Figure S1. MMTV-neu mice spontaneously develop breast tumors and lung metastases. (A) Kinetics of breast tumor occurrence in MMTV-neu females. (B) Rat ErbB2 (neu transgene) mRNA expression in different MMTV-neu mouse organs, as determined by real-time quantitative PCR. (C) Representative images of a small (upper panel) and a big (lower panel) lung metastasis. Scale bars: 200 μm (upper panel) and 100 μm (lower panel). (D) Rat ErbB2 (neu transgene) mRNA expression in a representative lung metastasis and the surrounding healthy lung tissue, as determined by real-time quantitative-PCR. Data are expressed in arbitrary units.
Figure S2. Cannabinoids inhibit breast tumor growth in vivo. Final volume (A) and final weight (B) of the first tumor appeared in each animal.
Figure S3. MMTV-neu-derived tumors express cannabinoid receptors. CB₁ receptor and CB₂ receptor expression (green) in tumor sections. Cell nuclei are in blue. Scale bars: upper panels, 120 µm; lower panels, 40 µm.
**Figure S4. Cannabinoids modulate the expression of MMP2 and MMP9.** (A) MMP2 (left panel) and MMP9 (right panel) mRNA expression in vehicle-treated, THC-treated and JWH-133-treated MMTV-neu mice, as determined by real-time quantitative PCR (graphs) and reverse-transcriptase PCR (pictures; 3 representative tumors of each group are shown). Data are expressed in arbitrary units. (B) MMP9 protein expression, as determined by Western blot, in the same tumors. *, p<0.05 vs vehicle-treated tumors.
Supplemental Figure 5

Figure S4. Human ErbB2-positive breast cancer cell lines are sensitive to cannabinoids. (A) ErbB2 and (B) CB1 and CB2 receptor expression, as determined by Western blot, in different breast cancer cell lines from mouse (N202.1A) and human (BT474, SkBr3, MDA-MB-231 and MCF-7) origin. MDA-MB-231 and MCF-7 cells were used as ErbB2-negative controls. U373-MG and Jurkat cells were used as positive controls for CB1 and CB2 receptor expression, respectively. (C and D) Viability of BT474 and SkBr3 cells in response to (C) increasing concentrations of THC or (D) 6 µM (BT474) or 3 µM THC (SkBr3) with or without 2 µM SR144528 (SR) for 72 h. Data are expressed as % of vehicle-treated cells, set at 100%. *, p<0.05; **, p<0.01 vs vehicle-treated cells; #, p<0.05 vs THC-treated cells.