

# Syndecans in the diagnosis and prognosis of prostate cancer Sindecanos: Su potencial uso diagnóstico y pronóstico en cáncer de próstata

Contreras, Héctor R.

Syndecans, a family of heparan sulphate proteoglycans that are present in the cell surface are involved in the control of cell proliferation, apoptosis and transformation. Syndecans 1 and 2 have a central role in processes such as position control, invasion, angiogenesis and metastases of several types of cancer. The expression of Syndecan 1 in epithelial cells, decreases when cells are transformed and acquire invasive properties. This decreased expression is associated to a bad prognosis. Syndecan 2, originally described in mesenchymal cells, favors cell apoptosis, increases angiogenesis and controls the death of cancer cells subjected to chemotherapy. Both syndecans are present in basal and epithelial cells of prostate cancer. Their lower expression is associated to more undifferentiated tumors. Disturbances in the expression and subcellular location of syndecans predict the relapse of localized tumors. Syndecans 1 and 2 can be considered tumor suppression genes and can be targets fo