

## Article

# Hypoxia Engineered Bone Marrow Mesenchymal Stem Cells Targeting System with Tumor Microenvironment Regulation for Enhanced Chemotherapy of Breast Cancer

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**Table S1.** Drug loading of the complexes with different DTX concentration.

Concentration (μM)	Intracellular DTX (pg/cell)	
	DTX@bMSCs	DTX@H-bMSCs
10	11.11 ± 0.35	10.01 ± 2.15
20	23.59 ± 3.57	23.13 ± 4.99
30	73.87 ± 3.33	67.87 ± 7.37
40	152.90 ± 0.47	145.91 ± 5.54
50	156.32 ± 2.03	152.27 ± 7.23
60	172.75 ± 7.93	175.15 ± 8.42

These samples in each group and the values were mean ± SEM.

**Table S2.** Drug loading of the complexes with 40μM DTX concentration at different times.

Time (h)	Intracellular DTX (pg/cell)			
	Free C6@bMSCs	DTX@bMSCs	Free C6@H-bMSCs	DTX@H-bMSCs
0.5	3.05 ± 1.43	9.74 ± 1.93	5.50 ± 1.85	13.07 ± 2.30
1	11.53 ± 4.68	38.50 ± 7.19	13.95 ± 2.51	38.61 ± 4.51
2	34.66 ± 4.33	72.32 ± 5.46	24.90 ± 5.87	63.69 ± 3.09
4	57.63 ± 12.84	135.54 ± 7.23	64.02 ± 7.39	141.05 ± 10.07
6	66.15 ± 8.75	148.31 ± 8.22	71.05 ± 5.53	150.90 ± 8.23
8	76.63 ± 9.06	158.34 ± 7.34	81.22 ± 7.48	158.02 ± 10.55

These samples in each group and the values were mean ± SEM.

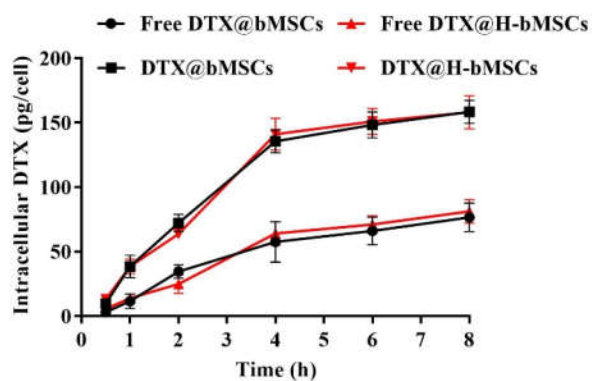


Figure S1. Drug loading of the complexes at different times.

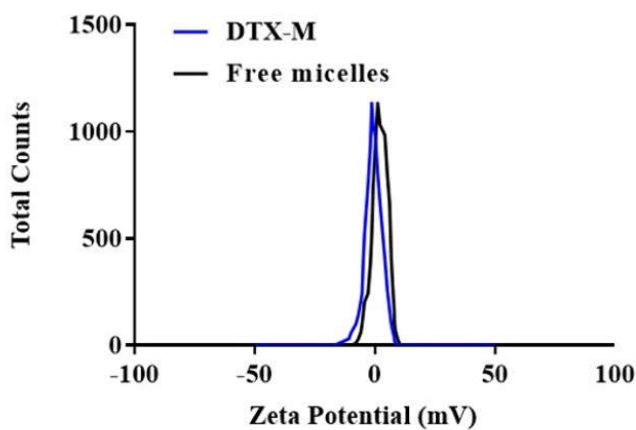


Figure S2. The zeta potential of DTX-M and blank micelles.

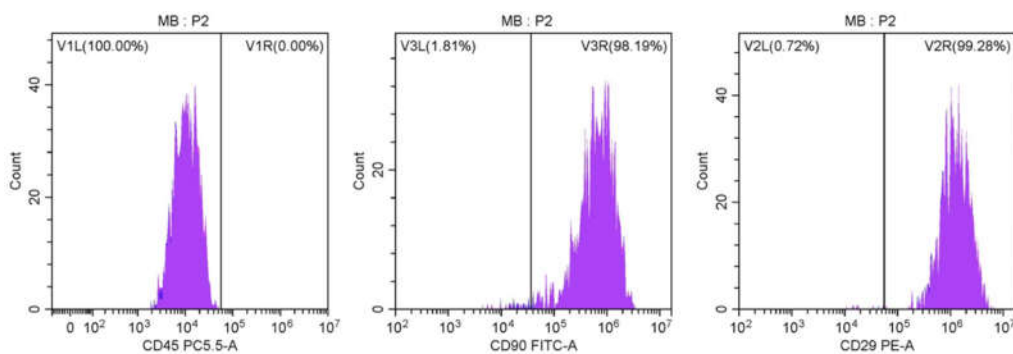


Figure S3. Identification of the bMSCs isolated from BALB/c mice by flow cytometry.

