Supporting Information

Photothermal-Hypoxia Sequential Activatable Phase-Change Nanoagent for Mitochondria-Targeting Tumor Synergistic Therapy

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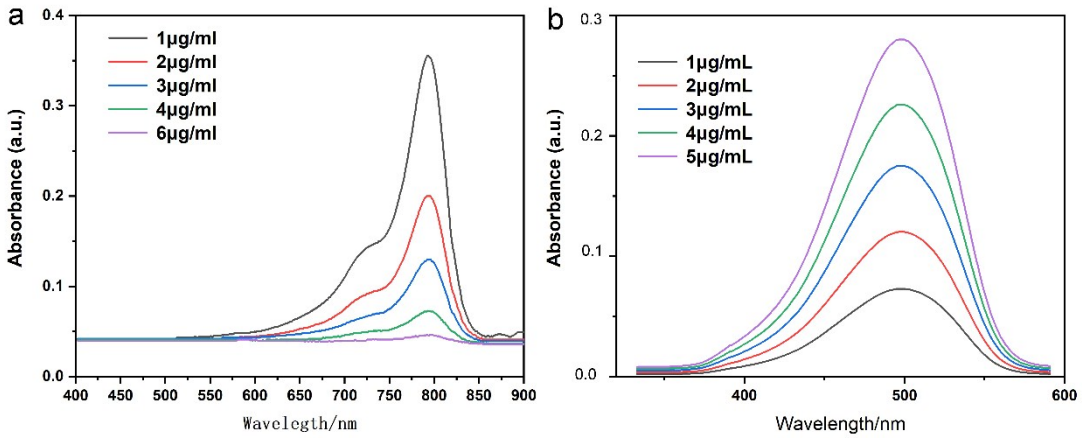

Figure S1. UV–vis–NIR absorbance spectra of (a) IR780 and (b) TPZ at different concentrations.

Table S1. Drug encapsulation efficiency of diffrent nanoparticles.

	Lauric acid	Stearic acid	Mixture fatty acid
TPZ	35.1%	27.2%	43.3%
IR780	46.1%	39.9%	81.5%

