

## Supplementary material

### Methods

#### Immunohistochemistry

E-Cadherin and VIM activity in tumor tissues were detected by immunohistochemistry. Briefly, sections were deparaffinized and dehydrated. Antigen retrieval was performed in citrate buffer (pH 6), using an electric pressure cooker set at 120 °C for 5 minutes. Endogenous peroxidase were blocked by immersion in 3% hydrogen peroxide for 5 minutes. The slides were covered with normal serum for 20 min, rinsed with phosphate buffered saline (PBS), and then incubated with diluted primary antibodies (anti-E-Cadherin or VIM antibody, 1:200 dilution). All the sections were examined under Nikon eclipse TE2000-U Microscope.

### Results

As shown in Figure S1, the expression of epithelial marker (E-cad) in curcumin and combination group was significantly up-regulated compared with that in the mode group. Meanwhile, combination group slightly decreased the expression of VIM among four groups.

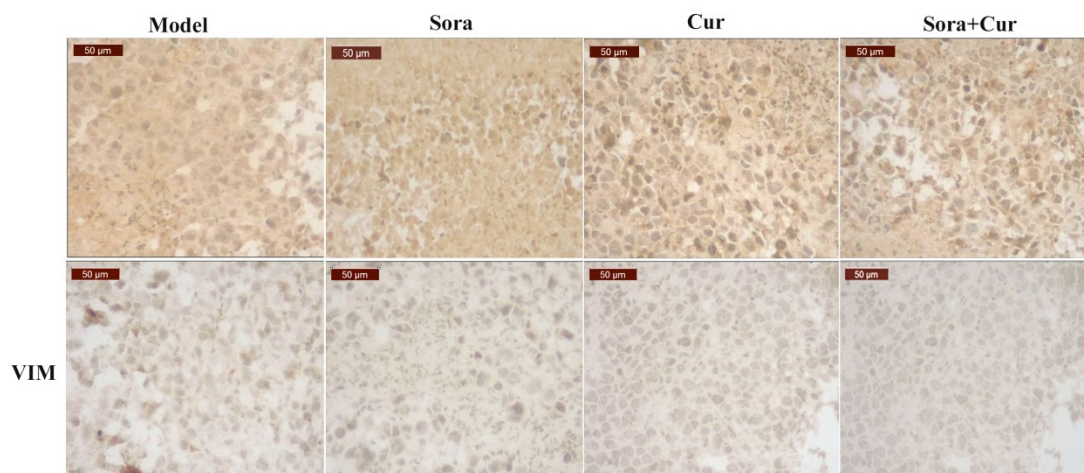


Figure S1 Immunohistochemical analyses of E-Cad and VIM in the tumor tissues.

Positive staining was observed as a dark brown color.