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LncRNA DLEU2 Affects Nasopharyngeal Carcinoma Cells via the PI3K/Akt Pathway

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ABSTRACT The mechanisms in which down-regulating lncRNA deleted in lymphocytic leukemia 2 (DLEU2) expression affects the PI3K/Akt pathway as well as nasopharyngeal carcinoma (NPC) CNE2 cells were explored. CNE2 cells had notably increased DLEU2 expression compared with human nasal epithelial cells ($P<0.001$), and at 24, 48, and 72 h, si-DLEU2 group exhibited a remarkably decreased proliferation rate in comparison with Blank group plus NC group ($P<0.05$). There were evidently fewer invasive cells and *in vitro* tubes, as well as a higher apoptosis rate in NC and Blank groups than in si-DLEU2 group ($P<0.05$). In contrast to NC and Blank groups, si-DLEU2 group had markedly lowered p-p85, VEGF and p-Akt expressions ($P<0.05$). DLEU2 has high expression in NPC cells, which possibly activates the PI3K/Akt signal pathway to enhance the proliferation and invasion of cells, suppress the apoptosis and promote the angiogenesis. It is a potentially eligible therapeutic target in NPC.