

*<Supporting information>*

## **Ultrasound-responsive liposomes for targeted drug delivery combined with focused ultrasound**

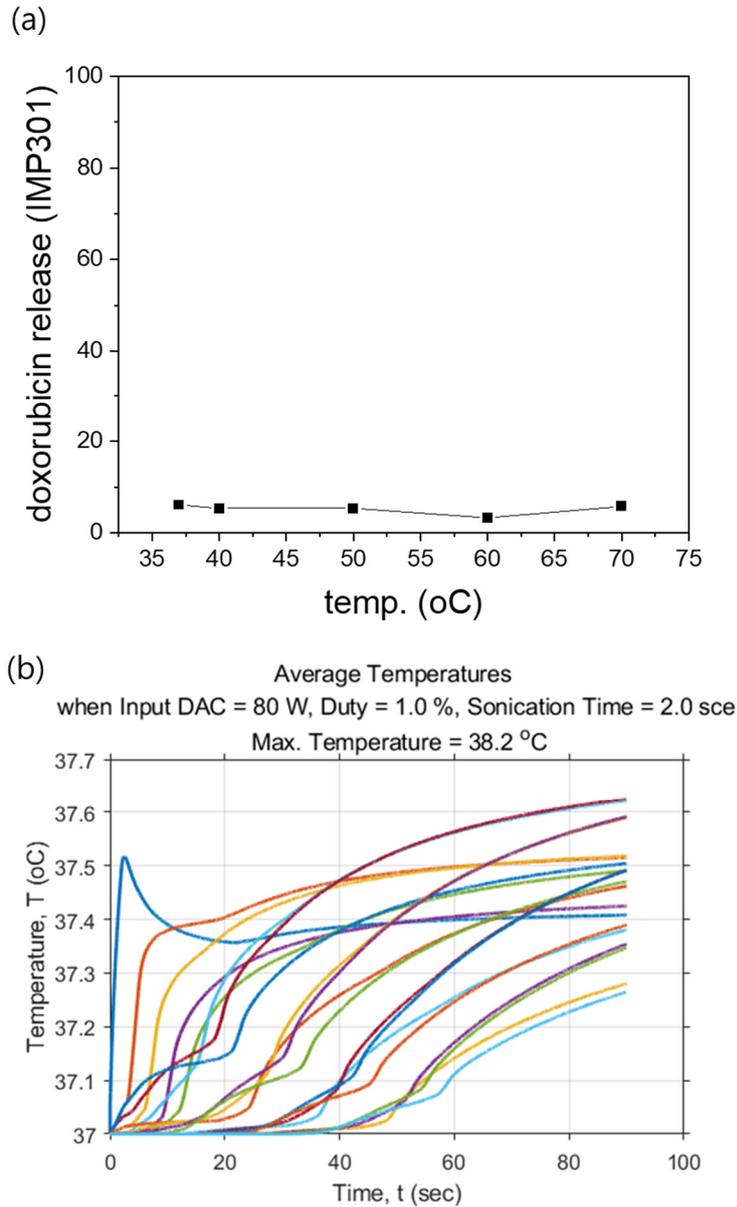
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**Keywords:** ultrasound-responsive liposome; liposomal doxorubicin; stimuli-triggered drug release; high-intensity focused ultrasound; triple negative breast cancer

**Figure S1.** (a) Doxorubicin release ratio of IMP301 dependent on the temperature, (b) simulation of temperature increases dependent on the focused ultrasound condition.



Time(sec)		2	4	6	8	10	12	14	16	18	20	22	24	26	28	30
Duty	1%	37.6	38.0	38.2	38.4	38.6	38.7	38.8	38.9	39.0	39.1	39.1	39.2	39.2	39.3	39.3
	2%	38.1	38.7	39.1	39.5	39.8	40.0	40.2	40.4	40.6	40.7	40.9	41.0	41.1	41.2	41.3
Time(sec)		32	34	36	38	40	42	44	46	48	50	52	54	56	58	60
Duty	1%	39.4	39.4	39.5	39.5	39.5	39.6	39.6	39.6	39.7	39.7	39.7	39.7	39.8	39.8	39.8
	2%	41.4	41.5	41.6	41.6	41.7	41.8	41.8	41.9	42.0	42.0	42.1	42.1	42.2	42.2	42.2

**Figure S2.** Population of free DOX to heart at 2h of post administration of DOX, DOXIL and IMP301.

