Exploring the potential of next generation immuno-oncology therapies for cancer

Until recently, standard treatments for cancer included:

surgery

radiotherapy

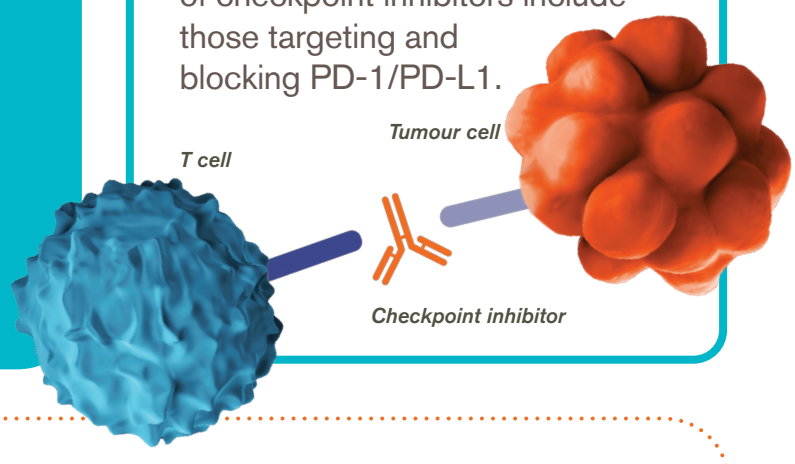
chemotherapy

targeted therapy

However, immuno-oncology (IO) has emerged as a novel treatment approach by harnessing the body's own immune system to fight cancer. While IO therapies have transformed cancer care, unfortunately, not all patients benefit. One of the most widely used types of IO therapies, **checkpoint inhibitors, have only demonstrated response rates of 15 to 30% across most solid tumours.**[i]

What are checkpoint inhibitors?

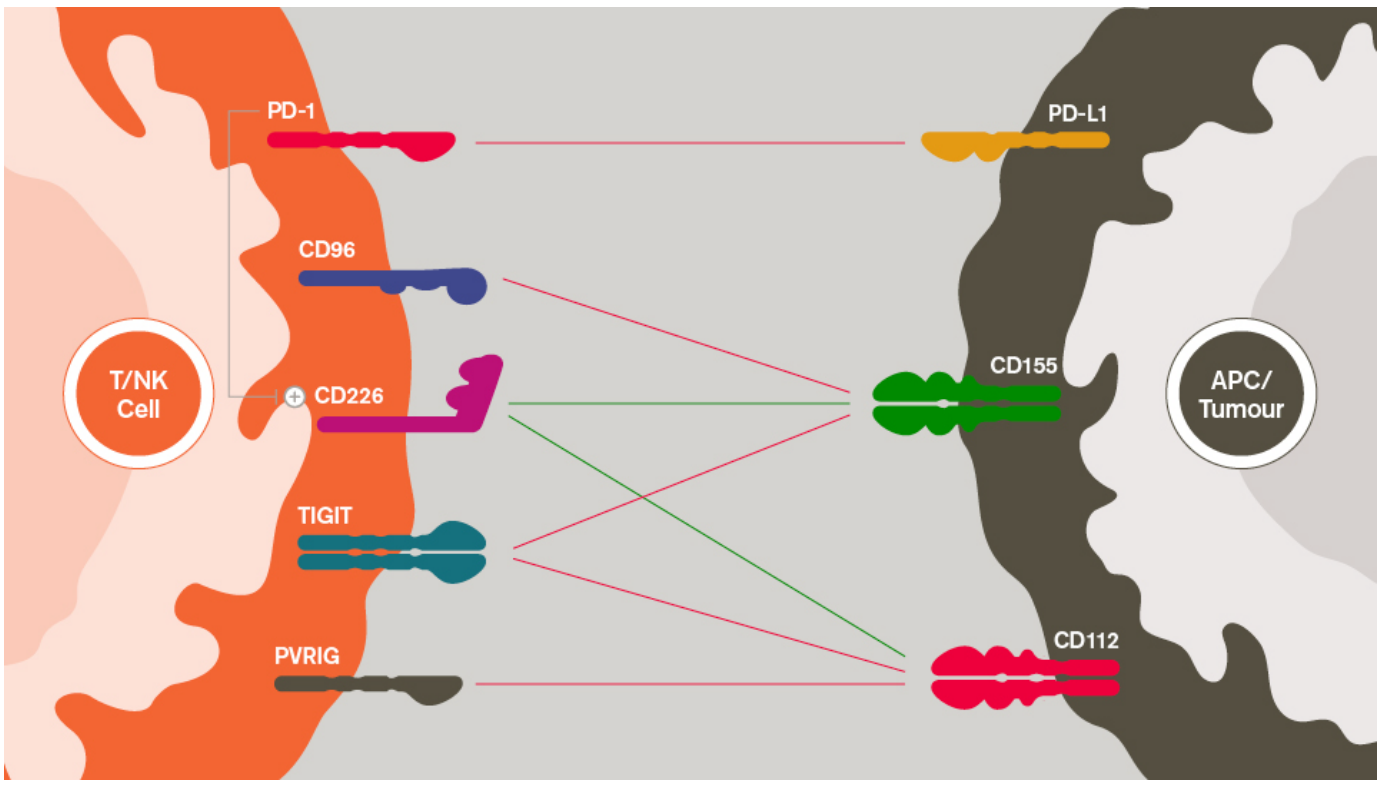
T cells are an important part of our immune system and produce proteins called checkpoints which help keep the immune system in "check" by not acting too aggressively. However, the checkpoints can also prevent T cells from recognising and killing cancer cells. When these checkpoints are blocked with certain medications, called checkpoint inhibitors, T cells function better and can attack cancer cells. The leading type of checkpoint inhibitors include those targeting and blocking PD-1/PD-L1.



Targeting the CD226 axis

CD226 is a molecule expressed on the surface of T cells and natural killer (NK) cells, which binds to CD155 and CD112 on tumour cells, stimulating an immune response. However, the immune checkpoints TIGIT, CD96 and PVRIG may prevent CD226 from interacting with CD155 and CD112, which may result in a reduced immune response and the development or progression of cancer.

Blocking the CD96, PVRIG and TIGIT checkpoints may enable T and NK cells to better target tumour cells.



We are uniquely positioned to explore innovative combinations with our CD226 axis checkpoint inhibitors – key targets for next-generation immuno-oncology therapies

We are exploring potential therapeutic approaches to better understand how and when these assets may be used to improve outcomes for patients with cancer.

References

i. Das S, Johnson DB. Immune-related adverse events and anti-tumor efficacy of immune checkpoint inhibitors. *Journal for ImmunoTherapy of Cancer*. 2019;7:306. doi: 10.1186/s40425-019-0805-8.

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