

Supplementary Information for “Attempts to strengthen and simplify tumor vascular normalization strategy using tumor vessel normalization promoting nanomedicine”

Shi Du¹, Hui Xiong¹, Cheng Xu¹, Yun Lu², Jing Yao^{1}*

¹State Key Laboratory of Natural Medicines and Jiangsu Key Laboratory of Drug Stability of Biopharmaceuticals, Department of Pharmaceutics, China Pharmaceutical University, 24 Tongjiaxiang, Nanjing 210009, China

²Pharmaceutical R&D Institute, Jiangsu Hengrui Medicine Co.,Ltd, No.7 Kunlunshan Road, Lianyungang Eco & Tech Development Zone, 222047, China

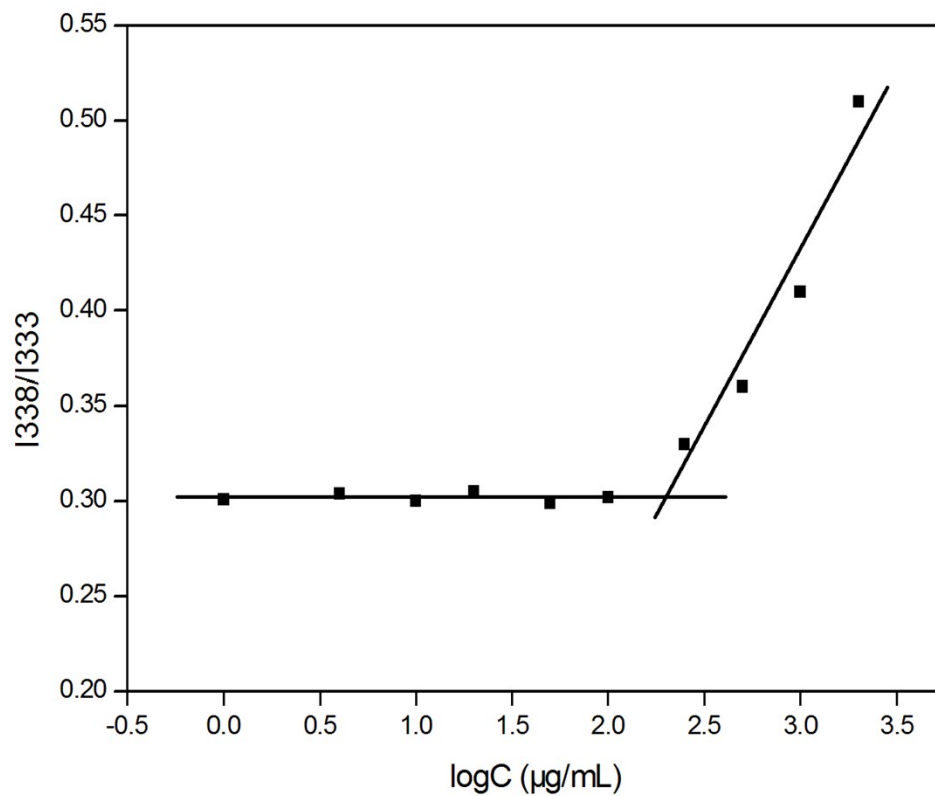


Figure S1. Quotient of vibrational band intensities (I338/I333) from excitation spectra of pyrene as a function of logC of LGC conjugate in distilled water.

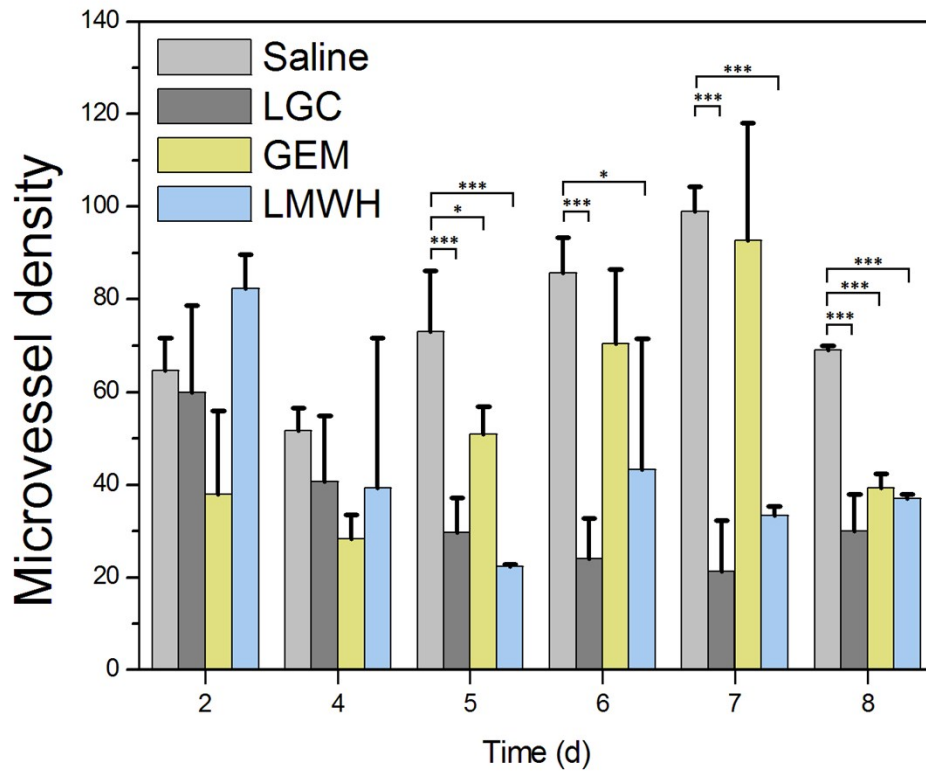


Figure S2. LGC treatment reduced the intratumoral microvessel density. Mean tumor microvessel density of different groups at day 2, 4, 5, 6, 7 and 8 after administration of different agents. (* $P < 0.05$, ** $P < 0.01$, *** $P < 0.005$ vs. control). Data are represented as mean \pm SD ($n=5$).