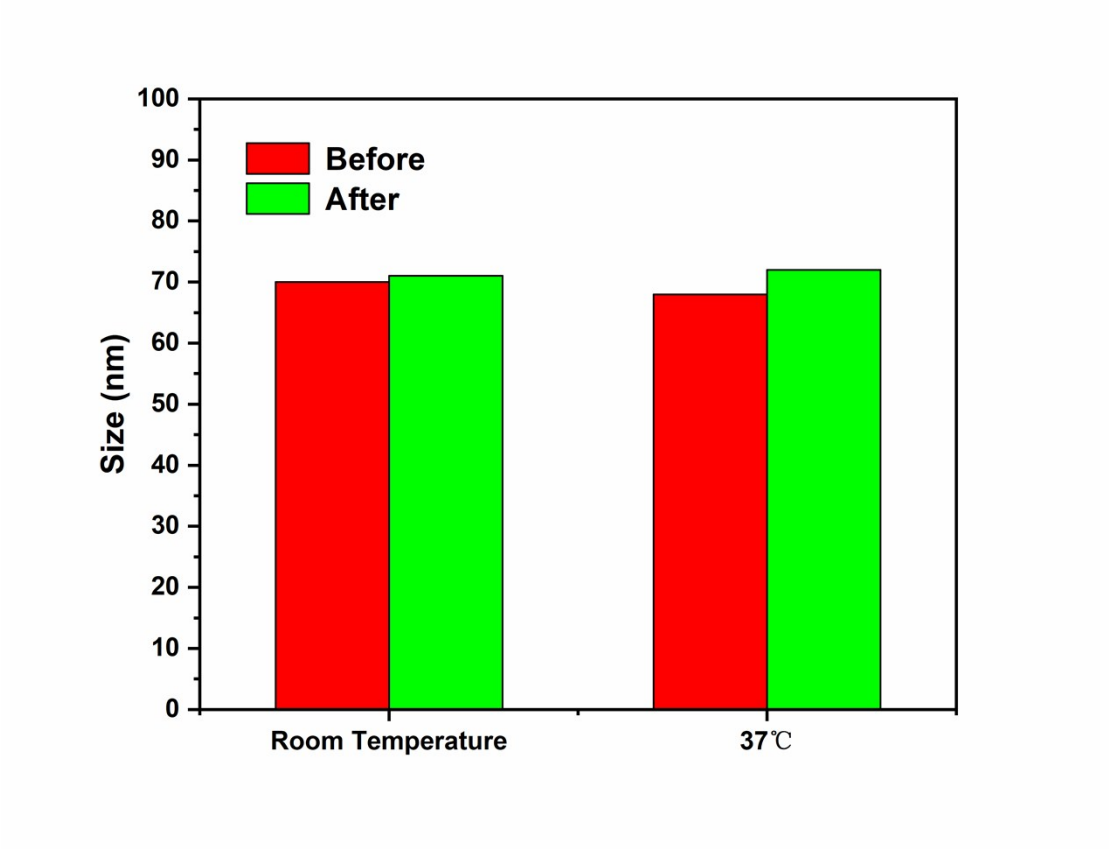

Figure S2. The size changes of PCM@Lip/IT NPs at different temperature for 4h.

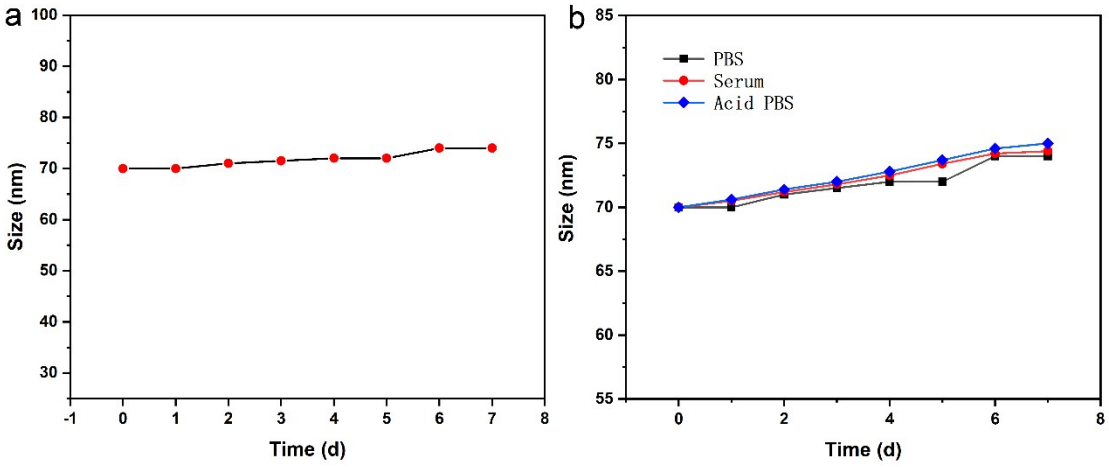

Figure S3. (a)The size changes of PCM@Lip/IT NPs at 4℃ for various days. (b) The size changes of PCM@Lip/IT NPs in PBS, serum and acid PBS.

