Studying quiescent cancer stem cells

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Pece (2010) noticed a link between quiescence and CSCs in breast tumors. The findings from Roesch et al (2010) in melanoma also give an indication about linkages between quiescence and CSCs. The study done by Dembinski and Krauss (2009) gave profound evidence of linkages between quiescence and cancer stem cells.

Moreover, the study of quiescence CSCs is important for the reason that the quiescent cancer stem cells are found to be resistant to chemotherapy and other applied therapies (Moore 2010). It has been discovered that as soon as the therapy is discontinued, they retain their state. In this perspective, it becomes necessary to understand the mechanisms of stem cell quiescent state so that normal stem cell functionality could be manipulated. The understanding of this account helps develop the clinical approaches to quell and target cancer stem cells. As per Li (2011), the recent findings explain the resistance of cancer stem cells by their state of dormancy. Dormant cancer stem cells can be activated by altering their intrinsic or extrinsic mechanisms that tend to maintain their quiescent state so that they become susceptible to the applied chemotherapy and help discover new visions in the cancer treatment.

From above it is quite clear that the study of quiescence CSCs is likely to open new vistas in the discovery of new cancer drugs and therapies to get effective and lasting treatment for all kinds of cancers.