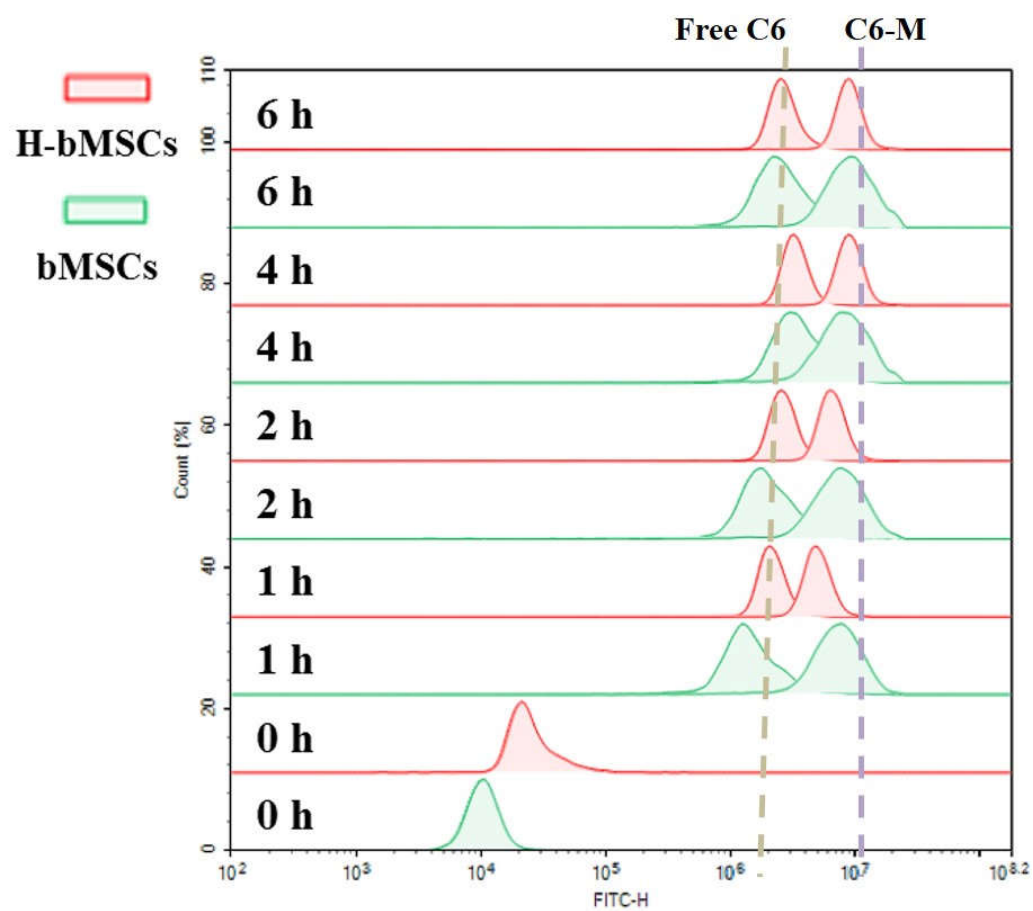
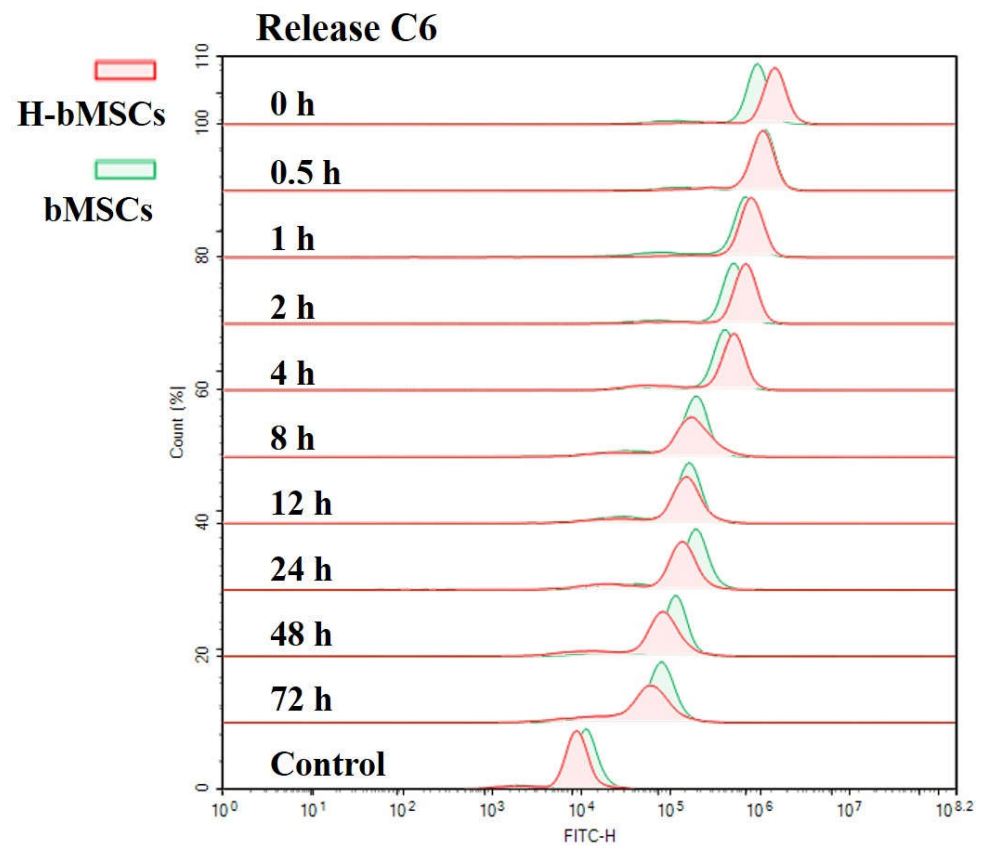


Figure S4. Flow cytometry analysis of cellular uptake ability at different co-incubation time.



**Figure S5.** Flow cytometry analysis of the release behavior from H-bMSCs or bMSCs.