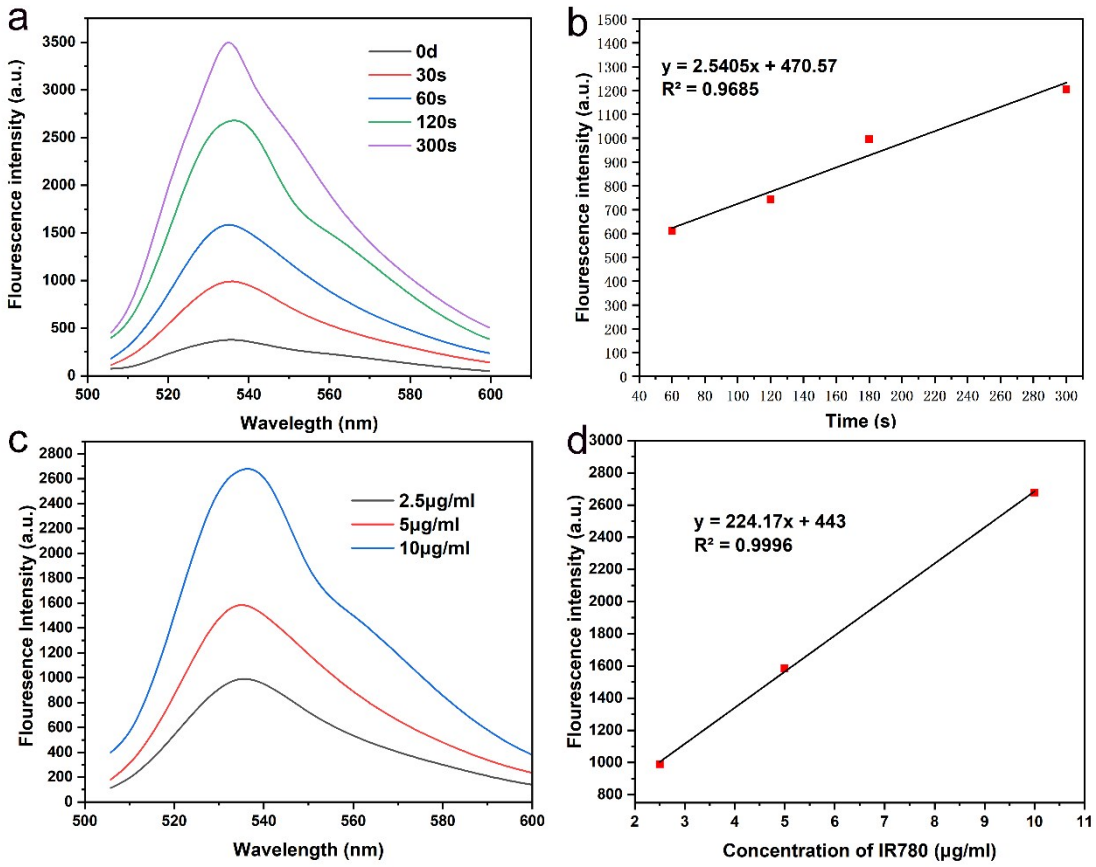

Figure S4. (a) ROS production of PCM@Lip/IT NPs irradiated by 808 nm laser (1.0 W/cm^2) during different time and (b) its linear correlation. The concentration of IR780 was 15 μg/mL. (c) ROS generation of PCM@Lip/IT NPs irradiated at different concentration of IR780 by 808 nm (1 W/cm^2, 300 s) and (d) its linear correlation.

