Good example of essay on second generation drug

Health & Medicine, Cancer



A second-generation drug is a drug that is designed to target a patient's molecules that have defects. These defects may include cancerous cells in the body of a patient. Cancer growth in the human body is the unregulated or uncontrolled growth of cells with metastasis and usually this growth spreads to the other organs and tissues of the body. The second-generation drug targets the cells that are continuously reproducing and thus prevent the cells from continuously reproducing uncontrollably.

The clinical candidate tipifarnib is a second-generation drug that targets the causative agent of the chagas disease. - Protozoan parasite, Trypanosoma cruzi (T. cruzi). The new developed strands of the tipifarnib analogs are vital in the development of the drug that targets the DNA in the human cells and stop the cancer from spreading. The cancer cells have a decreased capability of a gap that affects the intercellular communication. This drug, after several tests show that it has an anti-tumor effect, which eventually shows a 100% regression in the growth of the T47D tumor cells. This second-generation drug mainly targets the DNA that is present in protein molecules that make up the cell.

According to Stephen (21), it is imperative to note that though this drug is promising in the manner that it targets and prevents the cancer, the drug has severe side effects. From the description of how this drug works, it is evident that the drug targets the molecules that have defects. This is not normally the case and immune system impairment, the loss of hair follicles, and the blood cell that reproduce faster in the body may be targeted by this drug.

Works cited

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