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**Unmasking the masquerading cancer cells: Have we made progress with the revival of immunotherapy?**

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The tumor microenvironment is a principal feature of cancer biology that supports the initiation and progression of the tumor and response to therapy. Cells and molecules of the immune system are the essential elements of the tumor microenvironment. Therapeutic stratagems can harness the immune system to precisely target tumor cells by possibly stimulating tumor-specific immunological memory, which may lead to long term regression. Understanding the complexity of immunomodulation by tumors is important for the expansion and promotion of immunotherapy. Several approaches are being carried out to augment the anti-tumor immune responses. Among them are immunotherapeutic vaccines, adoptive cell transfer therapies and checkpoint blocking drugs. However, cancer cells try to evade the immune watchdogs by reducing surface tumor antigen or inducing cells that express certain proteins that affect immune cell inactivation or by promoting tumor proliferation and survival. Gaining a deeper understanding of the tumor immunogenicity by employing advanced techniques such as sequencing of the tumor DNA, will help to better address the challenges and gain an appreciation of the delicate association between cancer and our immune systems.

**Biography**

Ganapathi Bhat Mugulthimoole is a Senior Consultant Medical Oncologist & Stem Cell Transplant Physician at Jaslok Hospital & Research Centre. He has completed his graduation in Medicine in 1993 and Post graduation in General Medicine in 2000. He has further trained in the field of oncology in various institutions in India and later gained expertise in stem cell transplant while working in Kuwait Cancer Control Centre (2002-2006). He has gained specialized training in stem cell transplantation as part of the ESH-EBMT (2007), 2011 (Labaule, France) and ICAS training program (2009) from Ulm University, Germany. He has numerous academic articles published in Indian, international journals and textbooks to his credit.

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