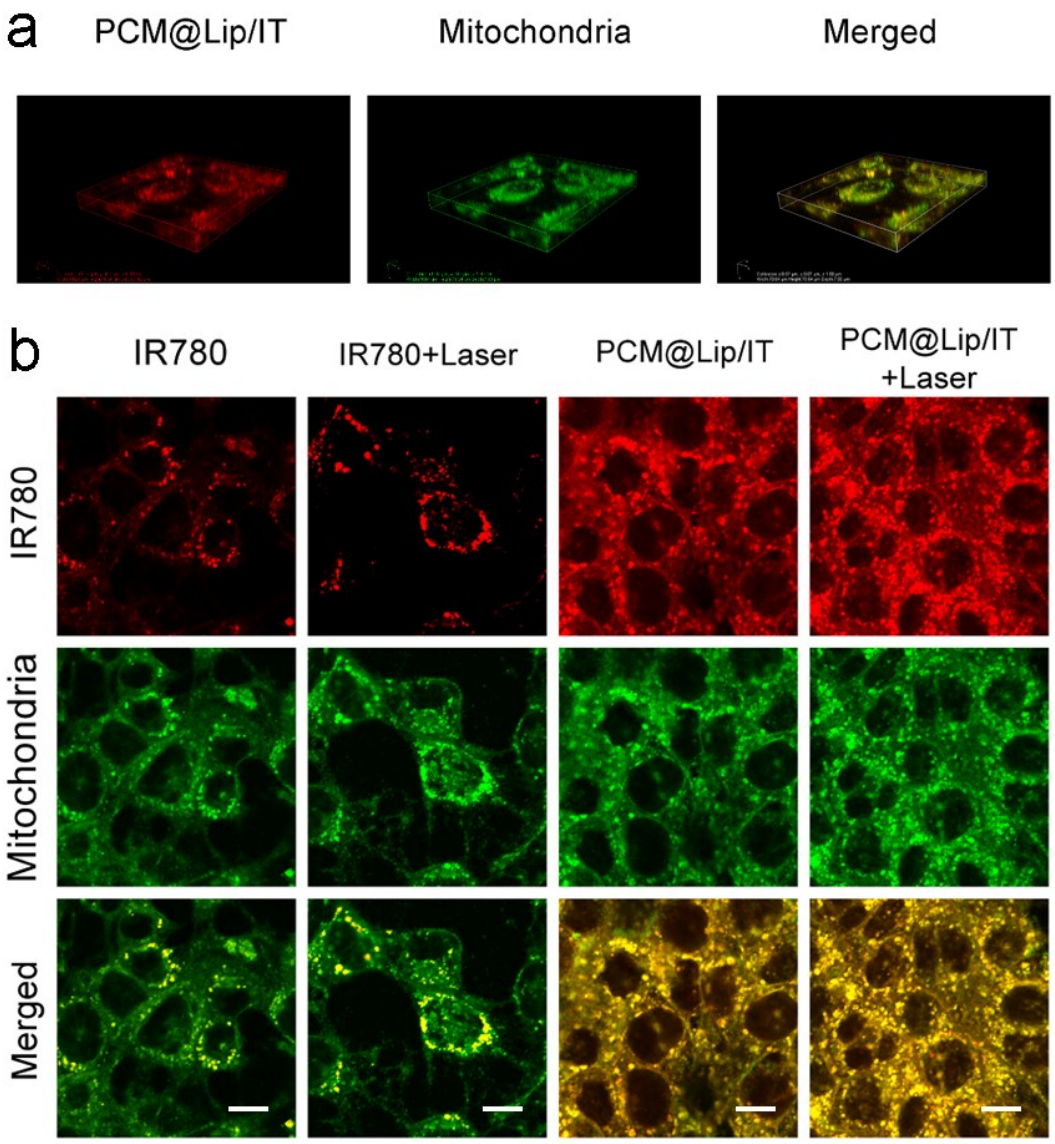

Figure S5. (a) 3D Confocal images of PCM@Lip/IT co-located with mitochondrial tracker. (b) Free IR780 and PCM@Lip/IT co-located with mitochondrial tracker with or without irradiation.

