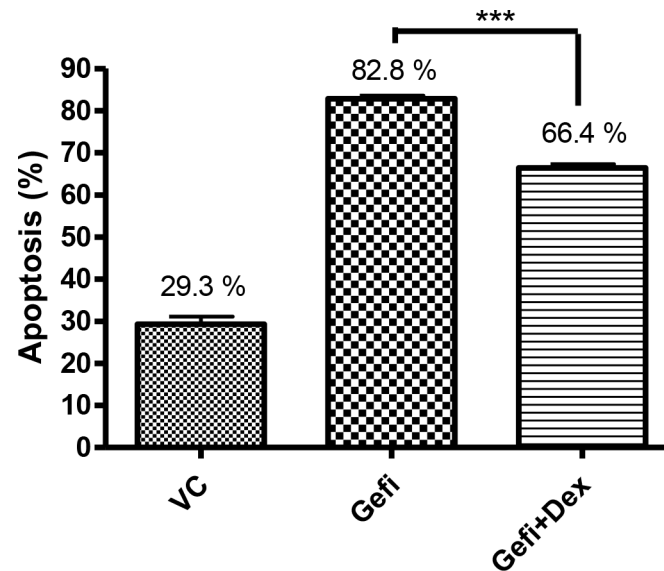
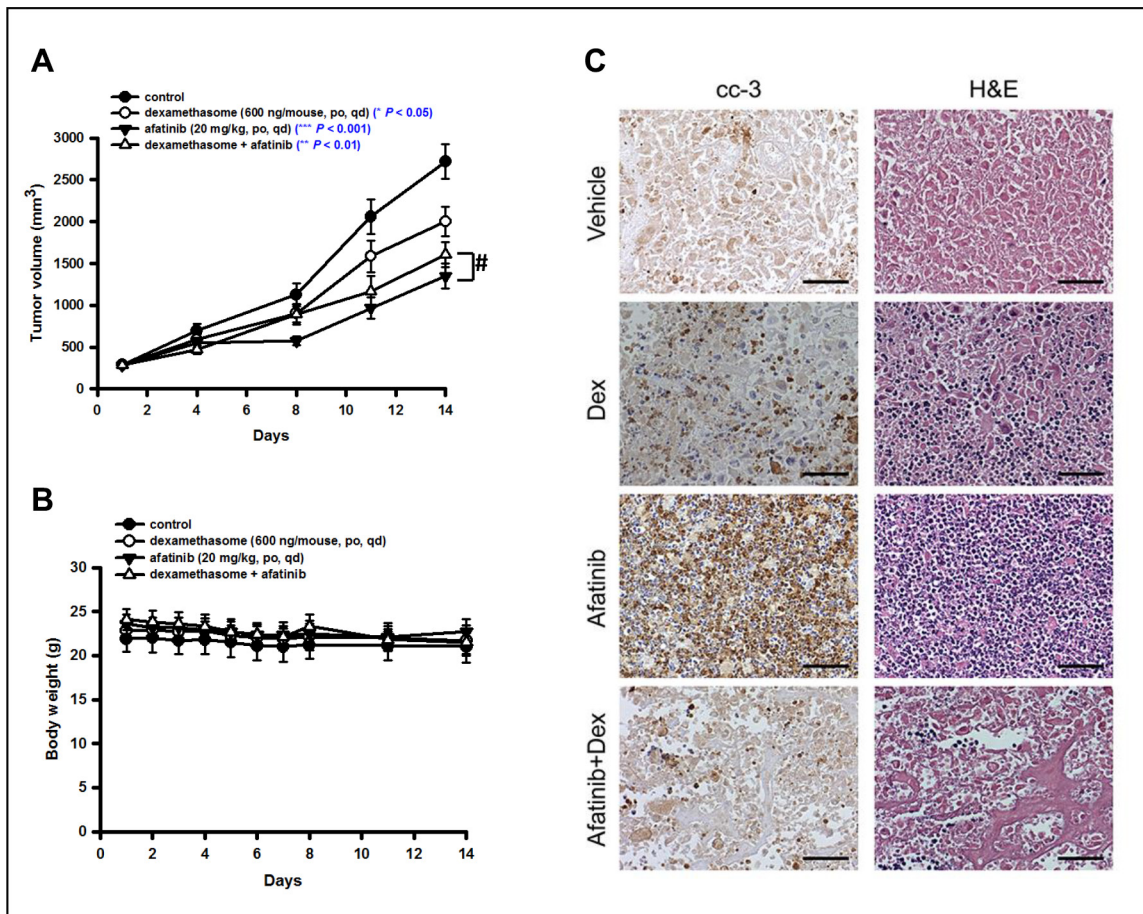


Glucocorticoids may compromise the effect of gefitinib in non-small cell lung cancer

Supplementary Materials



Supplementary Figure S1: Dexamethasone significantly lowered apoptosis induction in NCI-H3255 cells treated by gefitinib. NCI-H3255 cells were treated by gefitinib at 90 nM (IC_{80}) or in combination with dexamethasone, 1 μ M. Three independent repeat tests were performed. Abbreviation: VC, vehicle control; Gefi, gefitinib; Dex, dexamethasone. *** $p < 0.001$.



Supplementary Figure S2: Anti-cancer activity of dexamethasone in combination with afatinib in human non-small cell lung cancer NCI-H1975 xenograft model. (A) Nude mice were daily treated with vehicle (DMSO), afatinib (20 mg/kg), dexamethasone (600 ng/mouse) or afatinib (20 mg/kg) co-administered with dexamethasone (600 ng/mouse) by oral gavage for 14 days. Ten mice per group were used in the xenograft experiment. * $p < 0.05$ and ** $p < 0.01$ compared to control; # $p < 0.05$. (B) Body weight of the NCI-H1975 tumor bearing mice under the treatment during the study. The data represent mean \pm SEM from ten mice in each group. (C) Apoptosis in NCI-H1975 xenograft tumors. At the end of 14-day drug treatment, apoptotic cells in tumors were characterized by cytoplasmic shrinkage and nuclear chromatin condensation in H&E staining and were positive for cleaved caspase 3 positive cells (shown as brown). Scale bars, 50 μ m. cc-3, cleaved caspase 3.

Supplementary Table S1: NCI-H1975 cells treated with different EGFR-TKI alone or in combination with dexamethasone (apoptosis %)

Dex.	Non-Dex	Dex (1 μ M)
EGFR-TKI		
Non-TKI	9.6 (\pm 1.7)* %	3.1 (\pm 1.0) %
AZD9291 (1 μ M)	36.3 (\pm 2.5) %	5.6 (\pm 1.4) %
CO1686 (1 μ M)	22.7 (\pm 3.6) %	5.5 (\pm 0.9) %

Dex.: dexamethasone.

*mean (\pm 2SD)