

1 **Supplementary Figure Legends**

2 **Supplemental Figure 1: *In vitro* analysis of MDA-MB-231, BT-20, and MDA-MB-468** 3 **total live cell counts following treatment.**

4 **A**, MDA-MB-231 **B**, BT-20 and **C**, MDA-MB-468 cells were treated with either vehicle
5 (EtOH 0.01%), mif (100 nM), paclitaxel (100 nM), dex/paclitaxel (100 nM), or dex (100
6 nM)/mif (100 nM)/paclitaxel (100 nM) for 72 hours. A total live cell count was measured
7 by investigator-coded ImageJ software as described above. The total dead cells were
8 subtracted from the total phase contrast cell count to calculate a total live cell count.
9 Three independent experiments were performed for each cell line and one
10 representative experiment is shown in this figure. The addition of mifepristone to
11 dex/pac in MDA-MB-231 cells decreased the slope of the total live cell count over time
12 from -5.2 to -13.8. In BT-20 cells, the addition of mifepristone decreased the slope from
13 0.8 to 0.4. The addition of mifepristone to MDA-MB-468 showed a less significant
14 difference in the slope of the total live cells over time, -10.2 to -9.7. Error bars represent
15 +/-SEM.

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17 **Supplemental Figure 2: Phase-contrast and fluorescent images of apoptotic MDA-** 18 **MB-231 cells.**

19 Representative analysis of a single time point of MDA-MB-231 cells treated with vehicle.
20 The fluorescent channel representing apoptosis (green) is separated from the phase-
21 contrast image and both were then individually masked and analyzed using investigator-
22 coded ImageJ software as described above (Supplemental Method 1).

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24 **Supplemental Figure 3: Trypan blue dye exclusion analysis of MDA-MB-231, BT-** 25 **20 and MDA-MB-468 cells treated with dexamethasone +/-mifepristone and** 26 **paclitaxel.**

27 TNBC cell lines were treated with either vehicle (EtOH 0.01%), paclitaxel (100 nM), dex
28 (100 nM)/paclitaxel (100 nM), or dex (100 nM)/mif (100 nM)/paclitaxel (100 nM). **A**, The
29 addition of mifepristone significantly increased paclitaxel-induced cell death in MDA-MB-
30 231 cells ($P=0.02$). **B**, In BT-20 cells, mifepristone also increased paclitaxel-induced cell
31 death ($P=0.03$). **C**, The addition of mifepristone showed a trend toward increased cell

32 death in paclitaxel-treated MDA-MB-468 cells ($P=0.23$). In all three cell lines, the
33 addition of mifepristone to paclitaxel did not significantly increase the percentage of cell
34 death as compared to paclitaxel alone. Each experiment was performed three separate
35 times and results were averaged. Error bars represent \pm -SEM.

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37 **Supplemental Figure 4: Caspase-2 cleavage following treatment with**
38 **mifepristone.**

39 The second biological replicate of MDA-MB-231 cells treated with vehicle (EtOH
40 0.01%), dex (100 nM), mif (100 nM), paclitaxel (100 nM), dex/paclitaxel, or
41 dex/mif/paclitaxel for 24 and 48 hours. The addition of mifepristone resulted in
42 increased cleaved caspase-3 compared to dex/pac treatment alone.

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44 **Supplemental Figure 5: α GR and DAPI analysis of MDA-MB-231 xenografts.**

45 Representative image of a section from an MDA-MB-231 tumor. The red and blue
46 fluorescent channels were separated and then masked and analyzed with ImageJ
47 software as described above (Supp. Method S2).

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50 **Supplemental Figure 6: Western analysis of GR isoforms from MDA-MB-231**
51 **xenografts.**

52 Western analysis of tumor lysates from animals treated with vehicle, paclitaxel (10
53 mg/kg/day) or mifepristone (15 mg/kg/day)/paclitaxel (10mg/kg/day). Densitometry of
54 the full-length GR α shows a trend toward increased GR expression in paclitaxel-only
55 treated tumors compared with mif/paclitaxel-treated tumors (8.8 vs. 5.5, for paclitaxel
56 vs. mifepristone/paclitaxel respectively, $P=0.18$)

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58 **Supplemental Figure 7: Representative images of clonogenic assay with MDA-**
59 **MB-231 cells.**

60 Representative images of MDA-MB-231 cell colonies treated with either vehicle (EtOH
61 0.01%), paclitaxel (100 nM), dex (100 nM)/paclitaxel (100 nM), or dex (100 nM)/mif (100

62 nM)/paclitaxel (100 nM) for 96 hours. The 15x column (magnification of 15x) represents
63 the approximate magnification under which the colonies were counted.