Figure S1.
A) RT-qPCR analysis of HOXB13 expression in MCF10A, normal breast mammary epithelial cell line, mammary organoids from reduction mammoplasty of normal women, and ER+ breast cancer cell lines. MCF7 and T47D both express low levels of HOXB13, below the median expression of HOXB13 in tumors from long-term survivors. BT474 expresses significantly higher HOXB13 than the survivors (p=0.05) and above the threshold used to stratify patients in the survival, and was used to study the effects of HOXB13 knock down.

B) Levels of HOXB13 in engineered cell lines are comparable to those seen in primary tumors.

C) MCF7-B13 cells are independent of E2 for growth as xenografts. Tumor growth curves of MCF-7-Vec and MCF-7-B13-1 cells implanted s.c. in athymic mice in absence of exogenous estrogen supplementation (*P<0.01 and **P<0.001).
Fig S2.
A) RT-qPCR analysis of ERα and HOXB13 expression in MCF-7-TMR1 and -TMR2 cells compared to the parental MCF-7 cells, and (B) MCF7-TMR1-HOXB13 shRNA cells compared to scrambled shRNA cells.
D) Cell viability analysis of MCF-7-TMR-scrambled and MCF-7-TMR-HOXB13 shRNA cells with treatment of 1, 2, 5 uM TAM by MTT assay. (*P<0.01 compared to vehicle)
Fig S3. HOXB13 promotes stromal recruitment through expression of IL6
A) RT-qPCR analysis of IL6, IL8, CXCL12, CXCR4, ESR1, and MMP1 expression in MCF-7-HOXB13 cells and B) BT474-HOXB13 shRNA cells compared to control cells. C) RT-PCR analysis of IL-6 expression in MCF-7-HOXB13 and D) BT474-HOXB13 shRNA cells compared to their respective vector-control cells. E) RT-PCR analysis of IL-6 expression MCF-7-TMR cells compared to the vehicle treated parental cells. (F) RT-qPCR analysis of IL-6 expression in two stable clones of TMR1-HOXB13shRNA cells compared to the MCF-7-scr shRNA cells (*p<0.001).