Inhibiting cancer progression by inhibiting telomerase activity

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With data showing Indonesia's population being 2376 million in 2010, the prevalence of those with cancer has been expected to be 1.02 million Indonesian residents. Deaths caused by cancer are expected to continually rise worldwide, with an estimated number of deaths in 2030 equaled to 11.5 million. Tumor cells display a specific characteristic of immortality, which is made possible by their ability to avoid apoptosis or normal cell death. This abnormality is greatly influenced by many factors including the stabilization of telomerase length that is sustained by telomerase activity. It is known that if telomerase activity can be inhibited by a substance with an anti-telomerase effect, readjusting the dysregulation caused by tumor cell immortality, the progression of cancer will in turn be inhibited. Thus, this literature review is aimed to give a better understanding on the therapeutic approach by analyzing recent studies and elucidating the advances in knowledge dealing with telomerase activity in cancer cells.

Biography

Hilyatus Shalihat is a General Practitioner in Bantaeng Hospital, Indonesia. She has completed Doctorate degree from YARSI University, School of Medicine, where she received MD. She has worked as a Research Assistant in Internal Medicine Department in Jakarta, where she began her research.

Husna Nadia has completed her MD at the age of 24 years from YARSI University. She is a medical practitioner and a research assistant in Departemen of Internal Medicine, Dr. Ciptomangunkusumo National General Hospital, Jakarta. She has written several papers and presented scientific poster in international meeting.

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