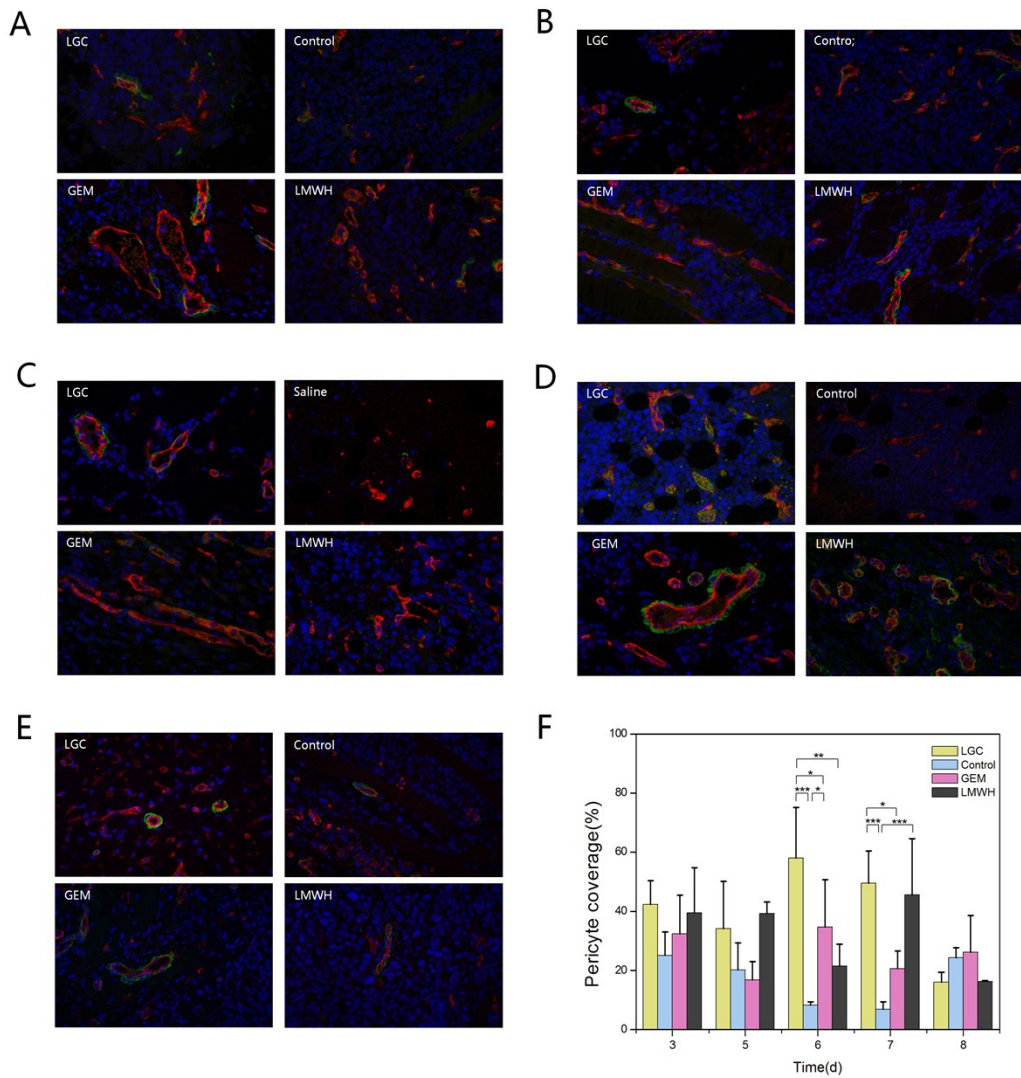


Figure S3. LGC induced 2 days “normalization window” after administration when tumor volume reached around 200 mm³. The representative photographs of CD31 (red)/ α -SMA (green) immunofluorescence staining ($\times 400$) at day 3 (A), 5 (B), 6 (C), 7 (D), 8 (E) and the quantified CD31/ α -SMA ratio (F) and microvessel density (G) at all points were shown. (*P<0.05, **P<0.01, ***P<0.005 vs. control). Data are represented as mean \pm SD (n=5).

Table S1

Tumor weight excised from euthanized mice and tumor inhibition rate observed in different groups. Data are represented as mean \pm SD (n=5).

Groups	Tumor weight (g)	Inhibition (%)
Saline	2.706 \pm 0.2961	—
PTX	2.273 \pm 0.1899	16.01
PTX+iRGD	2.132 \pm 0.2407	21.20
LGC	0.8894 \pm 0.3076	67.13
LGC+PTX	1.0067 \pm 0.1807	62.80
PTX/LGC	0.3687 \pm 0.1490	86.38
PTX/LGC+iRGD	0.2433 \pm 0.1156	91.01