green: model results for the subet of hormone receptor positive cases, and orange: model results for the subset of hormone receptor negative cases. AUC is the area under the corresponding ROC curve. **B**, ROC curves for the logistic regression models 1 (blue), 2 (orange), 3 (green), 4 (red), 5 (purple), 6 (brown), 7 (pink) to predict pathological response. AUC is the area under the corresponding ROC curve.

A. HER2 non-amplified fraction threshold models

B. Logistic regression models

1.00

0.75

Supplementary Figure S5. Predicting pathological complete response (pCR) from single cell HER2 FISH

frequency of HER2 unamplified cells to predict pathological response. Blue: the model results using all patients,

and clinical data. A, Receiver operating characteristic (ROC) curves for the prediction models using the

