Molecular Pharmacology

Lapatinib-mediated COX-2 expression via EGFR/HuR interaction enhances the aggressiveness of triple-negative breast cancer cells

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Supplemental Figures

Supplemental Figure S1

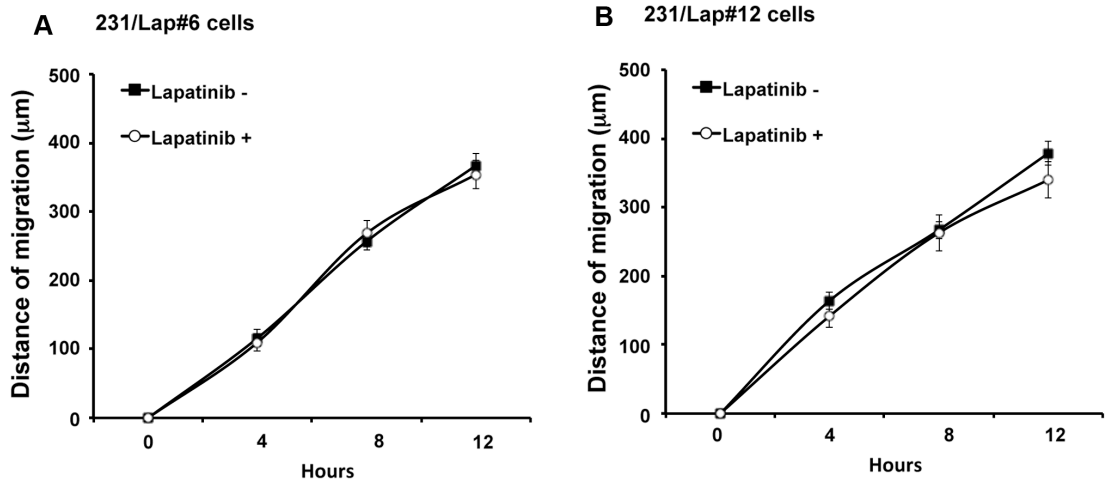

Figure S1. The effects of lapatinib treatment on the growth rate of TNBC cells. A and B, The cell growths of 231/Lap#6 (A) and 231/Lap#12 (B) cells treated with or without lapatinib were measured by MTT assays.

Supplemental Figure S2

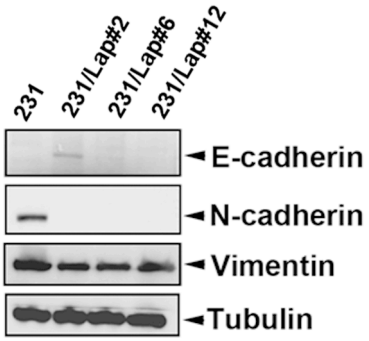

Figure S2. The effects of lapatinib treatment on the induction of markers of the epithelial-mesenchymal transition (EMT) in TNBCs. Whole cell lysates were prepared from the indicated cells and subjected to immunoblotting analyses with the indicated antibodies.

Supplemental Figure S3

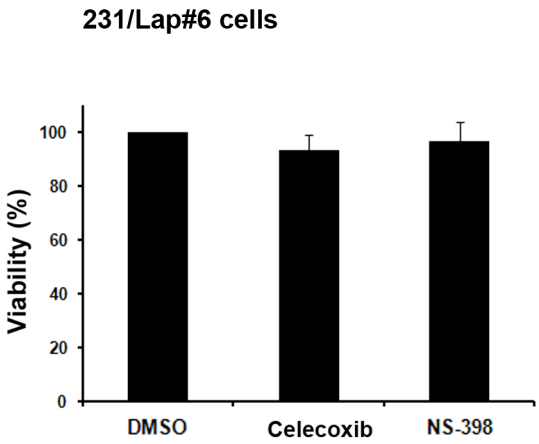

Figure S3. The involvement of selective COX-2 inhibitors in the viability of lapatinib-treated TNBC cells. Treatment with 30 μM celecoxib or with 30 μM NS-398 for 24 h did not significantly affect cell viability of 231/Lap#6 cells in the MTT assay. The data are represented as the mean ± SD.

