Use of multifunctional composite nanofibers for photothermalchemotherapy to treat cervical cancer in mice

Xue Wang^a, Lizhe Wang^c, Shan Zong^d, Renna Qiu^a^{*}, Shi Liu^b^{*}

^aPhysical Examination Center, China-Japan Union Hospital, Jilin University, Changchun 130033, P. R. China. E-mail: giurenna@163.com(Renna Qiu)

^bState Key Laboratory of Polymer Physics and Chemistry, Changchun Institute of Applied Chemistry, Chinese Academy of Sciences, P. R. China. E-mail: liushi@ciac.ac.cn (Shi Liu),

^cDepartment of Pediatric oncology, The First Hospital, Jilin University, Changchun 130021, P. R. China

^dDepartment of Gynecology, The First Hospital of Jilin University, Changchun 130021, China



Fig.S1 Nitrogen adsorption isotherm of DIMSN.



Fig.S2 BJH method Desorption dV analysis of DIMSN

DOX:ICG	DOX		ICG	
	LE(%)	EE(%)	LE(%)	EE(%)
1:2	6.7±0.27	85.0±0.53	13.9±0.56	87.9±0.28
2:1	15.2±0.56	98.4±0.75	7.6±0.35	99.1±0.56
1:1	11.4±0.11	98.7±0.96	11.5±0.13	99.4±0.10

Table.S1 the loading efficiency(LE) and encapsulation efficiency(EE) of DIMSN with different mass ratio between DOX and ICG.



Fig.S3 TEM image of DIMSN before and after 808nm laser irradiation (5min, 0.5W.cm⁻²).



Fig.S4 Macroscopic observation of genital tracts of mice at different times after DIMSN/F implantation.



Figure S5. Histological analysis of main organs of mice 25 days after tumor inoculation.