

## Supplementary Data

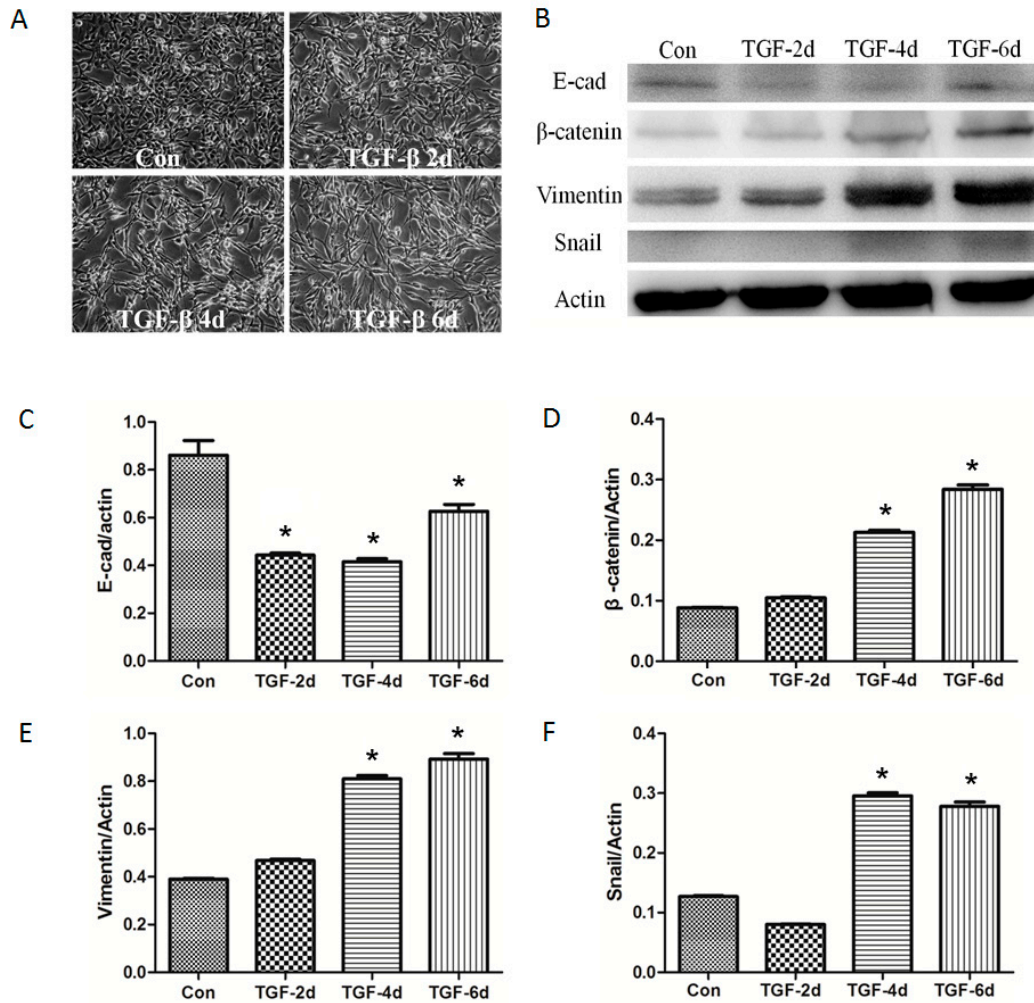
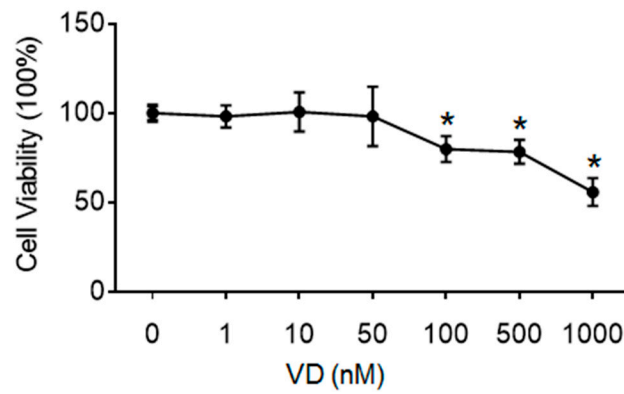