Supplemental Figure S4

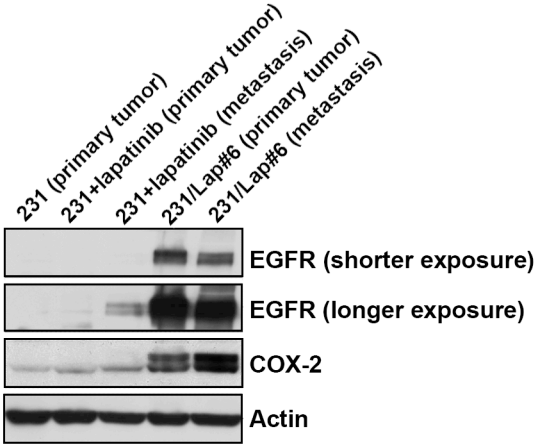

Figure S4. EGFR and COX-2 expressions in xenograft tumors from metastasis sections of MDA-MB-231 with lapatinib treatment or 231/Lap#6 cells.

Tumor tissues from different groups in the experiments shown in Figure 1I were homogenized and subjected to immunoblotting analyses with anti-EGFR, anti-COX-2, or anti-actin antibodies.

Supplemental Figure S5

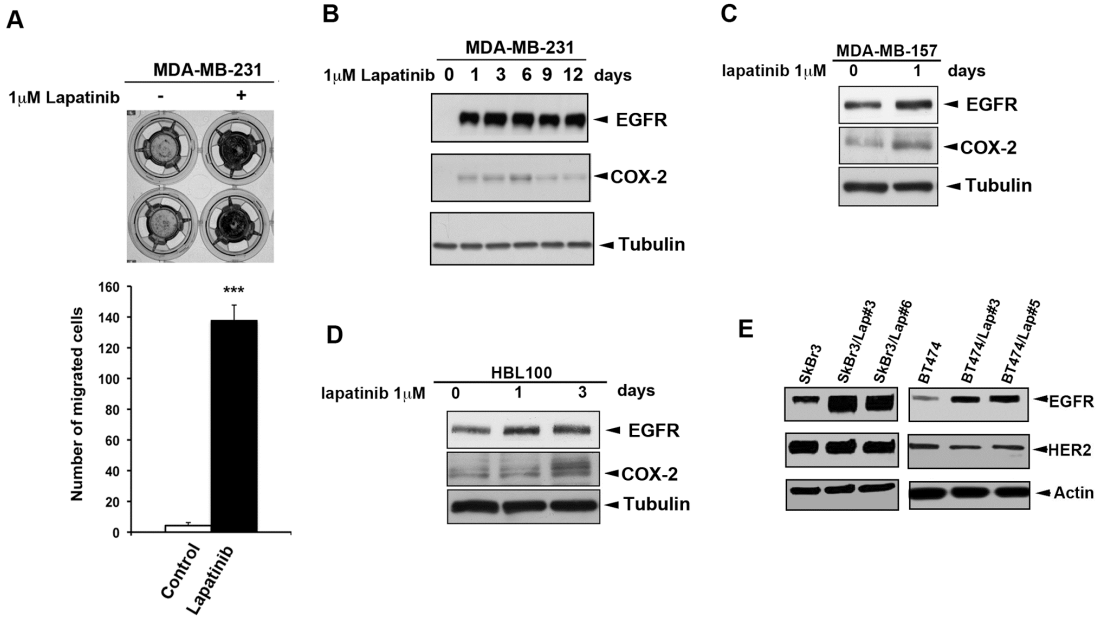

Figure S5. The effects of short-term treatment with lapatinib on EGFR and COX-2

expression and cell migration in TNBC cells.

A, The migration abilities of MDA-MB-231 cells after treatment with lapatinib for 24h were determined by the transwell migration assay. B-D, Whole cell lysates from lapatinib-treated MDA-MB-231 (B), MDA-MB-157 (C), and HBL100 (D) cells were subjected to immunoblotting analyses with the indicated antibodies. E, Whole cell lysates prepared from SkBr3 and BT474 and their lapatinib-resistant clones were subjected to immunoblotting analyses with the indicated antibodies.