Reviews

Identifying Cancer Stem Cells in Solid Tumors: Case Not Proven

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Building on studies of leukemia, a number of recent articles have reported data suggesting that cancer stem cells could be isolated from solid human cancers. Some of these reports have speculated that the isolation of these cells will allow the identification of the specific molecular properties that can be targeted for therapeutic purposes. Although previous work with animal model systems also suggests the presence of stem cells in solid tumors, there remain many uncertainties, both theoretical and technical, about the interpretation of the current results. The case that a small proportion of cells in solid tumors are specific cancer stem cells and that these cells can be successfully identified and isolated has not yet been proven. (Cancer Res 2006; 66(4): 1891-6)