Supplementary data

The loss of arylamine N-acetyltransferase NAT1 expression in breast cancer enhances drug resistance

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Supplementary Table 1: Parameters of the dose-response curves in MDA-MB-231 cells

| Drug        | IC_{50}         | Hill coefficient | Terminal Plateau |
|-------------|-----------------|------------------|------------------|
|             | Parent | NAT1 KO | Parent | NAT1 KO | Parent | NAT1 KO |
| Cisplatin (µM) | 3.4 ± 0.3 | 11.7 ± 4.1 | -1.16 ± 0.1 | -0.81 ± 0.1 | 11.4 ± 2.5 | 14.9 ± 8.8 |
| Daunorubicin (nM) | 26.0 ± 3.8 | 42.7 ± 7.3 | -0.92 ± 0.1 | -1.44 ± 0.3 | 4.0 ± 3.6 | 20.0 ± 4.3 |
| Epirubicin (nM) | 45.5 ± 16.1 | 115 ± 23.6 | -0.69 ± 0.1 | -1.32 ± 0.3 | 0.7 ± 8.5 | 17.3 ± 6.6 |
| Etoposide (µM) | 1.03 ± 0.2 | 1.45 ± 0.4 | -0.77 ± 0.1 | -0.83 ± 0.1 | 8.1 ± 3.7 | 13.8 ± 4.9 |
| 5-FU (µM) | 16.5 ± 1.5 | 83.0 ± 14.7 | -1.94 ± 0.3 | 1.56 ± 0.34 | 41.4 ± 1.6 | 41.8 ± 3.9 |
| Paclitaxel (nM) | 2.5 ± 1.1 | >1000\(^1\) | -0.52 ± 0.1 | -0.3 ± 0.1 | 41.2 ± 4.5 | 4.3 ± 15 |
| Vincristine (nM) | 3.1 ± 0.4 | 11.4 ± 3.8 | -0.90 ± 0.1 | -0.71 ± 0.1 | 20.8 ± 1.7 | 56.1 ± 3.1 |

\(^1\) estimated values
**Supplementary Table 2: Parameters of the dose-response curves in T-47D cells**

| Drug            | IC$_{50}$  | Hill coefficient | Terminal Plateau |
|-----------------|------------|------------------|------------------|
|                 | Parent     | NAT1 KO          | Parent           | NAT1 KO          | Parent     | NAT1 KO          |
| Cisplatin (µM)  | 20.2 ± 6.8 | 87.0 ± 6.8       | -0.85 ± 0.1      | -1.36 ± 0.7      | 21.20 ± 8.8| 0                |
| Daunorubicin (nM)| 16.0 ± 1.9 | 102 ± 24         | -2.77 ± 0.5      | -1.28 ± 0.3      | 34.7 ± 2.4 | 21.4 ± 1.9       |
| Epirubicin (nM) | 113 ± 10   | 165 ± 22         | -1.24 ± 0.1      | -1.7 ± 0.3       | 16.8 ± 2.8 | 20.4 ± 4.9       |
| Etoposide (µM)  | 2.2 ± 0.2  | 4.7 ± 0.5        | -1.19 ± 0.1      | -1.69 ± 0.2      | 36.9 ± 1.5 | 40.9 ± 1.9       |
| 5-FU (µM)       | 87.2 ± 18  | 719 ± 96         | -1.0 ± 0.1       | -0.7 ± 0.2       | 35.8 ± 4.2 | -                |
| Paclitaxel (nM) | 16.7 ± 1.2 | 22.1 ± 10.5      | -1.37 ± 0.1      | -0.81 ± 0.2      | 35.2 ± 1.2 | 48.9 ± 5.8       |
| Vincristine (nM)| 6.9 ± 0.5  | 13.9 ± 2.3       | -1.97 ± 0.2      | -1.28 ± 0.2      | 33.7 ± 1.4 | 44.7 ± 2.4       |