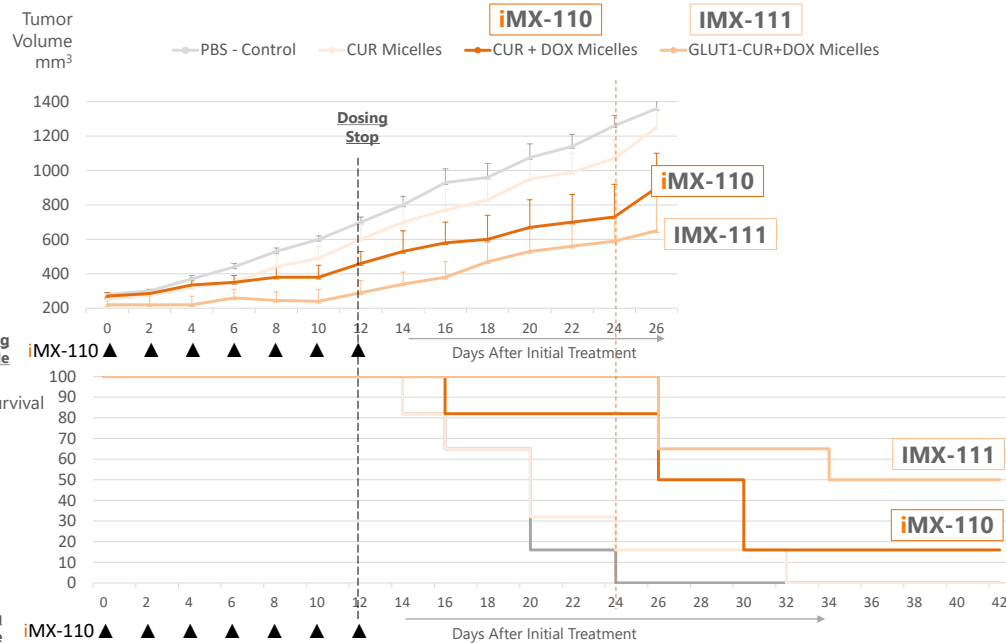


IMX-111 Kills Tumors in Colon Cancer Xenograft Mouse Model & Doxorubicin-resistant Breast Cancer Xenograft Mouse Model

1

Kills Tumors in HCT-116 Colon Cancer Cell Line Which Is Not Typically Treated With Doxorubicin...

HCT-116 Xenograft Model: Tumor Volume & Survival Curve After 14 day treatment (7 injections)

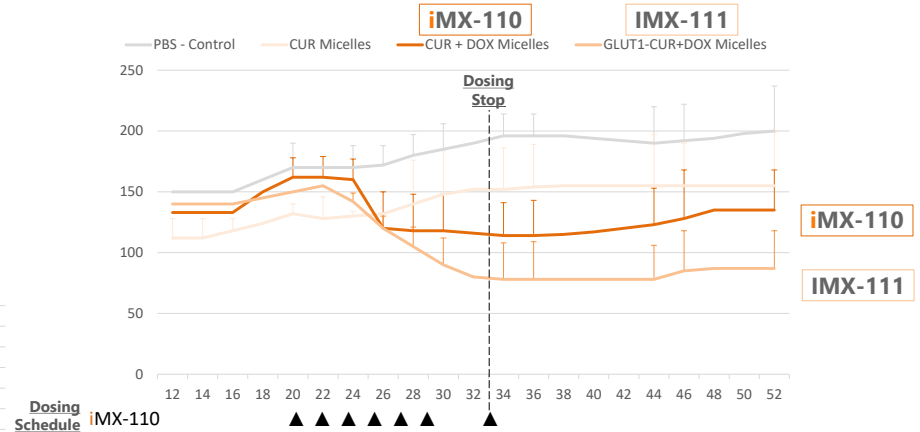


Tumor inhibition studies of various micellar formulations. Female nude (NU/NU) mice bearing 250mm³ HCT-116 tumors were treated every 2 d starting at day 0 (7 total tail vein injections, arrows correspond to injection days) at a dose of 4 mg/kg CUR and 0.4 mg/kg DOX. N = 6 with SEM. Empty micelle dose was equivalent to the amount of lipid from the drug-loaded micelle groups. A – Tumor volume. B – Survival curve, survival was determined when the tumor reached 1000mm³ (Sourced From Abouzeid et al, 2013)

