**Supplementary Table S1.** 50% Inhibitory concentrations (IC50) in esophageal or head-and-neck squamous cell carcinoma (ESCC or HNSCC) cell lines

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Cancer type** | **Cell line** | **HER family gene amplification** | **HER family gene mutation** | **IC50** | | |
| **Cetuximab (mg/L)** | **Erlotinib (µM)** | **Afatinib (µM)** |
| **ESCC** | **KYSE30** | *EGFR* amplification | - | >200 | 13.07 | 1.33 |
| **KYSE50** | - | - | >200 | 22.64 | 1.48 |
| **KYSE70** | - | *EGFR* Y69fs\*11 | >200 | 4.31 | 0.66 |
| **KYSE150** | - | *HER3* D297Y | >200 | 15.70 | 0.78 |
| **KYSE170** | - | NA | >200 | 3.61 | 1.34 |
| **KYSE180** | - | - | >200 | 1.94 | 1.11 |
| **KYSE270** | - | *EGFR* L861Q  *HER3* R1202W | >200 | 1.80 | 0.0072 |
| **HNSCC** | **OSC-19** | - | *HER2* S1050L | >200 | 5.47 | 1.13 |
| **OSC-20** | *EGFR* amplification | - | >200 | 3.84 | 0.54 |
| **HOC-313** | - | NA | >200 | 30 | 0.62 |
| **TSU** | - | NA | >200 | 7.58 | 0.73 |
| **SAS** | - | *HER4* G1109C | >200 | 1.47 | 0.020 |

NA, mutation data was not available in theCOSMIC database.