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Title (English)

Derivation of prostate cancer using human embryonic stem cells and shRNA technology

Abstract

Prostate cancer is a disease that has increased tremendously the past years and is now the second biggest cause of cancer deaths in men. Little is known about how the cancer starts and what initiates it. The aim of this project was to develop a model system of human prostate cancer and to study what causes the initiation events of the cancer. Knocking down Retinoblastoma 1, a key prostate cancer gene, in human embryonic stem cells and recombining these cells with normal and initiated stroma forms teratomas in vivo in SCID mice. What tissues are from which cells can hold the key to how prostate cancer develops.

Keywords

Human embryonic stem cells, Mesencymal-Epithelial interaction, Prostate Cancer, Recombination, Retinoblastoma 1, shRNA, teratomas

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