

Cancer and their therapeutics.

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Cancer is still the leading cause of death by disease. Based on the GLOBOCAN series of the International Agency for Research on Cancer, the cancer-related deaths can reach 8 million in a single year. In year 2012, over 14 million new cases were reported.

Thanks to the advanced technology, we can develop better treatments for the cancers. Nowadays, we have better understanding on the status of the tumor cells and the tumor microenvironment. The findings on the interactions between the cancer cells and the surrounding cells of the immune system can help to reveal novel cancer immunotherapy strategies. The findings on the interactions between cancer cells and the surrounding adipocytes may also help to reduce the incidence and prevent the development of the obesity-associated cancers. Furthermore, novel discoveries on the cancer metabolism can help to develop strategies to reduce cancer growth by limiting the energy supply. Development in the stem cell study can support the current immunotherapy and chemotherapy. The discovery of microRNAs also contributes to the development of the cancer therapeutics.

By suppressing the target messenger RNAs, microRNAs can control many cellular pathways in the cancer cells and hence the cancer growth, metastasis and invasion. MicroRNAs therapeutics should also hold a great promise in the medical oncology and therapeutics. More importantly, microRNAs have been found to be closely associated with many cancer types, that microRNAs may be used as biomarkers in cancers in the near future. After all, effectiveness of all these therapies is directly affected by the developed intrinsic resistance and/or the acquired resistance. Overcoming these resistances to the therapies is definitely another important issue in the medical oncology and therapeutics.

We, at *Medical Oncology and Therapeutics*, are providing a platform for the world-wide audience to relate and translate these scientific discoveries to experimental research and clinical therapeutics that eventually brings advancement to the healthcare for the mankind.

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