Electronic Supplementary Material (ESI) for RSC Advances.

Electronic Supporting Information

Hybrid Bicelles as a pH-Sensitive Nanocarrier for Hydrophobic Drug Delivery

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1. Characterization

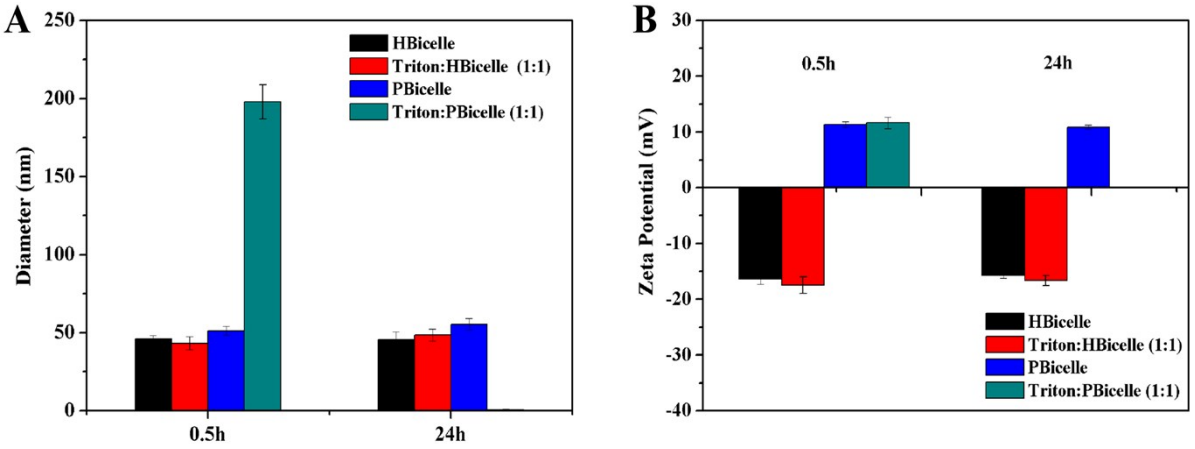

Figure S1. The diameter (A) and zeta potential (B) of HBicelles and PBicelles with/without Triton X-100 incubation at 0.5 h and 24 h.

2. Celluar uptake and adhension

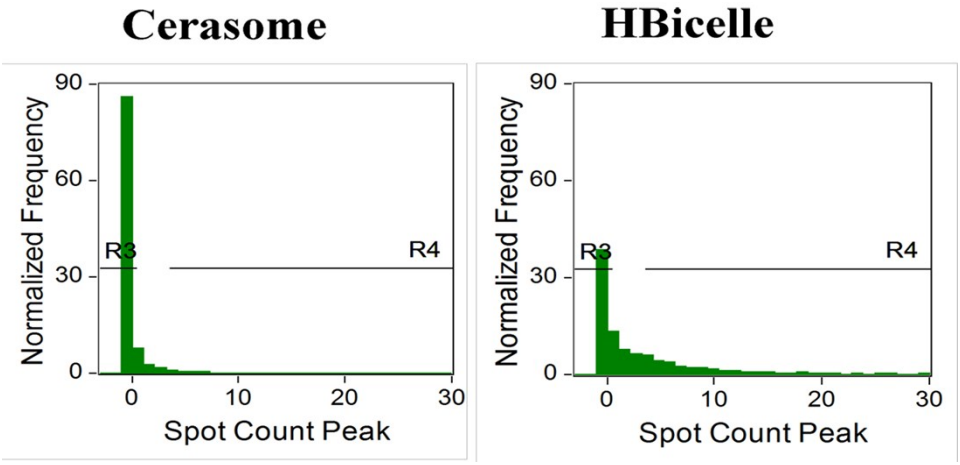

Figure S2. Intracellular fluorescent spot count of cerasomes and HBicelles at 37℃ by flow cytometry (Amnis Image Stream MarkII). Spot count peak indicated the amount of intracellular fluorescent spots, normalized frequency indicated the normalized amount of cells with certain number of fluorescent spot in.

