**Figure legend**

Supplemental figure 1. Pharmacodynamic effects of CUDC-101 in tumor, skin and PBMCs. A: IHC staining of pEGFR Y1068 (brown) and hematoxylin (blue) in tumor biopsies pre- and post-treatment from 2 patients who received 275 mg/m2 of CUDC-101. B: IHC staining and H-score of Ac-H3 (brown) in tumor biopsies pre- and post-treatment from 1 patient who received 225 mg/m2 (pt 100-104) and 2 patients who received 275 mg/m2 of CUDC-101 (pt 100-202 & 600-203). C: IHC analysis of Ac-H3 (brown) in skin biopsies prior to and post the 1st, 3rd and 24th dose of CUDC-101. Representative IHC staining is shown on the left and H-score of all 8 patients on the right. All samples are from patients who received 275 mg/m2 CUDC-101. D: Western blot analysis of histone H3 acetylation in PBMCs prior to and post the 1st, 3rd and 24th doses of CUDC-101. Representative image is shown on the left and quantification of all 7 patients on the right. All samples are from patients who received 275 mg/m2 of CUDC-101. The Ac-H3 to total H3 ratio is normalized to the baseline level of each patient prior to any CUDC-101 treatment.

Supplemental figure 2. FISH analysis of *EGFR* and *HER2* gene amplification in the archival tumor biopsies from 2 patients who received 275 mg/m2 of CUDC-101.

Supplemental figure 3. Ac-H3 induction in PBMCs from patients with evaluable clinical response. All patients with both evaluable tumor response and PBMC samples are included. The greatest Ac-H3 induction after the 1st, 3rd or 24th dose of CUDC-101 is included. All patients shown received 275 mg/m2 of CUDC-101.