Legends to Supplemental Figures

Figure S1. The effect of chemotherapy on expression of MPR *in vivo.* Human primary non-small lung tumor was established and propagated in Nude mice. When tumors reached 1cm diameter hey were treated with 1.5mg/kg DOX i. p. The tumors were excised 72h after treatment and paraffin sections stained for MPR. Hematoxylin was used to stain the nucleus. Typical example of staining is shown. Bar = 100 μm

Figure S2. Effect of treatment on tumor progression using bioluminescence imaging. Imaging was performed in B16-luc-bearing mice. 15–25 minutes before imaging, mice were injected i. p. with 150 μg/kg body weight of D-luciferin and then anesthetized using isoflurane. Mice were scanned for 60 seconds using the IVIS Spectrum photon-counting device optical imaging system (Xenogen, Alameda, Calif, USA). Regions of interest were drawn and quantified using the Living Image software version 2.5. Bioluminescence signal was reported as total light emission within the region of interest (photon/s). Specific signal was calculated as the ratio of bioluminescent signal in the region of interest to the bioluminescent signal in a background region containing no cells or tumors. A signal was defined as positive when it was greater than the sum of the mean background signal plus 2 standard deviations of the background signal. Typical example of measurements is shown. The quantification of the results is shown in Fig 3.

Figure S3. Redistribution of MPR to the cell surface after chemotherapy. MPR levels in fixed cells. 4T1 and B16F10 cell lines were treated with 12.5nM TAX for 16h and labeled with MPR antibody as described earlier (Ramakrishnan et al., 2010). A portion of the cells was fixed

with 2% paraformaldehyde for 20 min at room temperature. The cells were then stained for MPR expression. Appropriate untreated and isotype controls were used for the experiments. The expression of MPR was evaluated in viable and fixed cells by BD LSR-II flow cytometer. Dead cells were discriminated from the live population by either DAPI stain or Live/Dead Fixable Dead cell stain kit (Invitrogen). Typical example of three performed experiments is shown.

Figure S4. Redistribution of MPR to the cell surface after chemotherapy. B16F10 cells were grown on slides coated with poly-D-Lysine and treated with TAX 12.5nM for 16h. The slides were washed, fixed with 4% paraformaldehyde and blocked with 5% BSA for 30 min. Cells were labeled with primary antibody for MPR followed by the antirabbit MPR (red fluorescence). For labeling of TNG, goat anti rabbit giantin (Abcam) was used (green fluorescence). The slides were covered with Vectastain DAPI. Micrographs of B16 F10 cells were taken with a Leica TCS SP5 AOBS laser scanning confocal microscope through a 63X/1.40NA Plan Apochromat oil immersion objective lens (Leica Microsystems, Germany). 405 nm and 633 nm diode lasers, and an argon tunable 488nm laser lines were applied to excite the samples. An acoustic optical beam splitter was used to minimize crosstalk between fluorochromes. Over twenty 500 nm image z-sections for each sample were captured with photomultiplier detectors and prepared with the LAS AF software version 2.1.0 (Leica Microsystems, Germany). One section is shown.