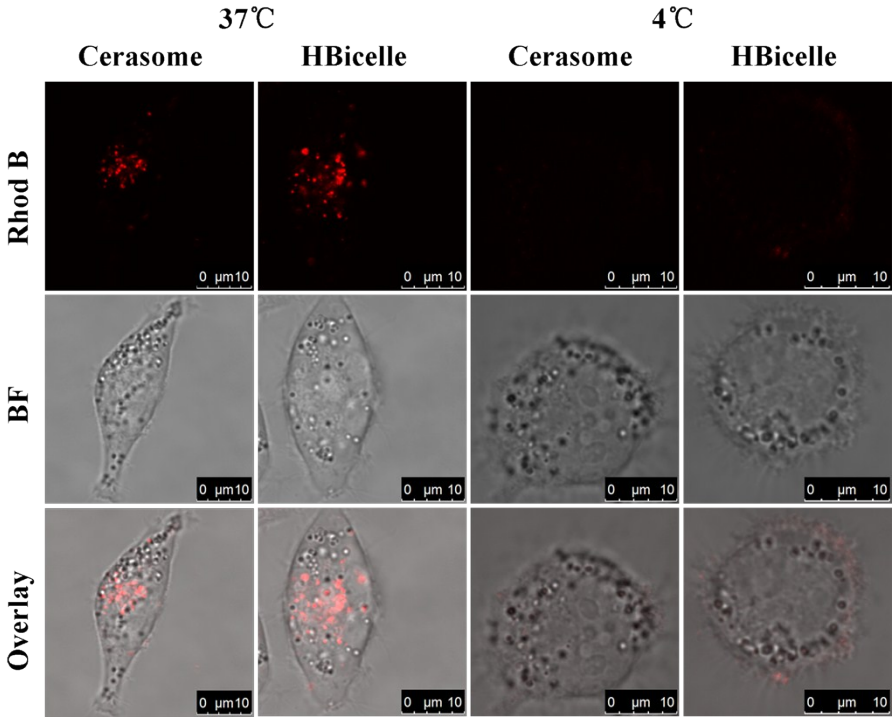

Figure S3. CLSM images of the uptake and adhesion of cerasomes and HBicelles by HUVEC cell at 37℃ and 4℃.

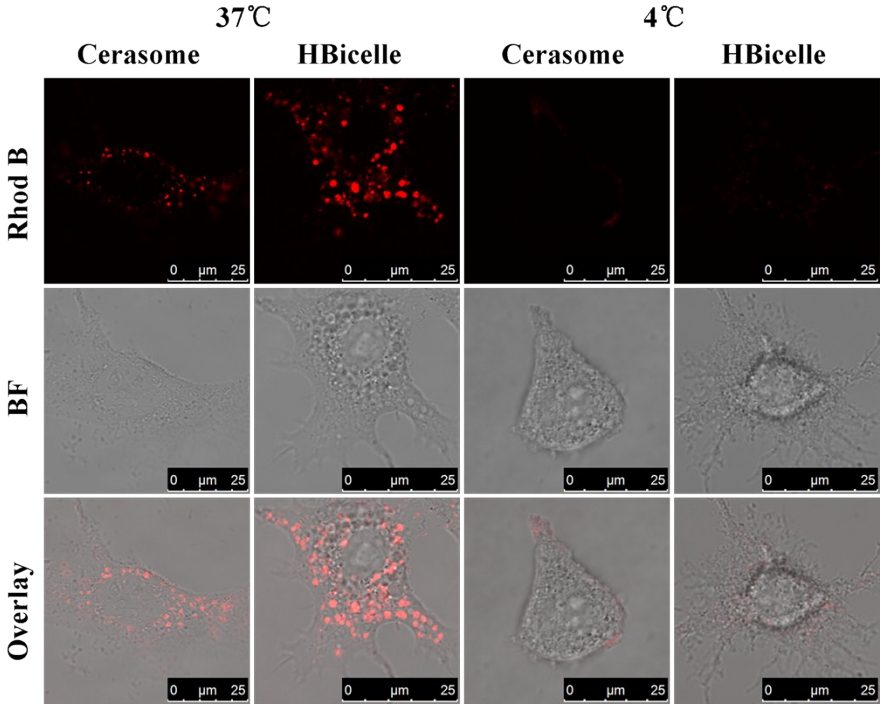

Figure S4. CLSM images of the uptake and adhesion of cerasomes and HBicelles by LX-2 cell at 37℃ and 4℃.

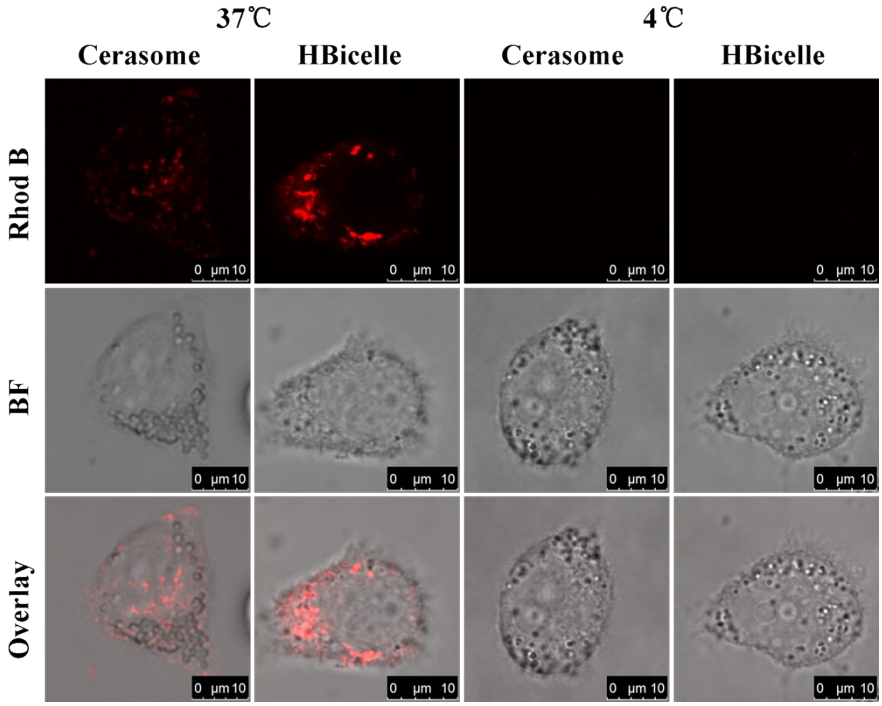

Figure S4. CLSM images of the uptake and adhesion of cerasomes and HBicelles by LX-2 cell at 37℃ and 4℃.

