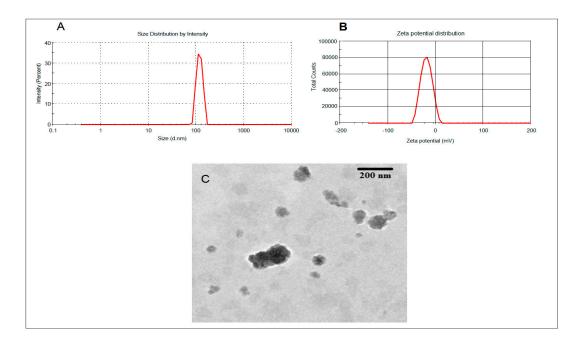
## Supplementary data sheet

Table 1S. The particle size, PDI, zeta potential, entrapment efficiency and drug loading of PLM-loaded glycerosome, PLM-loaded CL and rhodamine-loaded glycerosome

Characterizations	PLM loaded CL	PLM-loaded glycerosome	Rhodamine-loaded glycerosome
Vesicle size (nm)	$129.56 \pm 17.05$	$119.20 \pm 15.67$	$121.50 \pm 13.67$
PDI	$0.245 \pm 0.032$	$0.145 \pm 0.02$	$0.155 \pm 0.03$
Zeta potential (mV)	-22.50 ± 5.61	-27 ± 5.12	-25 ± 6.33
Entrapment efficiency (%)	71.67 ± 11.08	$76.42 \pm 9.98$	$75.31 \pm 9.78$
Drug loading (%)	$3.06 \pm 0.12$	$7.64 \pm 1.12$	-

## 1. Characterization of PLM-loaded conventional liposomes



**Figure S1.** Diagram showing (**A**) Average size of vesicle 129.56  $\pm$  17.05 nm; PI 0.245  $\pm$  0.032, (B) zeta potential -22.50  $\pm$  5.61 (mV), and (**C**) Transmission electron micrograph of optimised PLM loaded liposome formulation.

Table S2. Drug release kinetic analysis of optimized PLM-loaded GM formulation

Model	n	k	$\mathbb{R}^2$
Zero order	1.00	0.316	0.9027
First order	0.698	0.667	0.7240
Higuchi	0.492	0.018	0.9758
Korsmeyer-Pappas	0.670	1.679	0.9495
Hixson Crowell	0.732	1.278	0.8421