A simplified explanation
Of Cancer and Immunotherapy

This simplified explanation using a parable is based on general facts and the exact scientific extrapolation may not be correct. This has been made using simple terms and examples to make the common person understand the outline of the disease process and its treatments which otherwise use technical terms. The exact nature of ones disease and the outcome or the treatment needed, may vary significantly between individuals. Patients are therefore asked to consult their physician for further understanding of the relevance of this general explanation to the appropriate technical information or pertaining to their disease condition.
The legend

A House = Human body
The legend

Thief = Cancer
The legend

Bomb = Metastasis
The legend

House with Thief inside = Human body with Cancer
The legend

Thief inside House, bombs planted = Human body with Cancer+ metastasis
Surgical treatment for Cancer

The thief is located using Radar (Diagnostic eqpt) and if his position (Location) is clear, then He is removed by physical removal for which some entry into the house is necessary. This may only the thief (tumour) if his removal will not affect surrounding structures of house significantly.

Surgical approach is possible Where the tumor is located to One region without spread. Diagnosis like CT, MRI, PET Scan are used to locate the Extent of the disease and the tumour is removed. The scar will take time to heal and post-operative care is necessary.
Chemotherapy for Cancer

When bombing is not possible or when several thieves are there or when thieves are susceptible to some odour or poison then Poisonous gas is sent through chimney. Which will not only kill the thief(ves) but also the guard dogs within the house, the pet animals caught within and until the effect of poison is removed inhabitants cannot enter in.

Chemotherapy not only destroys the cancer cells, but also the normal cells depending upon the dosage and type of Cancer treated. Chemotherapy also brings down the peripheral blood count in which the immune cells are also affected. Therefore when chemo effect is there immunotherapy has to be planned appropriately.
Radiotherapy for Cancer

Laser guns also could be used to target the thief(ves) when locations are clearly known. But again some damage to surrounding structures could be there especially the entry point.

Radiotherapy is given for specific tumours which are amenable to radiotherapy depending on the type of organ/tissue. There could be some minor to major scarring of skin and surrounding tissues depending upon the dosage and tissue, tumour location.
Immunotherapy involves NK cells, DCs, CTLs which have been overpowered by the Cancer either due to the lower immunity or momentum of cancer development mechanism. Those Immune cells are taken out from blood, multiplied in the lab and given intravenously to fight the thieves.

Immunotherapy brings out the Guard dogs (Immune cells) which have been restrained by the thief. The guard dogs are released from restraints, rejuvenated, bred, and multiplied and then sent into the house.
Immunotherapy for Cancer-II

The immune cells not only destroy the cancer cells but also are capable of destroying the cancer stem cells which can form the metastasis, which gives an added advantage. Moreover being the guard dogs of the same house, they know which is the thief to destroy and accomplish the same while leaving the belongings of the house undamaged which is why this is considered the least toxic therapy.
Which is the BEST therapy then?

Cancer has to be treated using a **multipronged approach of**

1. Removing the tumour by surgery if feasible, or at least removing it partially
2. Give chemotherapy when specific targeted drugs are available; especially when surgery not feasible
3. Give radiotherapy if the tumour is sensitive to radiation

**4. AND...COMBINE IMMUNOTHERAPY**

As it has been proven that the survival rate improves when immunotherapy is combined with other therapies by 25% to 35%
Multipronged approach for Cancer

IMMUNOTHERAPY IS THE LEAST TOXIC OF ALL
And can always be added to the other treatments and the entire planning of the schedules of Chemo/Surgery/Radio/AIET has to be worked as a team among the treating oncologists.

Each therapy has its limitation and advantages depending upon the type, location and stage of Cancer. Therefore the best of every treatment has to be combined to get the best results.