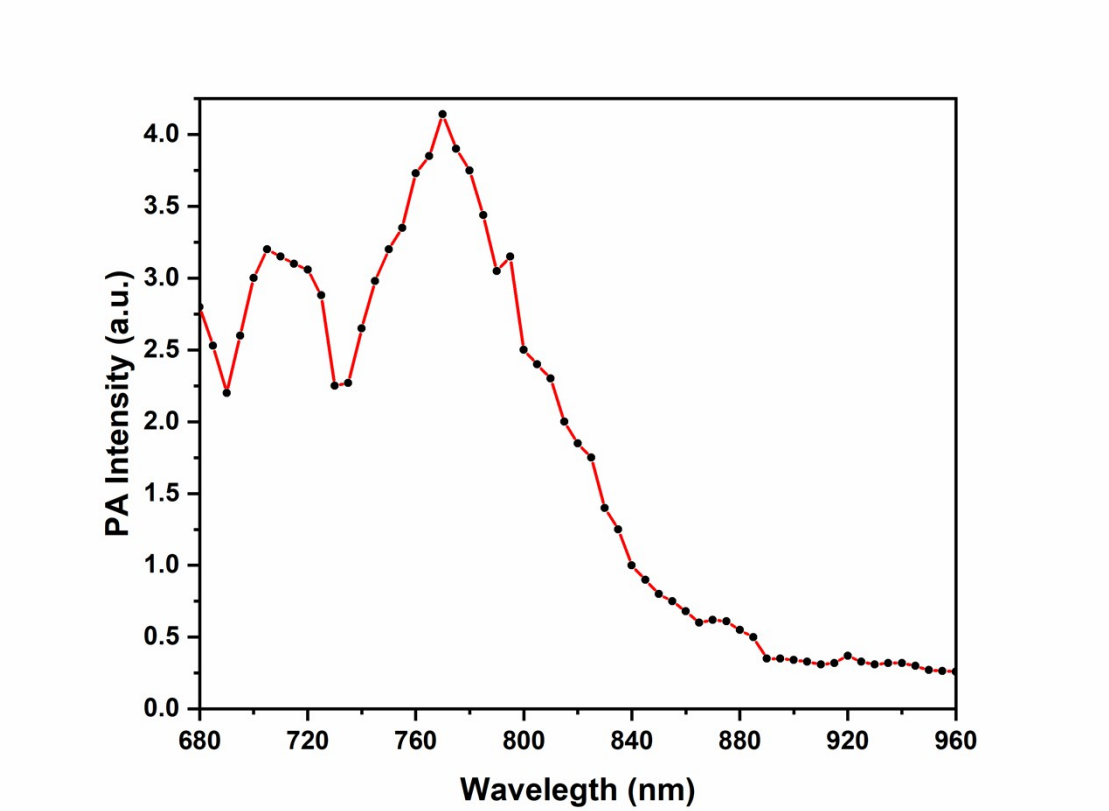

Figure S6. PA-signal tendency of PCM@Lip/IT (CIR780 = 100 μg/mL) under laser (wavelength range of 680-960 nm).

