Supplemental Figure 1. Single-agent DD chemotherapy is superior to MTD in treating cisplatin-resistant tumor, R HM-1

To a lesser degree, single-agent DD chemotherapy also exhibited better anti-tumor effect in mice bearing R HM-1 cell tumors. R HM-1 cells (1x10^6) were injected subcutaneously (s.c.) into the female (C57BL/6, C3H/He) F1 mice (5 in each group, day 0). On day 4, mice started chemotherapy with paclitaxel and cisplatin delivered intraperitoneally (i.p.) in either single-agent paclitaxel (16 mg/kg in DD, 40 mg/kg in MTD) or cisplatin (10 mg/kg in DD, 25 mg/kg in MTD) at the 3-day (DD) and 10-day (MTD) intervals for 7 courses (DD) and 3 courses (MTD). Control group mice were treated with PBS in 3-day interval. Better therapeutic efficacy was shown in mice treated by both DD chemotherapies with cisplatin and paclitaxel (*p=0.002 and **p=0.0003 for paclitaxel and cisplatin, respectively, DD versus MTD)

Supplemental Figure 2. DD chemotherapy is superior to MTD in treating intraperitoneal cisplatin-resistant ovarian tumor

DD chemotherapy exhibited better anti-tumor effect in a mouse intraperitoneal ovarian tumor model. Mouse ovarian tumor ID8 cells (5x10^5/mice), an aggressive cell line originating from MOSEC cell (19), were injected intraperitoneally (i.p.) into C57BL/6 mice (day 0). On day 7, mice were treated by DD, MTD, or control PBS. ID8 cells were engineered with luciferase and thus tumor growth could be monitored by non-invasive bioluminescent imaging. Photography of tumor image represented by strength of luminescence illustrated that mice receiving DD
chemotherapy had significantly less tumor loading (#p=0.022, DD versus MTD). DD chemotherapy exhibited better therapeutic effect against intraperitoneal cisplatin-resistant tumor. There was no statistically significant difference of the tumor loading between mice receiving MTD chemotherapy and control PBS.