## **Supporting Information**

## A co-delivery nanoplatform for Lignan-derived compound and perfluorocarbon tuning IL-25 secretion and oxygen level in tumor microenvironments for meliorative tumor radiotherapy

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**Figure S1.** HRMS of compound Q1,  $m/z = 387.1080 [M + H]^+$ .



Figure S2. The standard curve of Q1 from UV spectra for drug loading calculation.



Figure S3. The correlation curve for size of three nanoparticles.



**Figure S4.** Semi-quantitative analysis results of western blot ( $^{ns} p > 0.05$ ,  $^{**} p < 0.01$ ).



**Figure S5.** Semi-quantitative analysis results of fluorescence intensity in tumors after different treatments.