Supporting Information

Doxorubicin-loaded polypyrrole nanovesicles for suppressing tumor metastasis through combining photothermotherapy and lymphatic-targeted chemotherapy

Lu Wang, ^a Genhua Liu, ^a Yunping Hu, ^b Shuangquan Gou, ^a Tingting He, ^a Qian Feng, ^a and Kaiyong Cai*^a

^aKey Laboratory of Biorheological Science and Technology, Ministry of Education
College of Bioengineering, Chongqing University, Chongqing 400044, China.
E-mail: kaiyong_cai@cqu.edu.cn
^bFujian Provincial Key Laboratory of Advanced Materials Oriented Chemical
Engineering, College of Chemistry and Materials Science, Fujian Normal University
Fuzhou, Fujian 350007, China.



Figure S1. SEM images of SiO₂ NPs and PPy NVs.



Figure S2. Size distribution of PPy and PPy@DOX NVs at pH 7.4, pH 5.0 and pH 7.4 after NIR treatment.



Figure S3. Surface zeta potential of PPy and PPy@DOX NVs at pH 7.4, pH 5.0 and pH 7.4 after NIR treatment.



Figure S4. Size distribution and surface zeta potential of PEI/PPy NVs.



Figure S5. White light and fluorescence imges of the lymph nodes insolated at given time points after the mice in each group received SC injection of FITC labeled PPy, PEI/PPy NVs and Free DOX, respectively (n=3). Scale bar: 5 mm.



Figure S6. Representative pictures of the nuclear fast-staining of popliteal lymph nodes (pLNs) and inguinal lymph nodes (iLNs) at 2 h and 48 h after mice received SC injection of PPy@DOX NVs. Scale bar: 100 μm.



Figure S7. Fluorescence images of draining inguinal lymph node sections. The inguinal lymph nodes (iLNs) were obtained from tumor-bearing mice, which had been injected intratumorally with PPy@DOX NVs and sacrificed at various time points after administration. Scale bar: 100 μm.



Figure S8. Individual tumor growth curves (n=6). Mice received different treatment regimens as described in experimental section.



Figure S9. Body weights of the mice in each treated group.



Figure S10. The levels of myocardial function indicators (CK, MDA and LDH) of the mice treated with PBS (control), PPy@DOX NVs and Free DOX.