Molecular tumor markers: Diagnosis and therapy

Hussein Abd Elhay Kaoud
Cairo University, Egypt

Molecular tumor markers can be produced directly by tumor or non tumor cells as a response to the presence of a tumor. Most tumor markers are tumor antigens but not all tumor antigens can be used as tumor markers. Molecular markers are diagnostic, prognostic or predictive. The article discussed the molecular tumor markers; significance of each markers and its role in diagnosis, prognosis and prediction of tumor and tests used. It is used to distinguish tumor from normal tissue or to detect the presence of a tumor on the basis of measurements in the blood or secretions. And it is currently being put new molecular markers with an increased understanding of the molecular environment of the cell tumor and other disease cells. It can produce tumor markers directly from the tumor or by non-cancer cells in response to the presence of a tumor. Most tumor markers are tumor antigens but not all tumor antigens can be used as tumor markers. Concerning drug evaluation and check effects of drug treatment on the tumor, biomarkers perhaps can determine the appropriate dose in the early stages of a new antidepressant medication for cancer clinical development. Biomarkers and prognostic expects the natural course of cancer and excellence as a result of the tumor. They also help determine who to treat, how aggressively to treat and which candidates are likely to respond to a particular drug and the dose is most effective. Theranostic, use a combination of diagnosis and therapy sessions and can be different perception. Imaging can be used to track drug delivery within the body. However, imaging can also be used to stimulate drug releasing from the outside by external influences. These external influences to be laser light, temperature or ultrasound, for example. In the forefront, smart probes represent new innovative concepts for clinical application. Nanoparticles can be used to make selective surfaces for molecular interactions target. For example the population H biomarker present in the blood will be characterized fully, pads harvesting nano-particle has a great potential to improve the detection of the disease at an early stage and more treatable.

Biography

Hussein Abd Elhay Kaoud is a full Professor at Cairo University, Egypt. He has published more than 190 articles and scientific books and patents. He is a Member of several Egyptian and international societies. He is the Editor and Reviewer of many international journals and received many awards.

Notes: