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Epigenomic hard drive (EHD) imprinting: A hidden code within cancer cell to survive beyond the biological death of a tumor patient

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Several genetic and epigenetic theories have been proposed to explain the intricacies of life and death. However, several questions are still remaining unsettled with reference to the death event particularly of the living tissue in case of cancer patients such as destination of cancer cells after the biological death of patients. Cancer can display the intent to communicate with the external environment after the biological death of patient. Do they carry some special information in the form of coding that helps them to survive? To explain such queries in cancer field, we hypothesize epigenomic hard drive (EHD) as a recording and storage of global epigenetic events in cancerous and non-cancerous tissue of cancer patients. This mini-review presents the novel concept of EHD reinforced with the existing knowledge of genetic and epigenetic events in cancer. In conclusion, revealing such questions will help to understand the tumor community as well as its role in pre and post death events. We propose that cancer cells being a part of human cellular community may carry some encrypted coded message in the form of EHD and could be used beyond the death decoding purpose about the individual life time any events, acts and activities. In future perspectives, state of the art tools and techniques to decipher epigenetic landscape may provide answers to above proposed concept and could pave the way of better understating of cancer, cellular death and human body death. The authors suggest that epigenetic tools based method such as assessment of DNA methylation, histone code signature, small signaling messengers as miRNA could be performed on cancerous and non-cancerous tissue during and after biological death of cancer patients. In this paper, we summarize the EHD understanding may impart huge potential and interest for basic and clinical scientists to unravel mechanisms of carcinogenesis, therapeutic markers and differential drug responses.

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