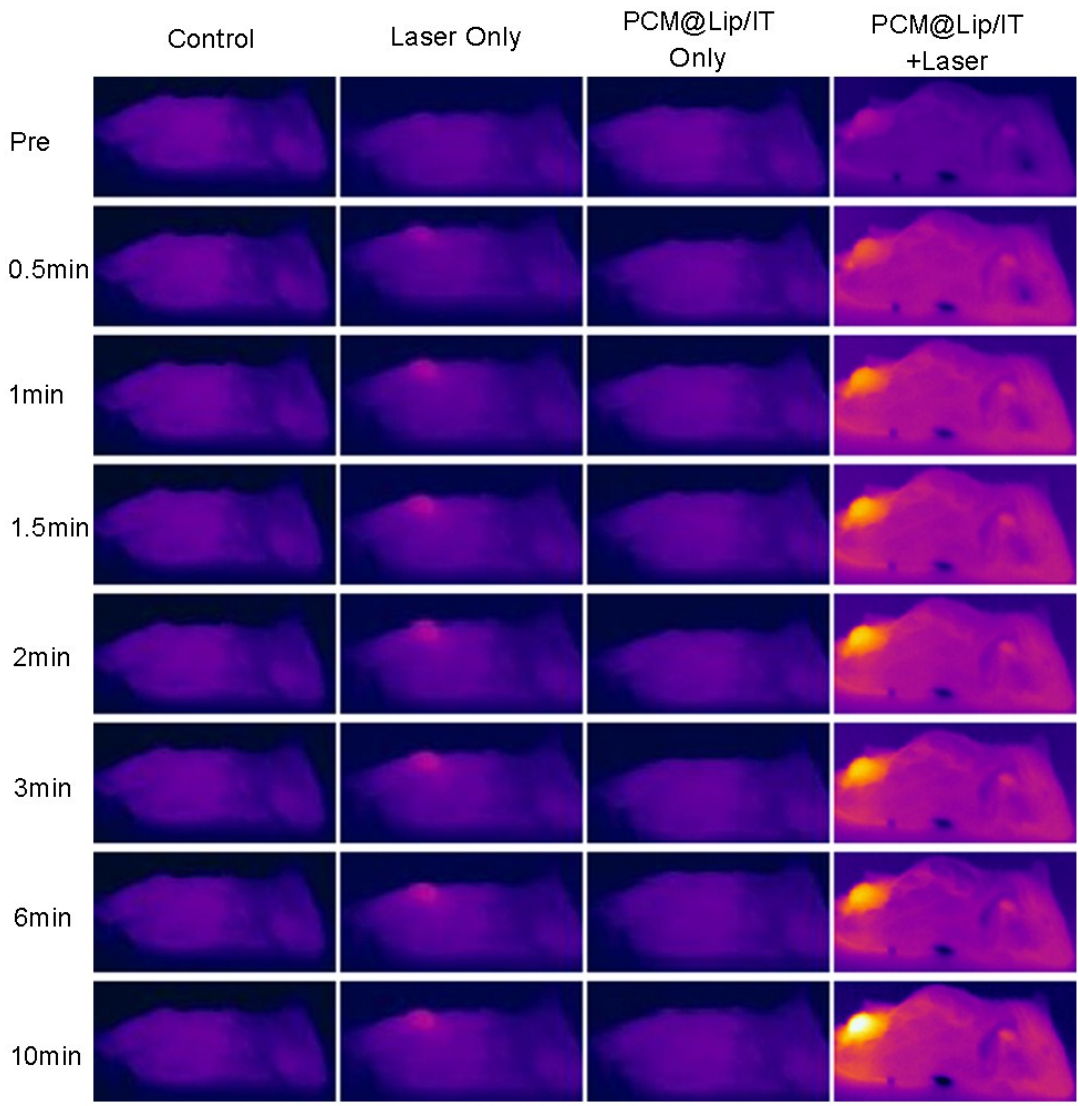

Figure S7. The IR thermal images of control, Laser only, PCM@Lip/IT only, and PCM@Lip/IT+Laser group under 808 nm laser (1.0 W/cm^2, 10 min).

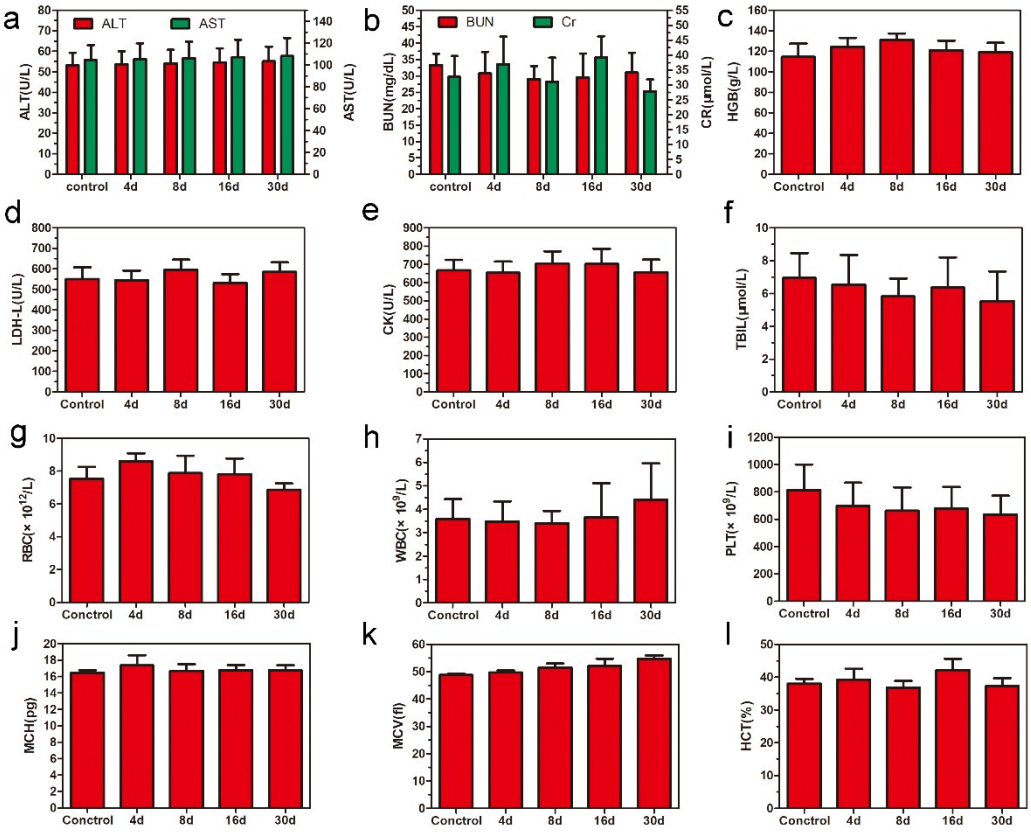

Figure S8. Blood biochemical analysis of control group and target group after injection of PCM@Lip/IT NPs for 4, 8, 16 and 30 days. (n = 5).