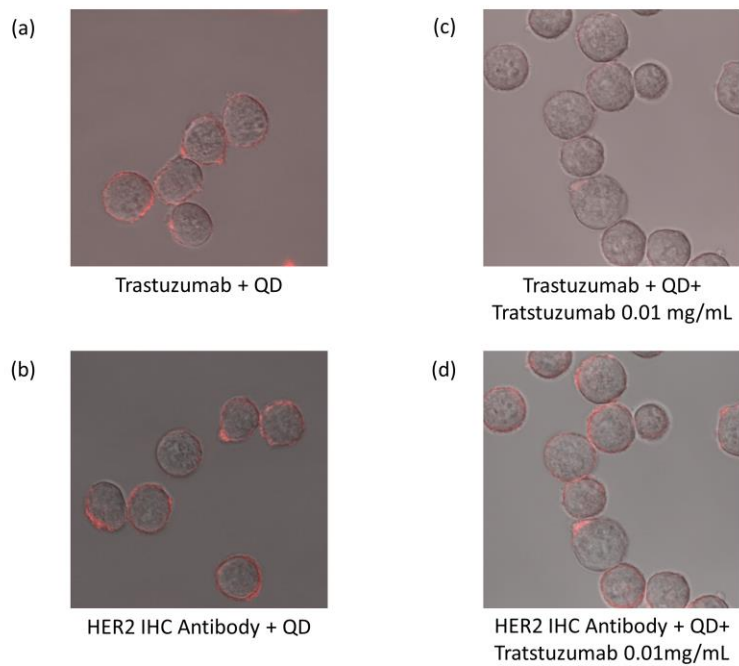


## Supplementary Material



**Figure S1.** Results of quantum dot (QD) detection using trastuzumab and HER2 immunohistochemistry antibody before and after treatment with trastuzumab. Both QD labeled Trastuzumab (a) and QD labeled HER2 IHC antibody (b) detected SNU-1 cell lines in vitro. However, after treatment with 0.01 mg/mL of trastuzumab in vitro, QD labeled trastuzumab to bind to SNU-1 cellular membrane (c) in contrast to HER2 IHC antibody (d), implying that cellular imaging using trastuzumab itself better represent the actual drug binding and mechanism of action.