Effect of microenvironmental viscosity on the emergence of colon cancer cell resistance to doxorubicin

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Supplementary data:

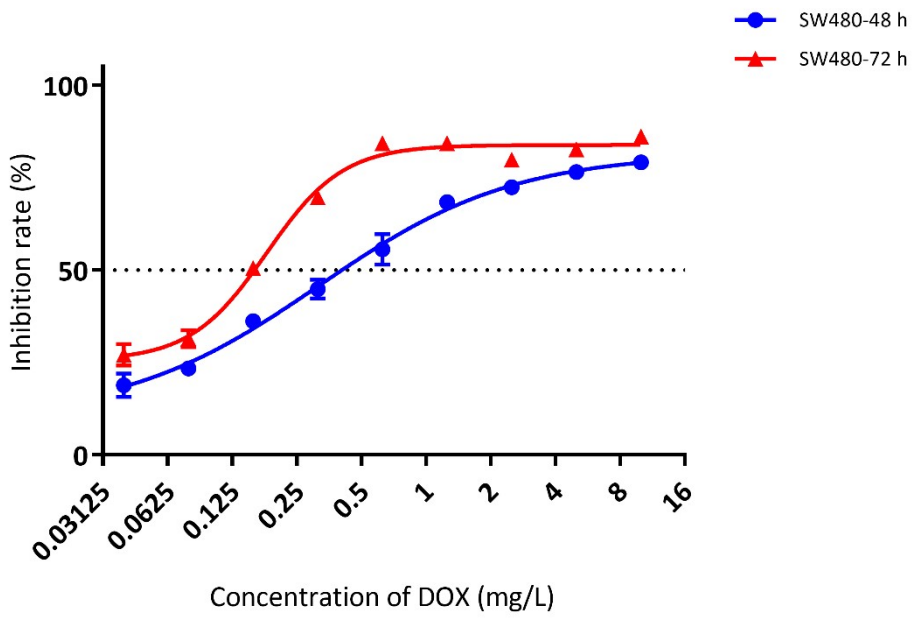

Fig. S1 Inhibition effect of DOX to SW480 cell line after culture for 48 h and 72 h. Data are the means ± S.D. (n = 4).