2

... And Kills Tumors in Doxorubicin resistant MDA-MB-231 Breast Cancer Cell Line

MDA-MB-231 Xenograft Model: Tumor Volume After 7 injections



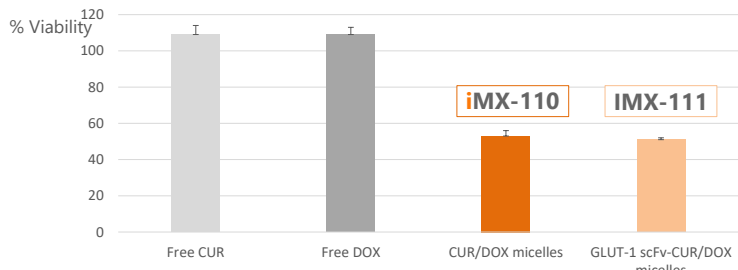
Tumor inhibition studies of various micellar formulations. Nude mice bearing ~150 mm³ MDA-MB-231 tumors were treated every 2 days starting at Day 20 except last injection administered at day 33 (7 total IV injections) at a dose of 6 mg/kg CUR and 1 mg/kg DOX. N≥6 with SEM (Sourced from Abouzeid et al, 2014).

IMX-111 Kills Cancer Cells In Doxorubicin Resistant Glioblastoma Spheroids

... Effectively Penetrates & Kills a 3D Spheroid Model of Doxorubicin resistant U87MG Glioblastoma Cancer Cell Line ...

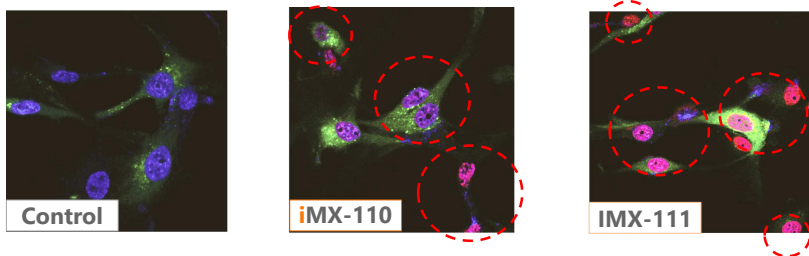
3

3D GBM Spheroids Model: Cell viability (%) vs. control (Free CUR or Free DOX) of doxorubicin-resistant U87MG cells after 48 h



