# Granzyme M expressed by tumor cells promotes chemoresistance and EMT *in vitro* and metastasis *in vivo* associated with STAT3 activation

## Supplementary Material

| Pathway | Count | p-Value | q-Value | Gene |
|---|---|---|---|---|
| Cytokine-cytokine receptor interaction | 18 | 2.07709E-19 | 4.00879E-17 | Kitl; Ccl25; Cxcl1; Ccr1 ;Cxcl5 ;Ccl2 ;Lif; Ccl7; Tnfrsf10b; Il1a; Egfr; Inhbb; Csf2; Cxcl16; Il11; Il6; Fas; Eda2r; |
| Jak-STAT signaling pathway | 11 | 2.95923E-12 | 1.42783E-10 | Stam2; Stat1; Lif; Socs4; Il13ra2; Pim1; Csf2; Il11; Il6; Pik3r5; Pik3r3 |
| VEGF signaling pathway | 5 | 3.77328E-06 | 3.73458E-05 | Ptgs2; Hspb1; Mapkapk3;Pik3r5;Pik3r3 |
| Cell adhesion molecules (CAMs) | 4 | 0.001571295 | 0.006034996 | Selp; Itgav; Cd80; Cldn9; |
| Regulation of actin cytoskeleton | 7 | 5.00242E-06 | 4.5732E-05 | Itgav; Msn; Enah; Egfr; Bdkrb1; Pik3r5; Pik3r3 |
| Drug metabolism - other enzymes | 4 | 2.55785E-05 | 0.000189871 | Tk1;Cyp3a13;2210023G05Rik;Ces5 |

**Figure S1. Several important pathways that are critical for cancer survival, chemoresistance, angiogenesis and inflammation.**

Supplementary Table S2. Information of patients with colon cancer.

| Variable | No. of patients (%) (n = 90) |
|---|---|
| Age(years) (mean±SD) | 63.5±12.5 |
| Gender | |
| Male | 57 (63.3) |
| Female | 33 (36.7) |
| Clinical stage | |
| Ⅰ | 17 (18.9) |
| Ⅱ | 23 (25.6) |
| Ⅲ | 35 (38.9) |
| Ⅳ | 15 (16.7) |
| Histologic type | |
| Well to moderately differentiated | 67 (74.4) |
| Poorly differentiated to undifferentiated | 23 (25.6) |
| Distant Metastasis | 15 (16.7) |
| Lymphatic Metastasis | 46 (51.1) |

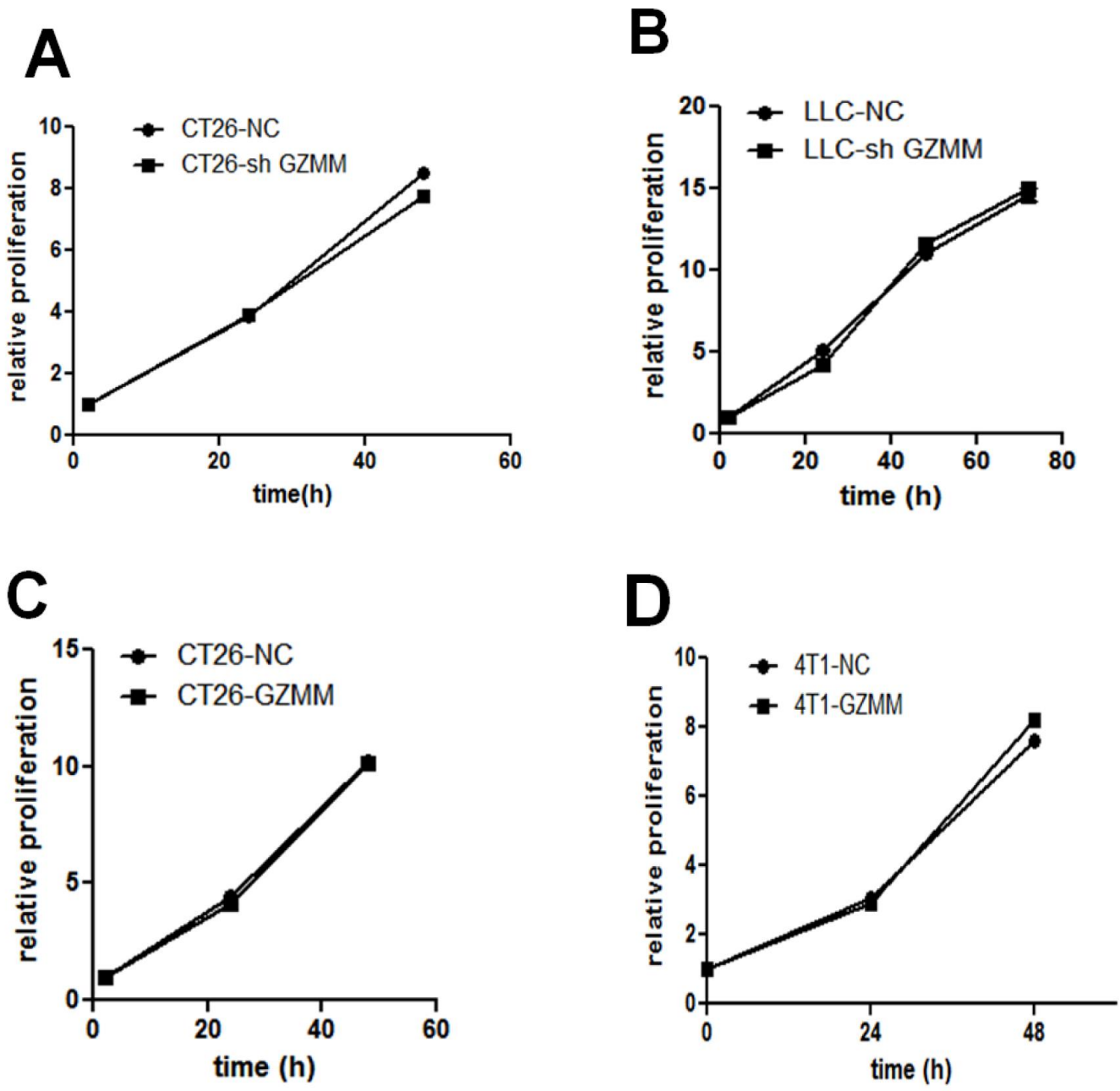


**Figure S3. GZMM had almost no significant influence on the proliferation of 4T1, LLC and CT26 cells.**