 \pm 10	95 \pm 10	100 \pm 0

Table S4. Effects of **HCurc II, 4, 5 and 6** on Gm survival. d: days after treatment; C: control (PBS injection); D subscript: dark condition; L subscript: after PDT. (means \pm SD of four independent assays).

HCurc II and derivatives									
d	% survival <i>G. mellonella</i> (means \pm SD)								
	C	HCurc II _D	HCurc II _L	4 _D	4 _L	5 _D	5 _L	6 _D	6 _L
1	100 \pm 0	95 \pm 10	75 \pm 10	100 \pm 0	95 \pm 10	100 \pm 0	100 \pm 0	95 \pm 10	100 \pm 0
3	100 \pm 0	85 \pm 10	45 \pm 10	100 \pm 0	90 \pm 11.5	100 \pm 0	100 \pm 0	95 \pm 10	100 \pm 0
5	100 \pm 0	80 \pm 0	30 \pm 11.5	100 \pm 0	85 \pm 19.1	100 \pm 0	100 \pm 0	95 \pm 10	100 \pm 0
7	100 \pm 0	75 \pm 10	0	100 \pm 0	85 \pm 19.1	100 \pm 0	100 \pm 0	95 \pm 10	100 \pm 0