Electronic Supplementary Information (ESI)

Self-assembled organic nanorods for dual chemo-

photodynamic Therapies

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Figure S1. (A) ¹H NMR spectra of BDP-I₂. (B) MALDI-TOF mass spectra of BDP-I₂.



Figure S2. (A) Standard curve of BDP- I_2 in DMF and water (9:1). (B) The standard curve of high performance liquid chromatography (HPLC) result of PTX.



Figure S3. The physiological stability of Co-NRs in water (A) and 10% FBS (B), 10% PBS (C) for 14 or 7 days. (D) The Zeta potential change of Co-NRs after 14 days.



Figure S4. The UV-Vis absorption intensity changes of Co-NRs under a 540 nm lamp at an intensity of 13 mW cm⁻².



Figure S5. Representative CLSM images of HeLa cells incubated with Co-NRs for

0.5, 2, 6 h at 4 °C and 37 °C, respectively. Scale bars, 20 $\mu m.$



Figure S6. Representative CLSM images of HeLa cells incubated with Co-NRs with and without irradiation, respectively. Scale bars, $20 \ \mu m$.



Figure S7. Effects of Co-NRs with and without irradiation on AO staining of HeLa cells. From the top to bottom: green fluorescence of AO excited by 488 nm channel, red fluorescence of AO excited by 555 nm channel and merged results. Scale bars: 50 μ m.

IC ₅₀ (µg/mL)	Co-NRs	Taxol	Co-NRs + L
HeLa	0.06	0.013	0.012
HepG2		0.081	0.064

Table S1. IC_{50} values of Co-NRs against HeLa and HepG2 Cells.