Supplementary Figure 1. Data flow diagram of the secondary/progressive lesions.

Supplementary Figure 2. PTEN IHC changes from pre-trastuzumab to post-trastuzumab samples. Depicted are photomicrographs of PTEN change from reduced to loss of expression: a) PTEN expression by IHC in the primary breast invasive carcinoma with reduced nuclear and cytoplasmic staining as compared to the adjacent normal stroma (200X); b) HE staining of the primary lesion (200X); c) PTEN complete loss of expression in the secondary invasive carcinoma with absence of any staining in the lesion as compared to the adjacent normal stroma (200X); d) HE staining of the secondary lesion (200X).