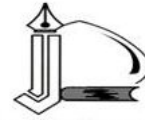




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Embryonal carcinoma cells, the archetype of cancer stem cells

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BACKGROUND: Cancer stem cells are a population of self-renewing stem cells, which are present in most, if not all, tumours. Teratocarcinomas are a type of germ cell tumours that provide a paradigm of stem cell concept of cancer.

Embryonal carcinoma (EC) cells, which are the stem cells of teratocarcinomas, have been considered as the archetype of cancer stem cells. Transplantation of a single EC cell into a new host is sufficient to produce a new tumour. Here, the properties of EC cells and the ability to differentiate them will be discussed. This property might be a useful technique in differentiation therapy of tumours.

Keywords: embryonal carcinoma cells, cancer stem cells, differentiation