marinobufagenin (MBG), is elevated in preE prior to the development of the syndrome in rats with preE. MBG and ouabain impair cytotrophoblast (CTB) function, which is critical for placental development.

Study Design We evaluated the effect of a CTS, cinobufotalin (CINO), on CTB cell function *in vitro*.

Results CINO at ≥1 nM inhibited CTB cell proliferation, migration, and invasion ($p<0.05$) but had no effect on cell viability. There was a higher ($p<0.05$) percentage of G0/G1 phase cells in groups treated with CINO at ≥1 nM. CINO caused an increase in stress signaling p38 MAPK and a positive annexin-V staining in CTB cells, indicating the activation of apoptotic signaling. However, the CINO induced apoptotic signaling was prevented by p38 inhibition.

Conclusion This data demonstrates that CINO impairs CTB cell function via cell cycle arrest and apoptotic signaling.

Nephrology

ID: 104 CINOBUFOTALIN HINDERS CYTOTROPHOBLASTS FUNCTION VIA CELL CYCLE ARREST

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Objective Preeclampsia (preE) is a hypertensive disorder of pregnancy. Cardiotonic steroids (CTS) are endogenous inhibitors of Na^+/K^+ ATPase and at least one CTS,

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