

HOW IMMUNOTHERAPEUTICS WORK

The way in which different immunotherapeutics unleash a patient's immune system to fight cancer varies:

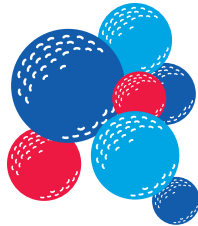
Some release the brakes on the natural cancer-fighting power of the immune system, for example, cemiplimab-rwlc (Libtayo), nivolumab (Opdivo), and pembrolizumab (Keytruda) (see **Releasing the Brakes on the Immune System**, p. 85).



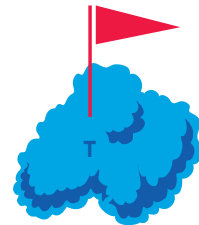
Some enhance the cancer-killing power of the immune system by triggering cancer-fighting T cells; these are called therapeutic cancer vaccines, for example, sipuleucel-T (Provenge).



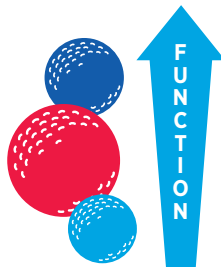
Some amplify the killing power of the immune system by providing more cancer-targeted immune cells called T cells, for example axicabtagene ciloleucel (Yescarta) and tisagenlecleucel (Kymriah).



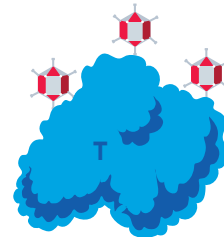
Some flag cancer cells for destruction by the immune system, for example mogamulizumab-kpkc (Poteligeo) (see **Directing the Immune System to Cancer Cells**, p. 91).



Some increase the killing power of the immune system by enhancing T-cell function, for example, interleukin-2 (Aldesleukin).



Some comprise a virus that preferentially infects and kills cancer cells, releasing molecules that trigger cancer-fighting T cells; these are called oncolytic virotherapeutics, for example, talimogene laherparepvec (T-Vec; Imlygic).



Adapted from (1)