

A Genetically and Histologically Accurate Mouse Model of Basal Cell Carcinoma

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INNOVATION

In human basal cell carcinomas (BCC), mutations in the Hedgehog pathway (most commonly, loss of the tumor suppressor PTCH1) and NOTCH1 are commonly seen. These mice contain a mutation deleting both of these genes simultaneously in hair follicle stem cells in the skin. Importantly, formation of palpable BCCs that resemble human tumors histologically have been observed in these mice. Thus, for the first time, a "second generation," immunocompetent mouse tumor model that both mimics the genetics and morphology of human BCC has been created.