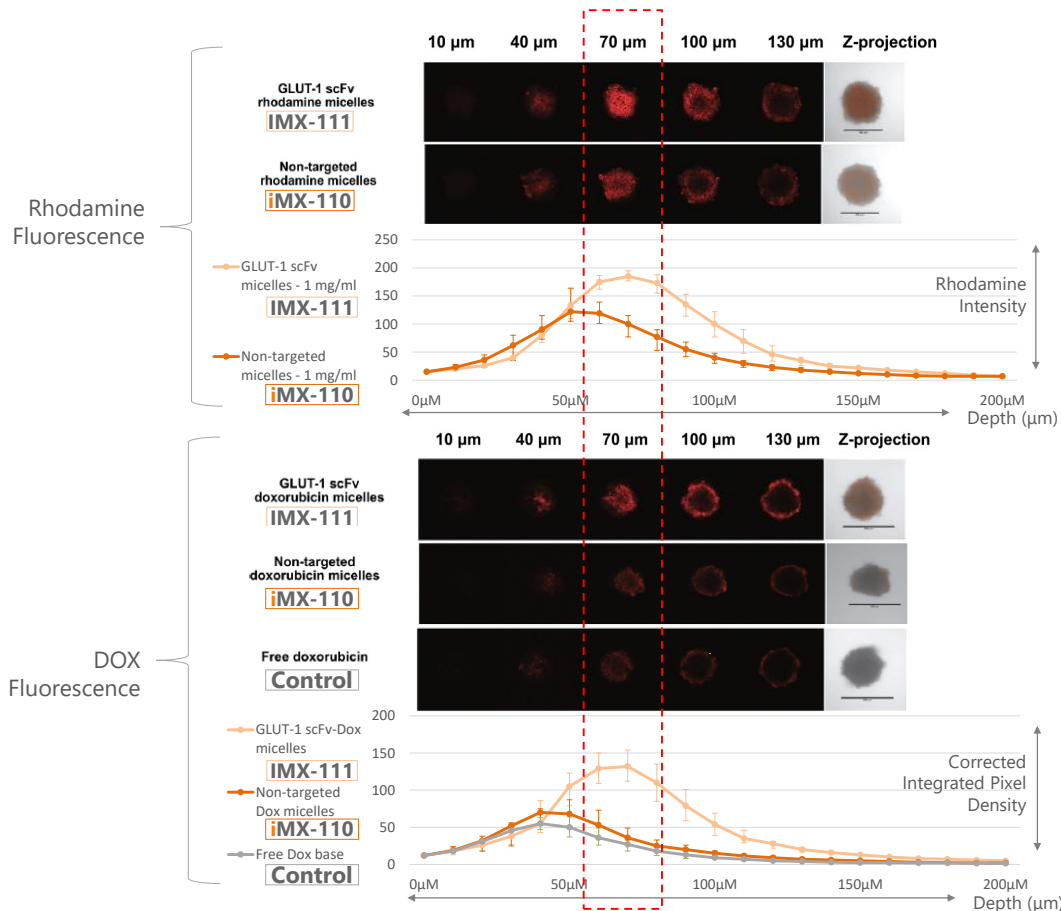
Evaluation of 48 h cytotoxicity on U87MG spheroids in vitro. The spheroids were treated with 40 μM CUR and 0.8 μM DOX, alone or in combination. The viability values obtained by CellTiter-Glo assay following 48 h treatment of the spheroids. Five spheroids were used as one replicate and results indicate n = 3, one-way ANOVA with Tukey's multiple comparison test (Sarisozen et al, 2016)

Penetration Into Doxorubicin resistant U87MG 3D Spheroids Cell Nuclei (Pink/Red Color)



Colocalization (magenta) of DOX (red) in the nuclei (blue) with the early-endosomal marker (green) by confocal microscopy. (A) Control, (B) non-targeted DOX micelles, (C) GLUT-1 scFv-targeted DOX micelles, 63x, 1.4-numerical aperture plan-apochromat oil immersion objective, ROI: 40x40 μM (Sarisozen et al, 2016)