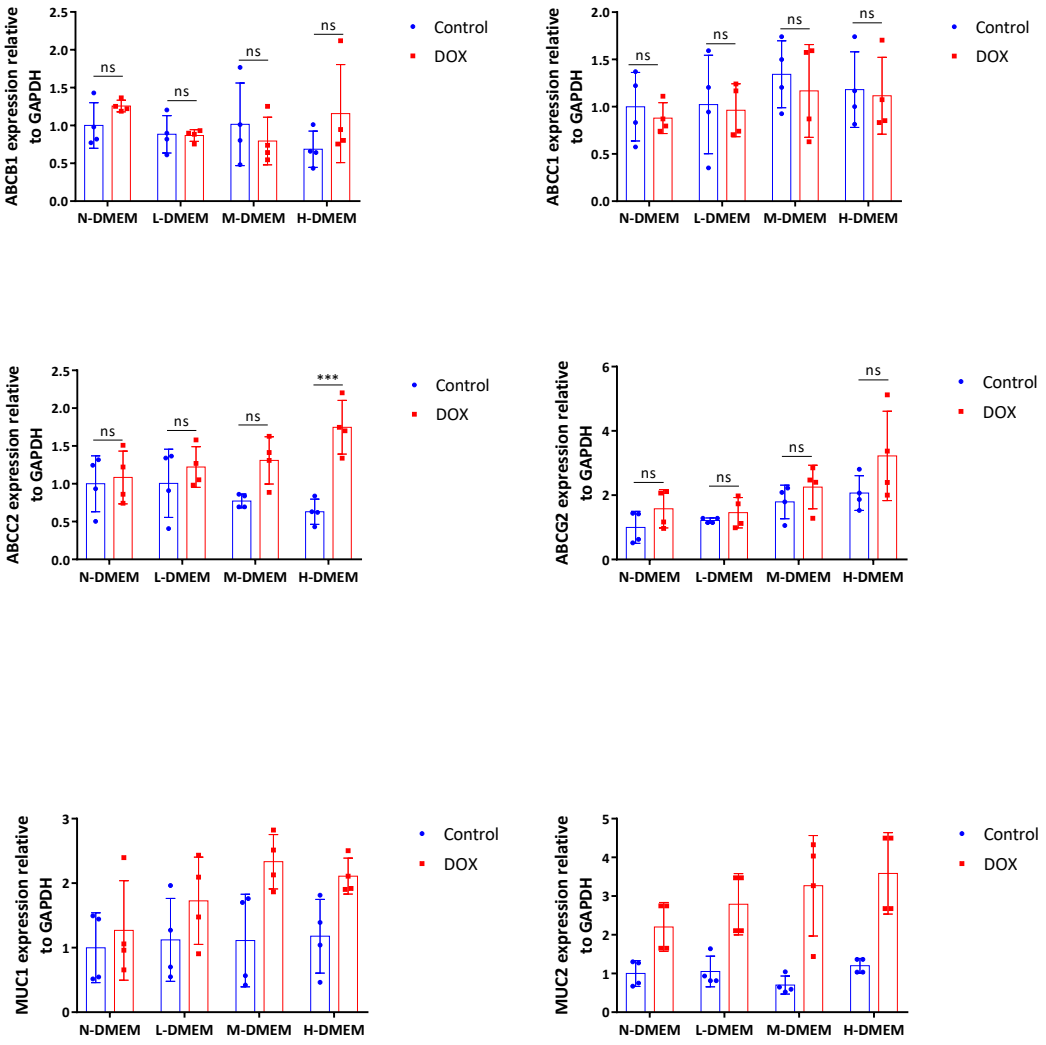

Fig. S2 Comparison of expression levels of chemoresistance-related genes between control group and DOX group of the same viscosity. Quantified expression levels of ABCB1 (a), ABCC1 (b), ABCC2 (c), ABCG2 (d), MUC1 (e), and MUC2 (f) mRNAs in colon cancer cells after 72 h culture in N-DMEM, L-DMEM, M-DMEM and H-DMEM media without (control group) or with 0.1 mg L^{-1} DOX (DOX group). The data relative to GAPDH were normalized to the expression level in N-DMEM. Data are the means ± S.D. (n = 4). Significant differences: * $p < 0.05$. ns = no significant difference.

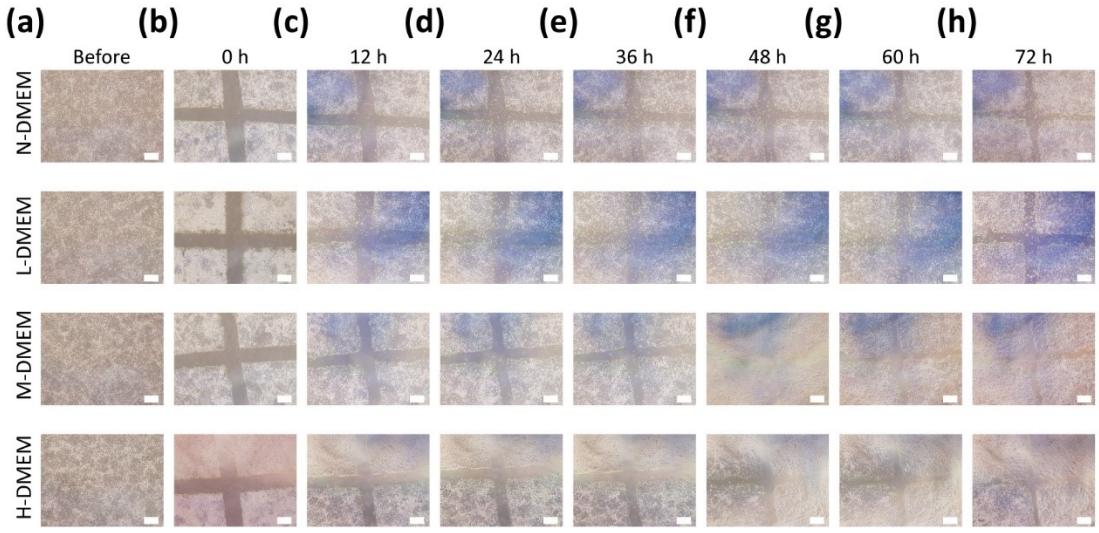

Fig. S3 Effect of viscosity on cell migration ability as demonstrated by a scratch test. Photomicrographs showing cell migration in the N-DMEM, L-DMEM, M-DMEM and H-DMEM without addition of DOX (a-h). Scale bar: 500 μm.

Table S1 Primer sequence of the genes used for RT-qPCR analysis.

Gene symbol	Forward primer	Reverse primer
GAPDH	GGAGCGAGATCCCTCCAAAAT	GGCTGTTGTCATACTTCTCATGG
ABCB1	GGGAGCTTAACACCCGACTTA	GCCAAAATCACAAGGGTTAGCT T
ABCC1	TTACTCATTCAGCTCGTCTTGT C	CAGGGATTAGGGTCGTGGAT
ABCC2	CCATAGCTTCATTCCTGAGTAG C	TCAGAGGACGCTTGTAGCCTT
ABCG2	ACGAACGGATTAACAGGGTCA	CTCCAGACACACCACGGAT
CDKN1A	CGATGGAACTTCGACTTTGTCA	GCACAAGGGTACAAGACAGTG