3. Drug loading performance

Table S1. The effects of ratio of drug/bicelles on properties of HDOX@HBicelle

Drug/bicelles (mol)	EE %	DLC %
1:20	56.27 ± 0.76	2.81 ± 0.04
1:30	67.82 ± 1.73	2.26 ± 0.06
1:40	65.68 ± 3.95	1.64 ± 0.10
1:50	63.00 ± 0.61	1.26 ± 0.01

4. Biocompatibility

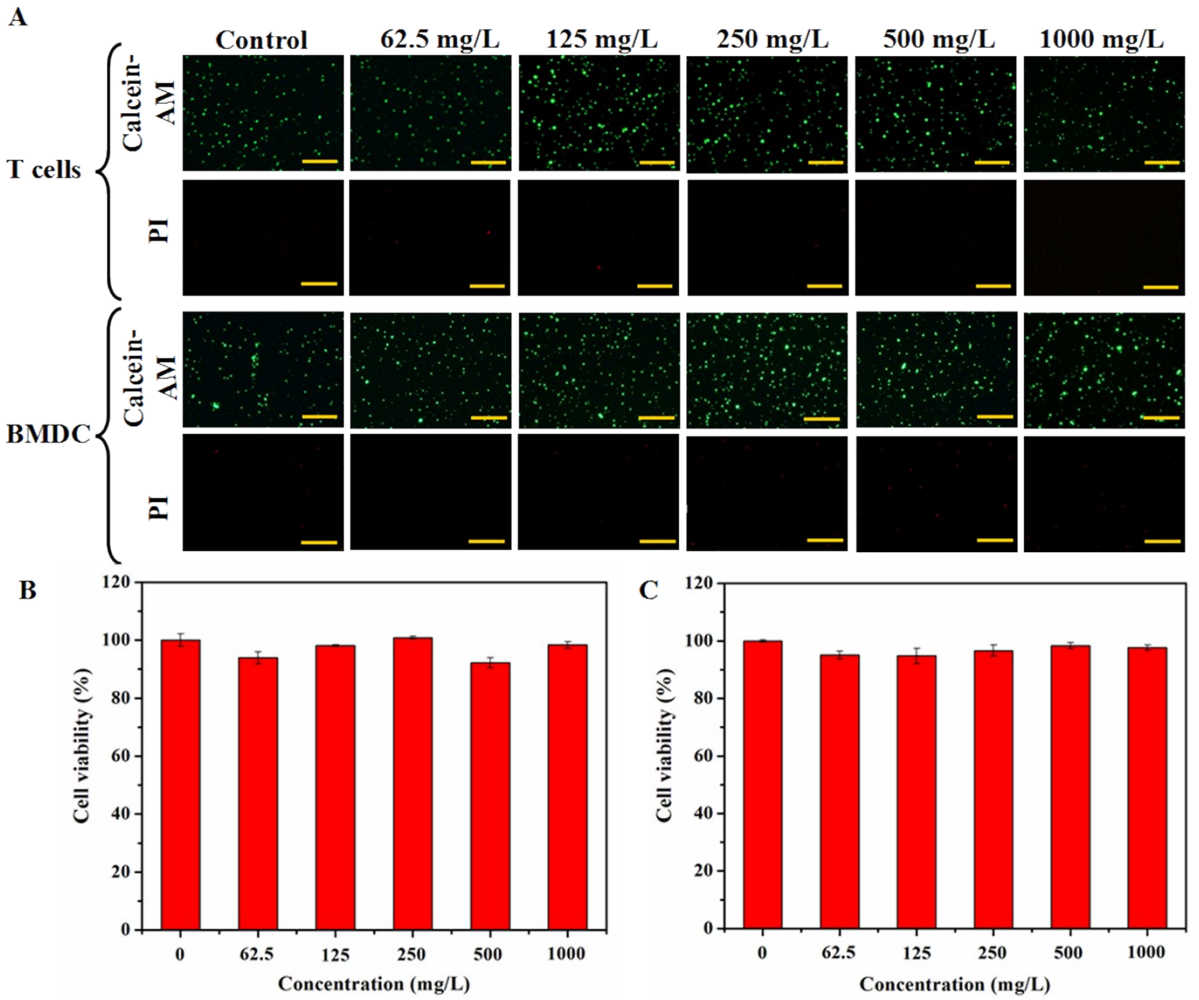

Figure S5. (A) Fluorescence microscopy images of T cells and BMDCs incubated with different concentrations of HBicelles for 24h. (B) MTT analysis of T cells incubated for 24 h. (C) MTT analysis of BMDCs incubated for 24h. Data were presented as mean ± SD (n=3).