Penetration Into Doxorubicin resistant U87MG 3D Spheroids



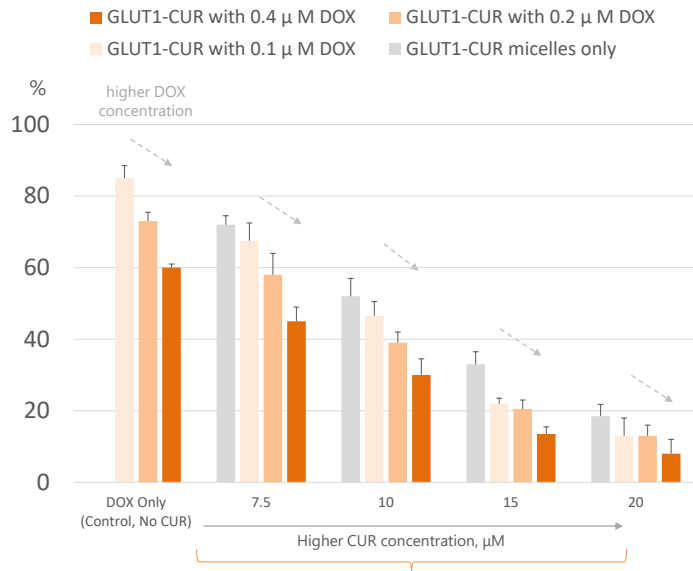
Confocal scanning laser microscopy analysis of rhodamine- or DOX-loaded micelles fluorescence in U87MG spheroids. Spheroids were incubated for 4 h with the formulations in serum complete medium. (PICTURES) Rhodamine or DOX distribution throughout the spheroids at different layers of depth. Z-projection images were obtained using average intensity and represent the average rhodamine or DOX fluorescent signal collected from each layer of the spheroid. (GRAPHS) (TOP) Corrected integrated pixel density as a representation of rhodamine intensity vs. distance from the apex of the spheroids, at 1 mg/ml lipid concentration. n = 5, mean ± SD, two-way ANOVA with Sidak's multiple comparisons. (BOTTOM) DOX intensity profiles of DOX-loaded micelles in the spheroids. n = 5, mean ± SD.

IMX-111 Kills Various Tumors Types Irrespective Of Doxorubicin Sensitivity (Cell Lines 1/2)

1

Kills Cancer Cells in HCT-116 Colon Cancer Cell Line Which Is Not Typically Treated With Doxorubicin...

Cell viability (%) vs. control (empty micelle) of doxorubicin-resistant HCT-116 cells after 48 h



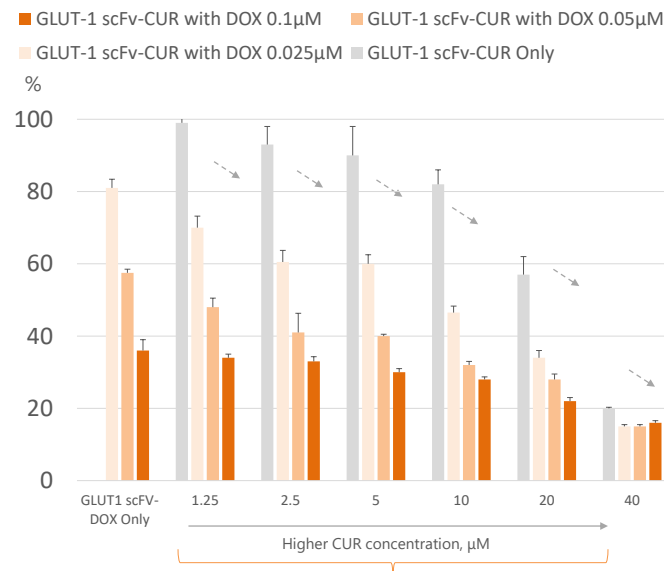
IMX-111

Viability of doxorubicin-resistant HCT-116 colon cancer cells after 48 h of continuous incubation with combination micelles at various concentrations of CUR and DOX. Cell viability was determined using CellTiter Blue cell viability assay. Data shown are representative of three independent experiments performed in triplicate (Abouzeid et al, 2013)

2

.. And Kills Cancer Cells in Doxorubicin resistant U87MG Glioblastoma Cancer Cell Line

Cell viability (%) vs. control (empty micelle) of doxorubicin-resistant U87MG cells after 48 h