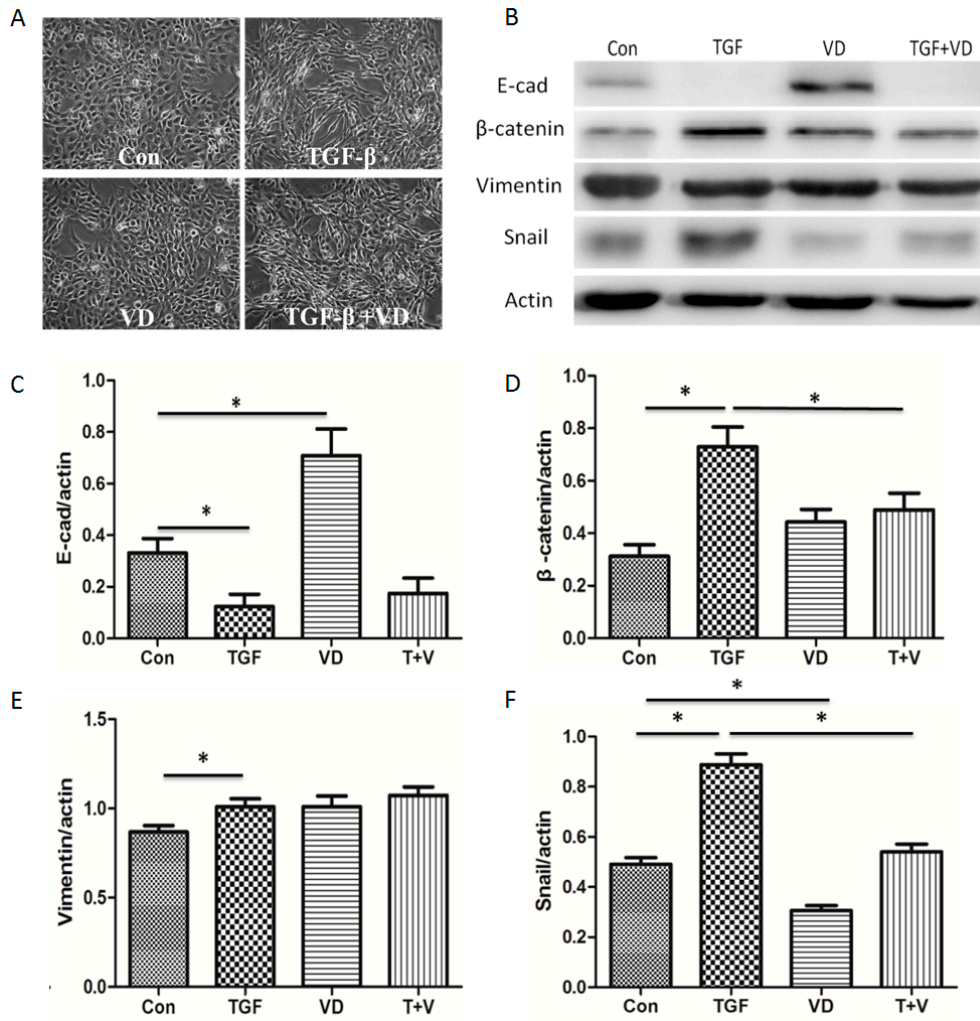
Figure S1. TGF- $\beta$  induced EMT in BEAS-2B cells.

BEAS-2B cells were exposed to 5 ng/ml TGF- $\beta$  for 0, 2, 4, and 6 days. (A) Morphological features of cells at the last day (400 $\times$ magnification); (B) Western blot analysis of E-cadherin, Vimentin,  $\beta$ -catenin, and Snail.  $\beta$ -actin served as a loading control; (C-F) the levels of the indicated protein was quantified with gray value (Mean $\pm$ SD, n=3). \* $P$  < 0.05 compared with the corresponding group.



*Figure S2. Effects of  $1\alpha,25(\text{OH})_2\text{D}_3$  on cell viability in A549 cells.*

A549 cells were exposed to different concentration of  $1\alpha,25(\text{OH})_2\text{D}_3$  (0, 1, 10, 50, 100, 500, 1000 nmol/L) for 3 days. Then 10  $\mu\text{l}$  of CCK-8 solution was added and the cells were incubated for 1 h. Absorbance was measured at 450 nm in a microplate reader (BioTec Instruments, Inc., Winooski, VT, USA) and cell viability was calculated. Each experiment was performed in triplicate. \* $P < 0.05$  compared with the corresponding group.



*Figure S3. Vitamin D prevented TGF-β induced EMT markers alteration in BEAS-2B cells.*

BEAS-2B cells were treated with 5 ng/ml TGF-β and/or 50 nmol/L 1α,25(OH)<sub>2</sub>D<sub>3</sub> for 6 days. (A) Morphological features of cells at the last day (400×magnification); (B) Western blot analysis of E-cadherin, Vimentin, β-catenin, and Snail. β-actin served as a loading control; (C-F) The levels of the indicated protein was quantified with gray value (Mean ± SD, n=3). \**P* < 0.05 compared with the corresponding group.