NORMAL IMMUNE RESPONSE ➤ Certain immune cells, called antigen-presenting cells (APCs), will take “foreign” antigens, such as virus proteins or abnormal proteins made by cancer cells, and further process them via the major histocompatibility complex (MHC)-presenting molecule so they activate T cells. T cells, another immune cell type, have the ability to kill cells bearing foreign antigens.
IMMUNE RESPONSE DAMPENED > Once a T cell is activated, it triggers CTLA-4 proteins, which interact with the APC by binding to B7 proteins. When these proteins bind together, they send a “shut-off” signal to dampen the immune response, allowing cells to proliferate.

DAMPENING INTERRUPTED > By binding to the CTLA-4 protein, a CTLA-4 inhibitor interrupts the “shut-off” signal, enabling the immune system to attack the tumor cells.