Table S1. Significances of epigenetics in carcinogenesis

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| **Study** | **Related descriptions** |
| Feinberg et al. (1983) [A01] | Substantial hypomethylation was found in genes of cancer cells compared with their normal counterparts. |
| Robertson (2001) [A02] | DNA methylation and chromatin structure are linked at the molecular level and how methylation anomalies play a direct causal role in tumorigenesis and genetic disease. |
| Jones et al. (2002) [A03] | These epigenetic changes — in particular, aberrant promoter hypermethylation that is associated with inappropriate gene silencing — affect virtually every step in tumour progression. |
| Worm et al. (2002) [A04] | While gain, loss, and mutation of genetic information have long been known to contribute to tumorigenesis, it has been increasingly recognized over the past 5 years that 'epigenetic' mechanisms may play an equally important role. |
| Verma et al. (2002) [A05] | The initiation and development of cancer involves several molecular changes, which include epigenetic alterations. |
| Feinberg et al. (2004) [A06] | Since its discovery in 1983, the epigenetics of human cancer has been in the shadows of human cancer genetics. |
| Lund et al. (2004) [A07] | An altered pattern of epigenetic modifications is central to many common human diseases, including cancer. |
| Li et al. (2005) [A08] | The significance of epigenetics in cancer development is clearly evident. |
| Esteller (2007) [A09] | An altered pattern of epigenetic modifications is central to many common human diseases, including cancer. |
| Jones et al. (2007) [A10] | Epigenetic changes can collaborate with genetic changes to cause the evolution of a cancer because they are mitotically heritable. |
| Ellis et al. (2009) [A11] | Aberrant gene expression and altered epigenomic patterns are major features of cancer. |
| Korkola et al. (2010) [A12] | Cancer is now recognized as disease in which abnormalities in the genome and epigenome accumulate as a result of exposure to endogenous and exogenous damaging agents thereby enabling cells to escape normal regulatory controls. |
| Kanwal et al. (2010) [A13] | Traditionally, cancer has been viewed as a genetic disease, and it is now becoming apparent that the onset of cancer is preceded by epigenetic abnormalities. |
| Dawson et al. (2012) [A14] | The principal tenet in oncology—that cancer is a disease initiated and driven by genetic anomalies—remains uncontested, but it is now clear that epigenetic pathways also play a significant role in oncogenesis. |
| Virani et al. (2012) [A15] | Cancer is a disease that results from the successive accumulation of genetic and epigenetic alterations. |
| Hassler et al. (2012) [A16] | During the last decade it became clear that cancer is defined by a variety of epigenetic changes, which occur in early stages of disease and parallel genetic mutations. |
| You et al. (2012) [A17] | Epigenetic and genetic alterations have long been thought of as two separate mechanisms participating in carcinogenesis. |
| Verma et al. (2014) [A18] | Cancer is both a genetic and epigenetic disease. |
| Hatzimichael et al. (2014) [A19] | Cancer cells contain multiple genetic and epigenetic changes. |
| Basse et al. (2015) [A20] | The mechanisms governing the occurrence of cancer are thought to be the consequence not only of genetic defects but also of epigenetic modifications. |
| Verma (2016) [A21] | Differences in tumor behavior arise due to genomic and epigenomic changes. |

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