IMX-111

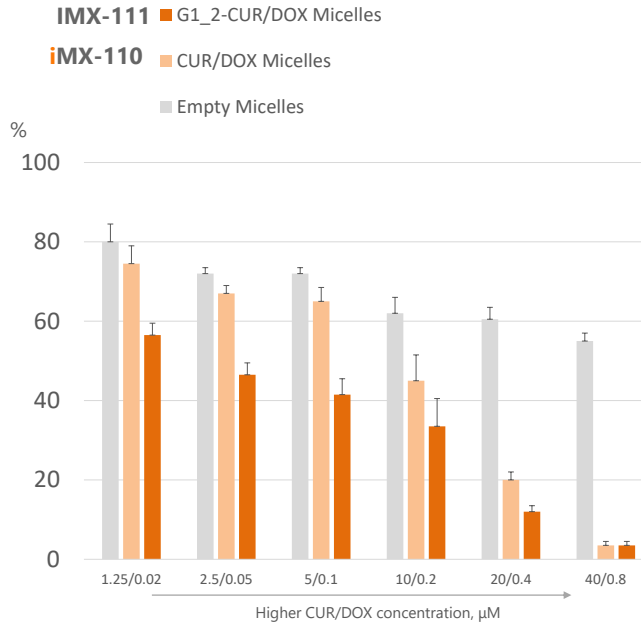
Viability of doxorubicin-resistant U87MG glioblastoma cells following 48 h of continuous incubation with combination treatment at various concentrations of CUR and DOX. Cell viability was determined using CellTiter Blue cell viability assay. Data shown are representative of three independent experiments performed in triplicate (Sarisozen et al, 2016)

IMX-111 Kills Various Tumors Types Irrespective Of Doxorubicin Sensitivity (Cell Lines 2/2)

3

Kills Cancer Cells in Chemotherapy-resistant ovarian carcinoma (A2780/Adr) in vitro ..

Cell viability (%) vs. control (empty micelle) of doxorubicin-resistant A2780/Adr cells after 48 h



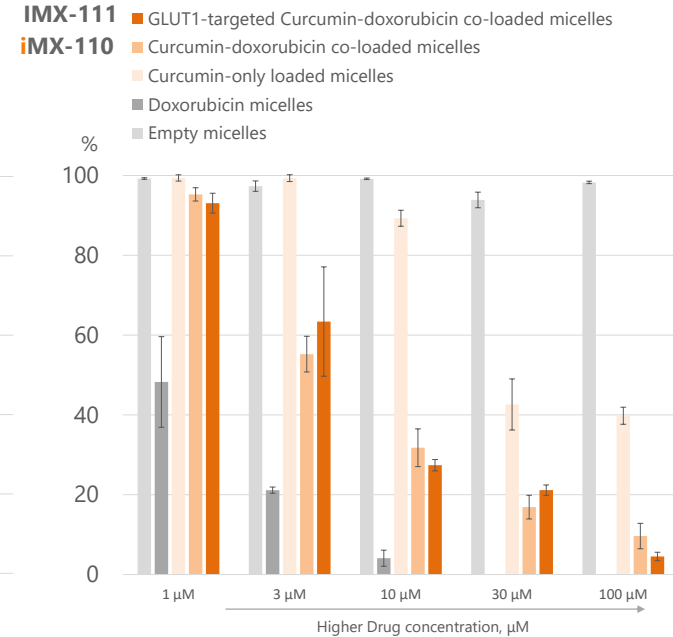
IMX-111

[Viability of doxorubicin-resistant A2780/Adr ovarian carcinoma cancer cells after 48 h of continuous incubation with combination micelles at various concentrations of CUR and DOX. Cell viability was determined using CellTiter Blue cell viability assay. Data shown are representative of three independent experiments performed in triplicate (Immix Biopharma Management)]

4

... And Kills Cancer Cells In Multiple Myeloma RPMI8226

Cell viability (%) vs. control (empty micelle) of RPMI8226 cells after 48 h



IMX-111

[Viability of RPMI8226 multiple myeloma cells following 48 h of continuous incubation with combination treatment at various concentrations of CUR and DOX. Cell viability was determined using CellTiter Blue cell viability assay. Data shown are representative of three independent experiments performed in triplicate (Immix Biopharma Management)]