**Appendix A**

**Supplementary Materials**

***Supplementary Table 1: Top 6 identified disease and functional pathways enriched in differentially expressed (DE) genes in MCF7(2) cells.*** *Significantly changed genes following treatment with 100 M BOLD-100 were ranked by p-value (IPA Core Analysis, QIAGEN).*

|  |  |
| --- | --- |
| **# DE GENES** | **TOP DISEASE AND FUNCTIONS** |
| 33 | RNA Post-Translational Modification, Cancer, Cell-mediated Immune Response |
| 32 | Gene Expression, Connective Tissue Disorders, Developmental Disorders |
| 31 | Drug Metabolism, Endocrine System Development and Function, Lipid Metabolism |
| 31 | Cancer, Cell Cycle, Cellular Assembly and Organization |
| 31 | Embryonic Development, Cell Cycle, Cellular Development |
| 29 | Lipid Metabolism, Small Molecule Biochemistry, Vitamin and Mineral Metabolism |

**MCF7 (2)**

**A**

100uM BOLD-100

10uM BOLD-100

Vehicle



GRP78/Bip

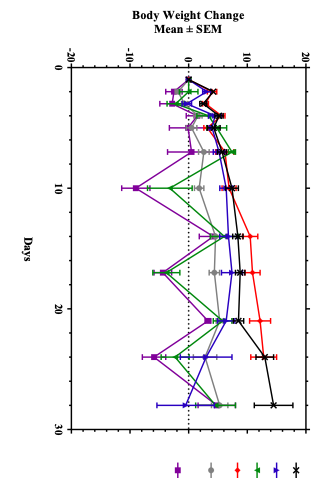


β-tubulin

****

**B**

***Supplement Figure S1: GRP78 protein levels did not change in basal unstressed MCF7(2) cells.*** *(A) Western blot analysis of MCF7(2) cells that were treated with BOLD-100 at indicated doses for 72 h did not show any change in GRP78 levels compared to vehicle. (B) GRP87 protein levels were determined in MDA-MB-231 cells by Western blotting. Cells were treated with indicted doses of BOLD-100 and/or olaparib for 72 h. -tubulin was used as the loading control in both cases.*



**Vehicle**

**30 mg/kg BOLD-100**

**50 mg/kg BOLD-100**

**olaparib**

**30 mg/kg BOLD-100 + olaparib**

**50 mg/kg BOLD-100 + olaparib**

***Supplement Figure S2: Mean body weight of mice for in vivo MDA-MB-231 xenograft study.*** *The mean body weights were calculated from Day 1 for each group for each day of body weight measurement, and were plotted as a function of time. Error bars on the plots indicate one standard error of the mean (SEM).*