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2 Supplementary Figure 1. Amentoflavone suppressed non-canonical Hedgehog signaling in 3 TNFα-induced MDA-MB-231 human breast cancer cells. Cells (8×10^5 cells/ 6 cm dish) were 4 treated with TNFα (10 ng/mL) alone or together with amentoflavone (1, 5, 10 µM) for 12 or 5 24 h. The mRNA (**A**) and protein level (**B**) of Gli1and Smo were determined by RT-PCR and 6 western blot which normalized with Gapdh and β-Actin respectively. The lower-case letters 7 a-e indicate statistically significant differences with p < 0.05, evaluated by one-way ANOVA 8 followed by Duncan's test.

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Supplementary Figure 2. Amentoflavone may suppressed migration and invasion in $TNF\alpha$ -11 induced MDA-MB-231 via AKT/mTOR/S6K1/Gli1 axis. A, Cells (5×10^5 cells/ 6 cm dish) 12 were treated with TNF α (10 ng/mL) alone or with AKT siRNA (20 nM) for 48 h. **B**, Cells (8 × 13 10^5 cells/ 6 cm dish) were treated with TNFa (10 ng/mL) alone or with Gant61 (5 μ M) for 48 14 h. The protein levels of AKT, p-AKT (S473), p-mTOR, p-S6K1 and Gli1 were confirmed by 15 western blot and normalized with β-Actin. The lower-case letters a-c indicate statistically 16 significant differences with p < 0.05, evaluated by one-way ANOVA followed by Duncan's 17 test. 18

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