RelB promotes breast cancer progression

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Video Byte

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Abstract

Breast cancer accounts for more than 6% of all cancer-related deaths worldwide; the main cause of death being metastasis to other tissues. One factor that leads to this spread is breast cancer's resistance to chemotherapy. A recent study reveals a molecular target that could curb the persistent progression of breast cancer. The protein RelB was observed to be overexpressed in human breast cancer tissue promoting cancer cell proliferation by decreasing normally programmed cell death and increasing cell mobility. Genetically switching RelB expression off dramatically reduced and even prevented breast tumor growth in mice. RelB's cancer-promoting functions are linked to its activation of the noncanonical NF- κ B signaling pathway, which helps sustain breast cancer metastasis under low-estrogen conditions. Targeting this under-examined pathway could be one way to prevent the spread of breast cancer cells and thereby boost anti-cancer therapies for millions of patients around the globe.