

IMMUNOTHERAPY

NATURAL KILLER CELLS

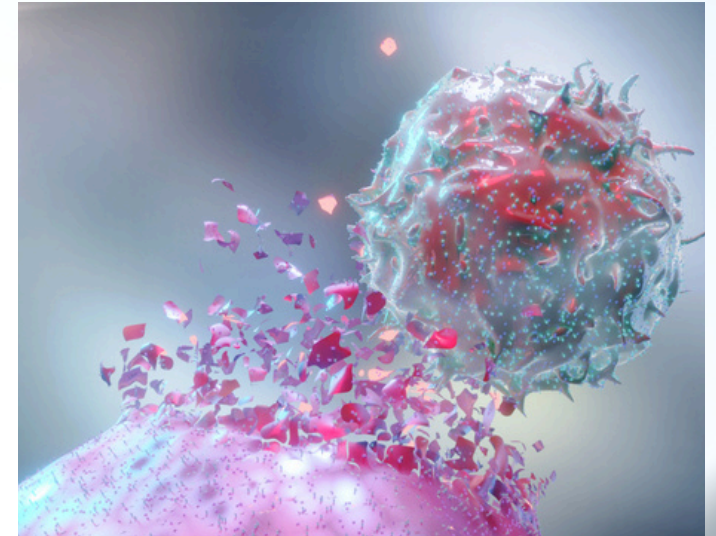


WHAT ARE NK CELL?

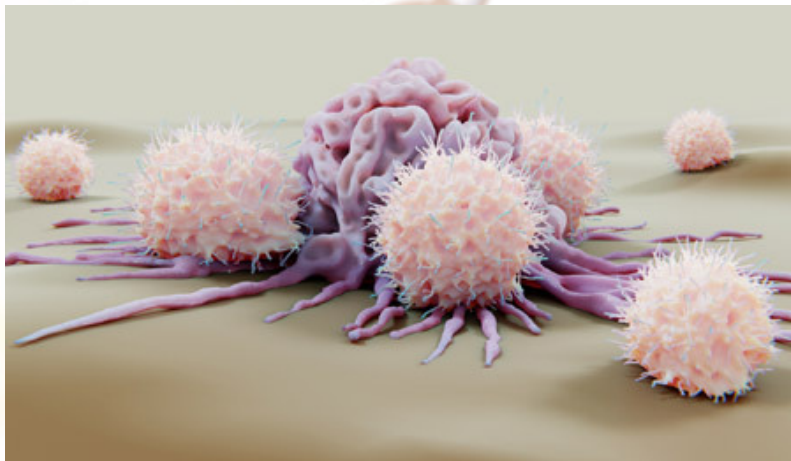
NK Cells are a type of white blood cells. They are the first line of defence in our body to combat infections and cancer.

In NK therapy cells, patient own NK cells will be purified from the patient blood and it will be multiplied by cultured and stimulated for 3 weeks in the presence of cytokines.

Then the expanded NK cells are infused back into the patient. The infused NK cells can target and destroy cancer cells. It also can be used to improve the immune system in the elderly patients.



Cancer cells often lack MHC class I molecule on their surface. The reduced MFC class I expression provides a signals for NK Cells activation, and kills the cancer cells.



MECHANISM OF NATURAL KILLER CELL THERAPY

Healthy cells display peptide from their own proteins on their surface through MHC class I molecules, they use inhibitory receptors such as KIRs and CD94/NKG2A to recognize and bind to them. This interactions sends inhibitory signals to the NK Cells, which prevents it from attacking the healthy cell.

PROCESS OF THE TREATMENT

A patient may be required to undergo 3 to 6 doses depends on the response and clinical condition.

➤ 1st Appointment

Week 1: 10ml patients blood will be taken for the following test

➤ 2nd Appointment

Week 2: 60-100ml blood sample will be taken from the patient for NK culture at the cGMP facility.

➤ 3rd Appointment

Week 4: Infusion of NK Cells

ADVANTAGES OF NK CELL

- Safe adjunct treatment for cancer
- Autologous
- No graft versus host disease
- No Cytokines Release Syndrome (CRS)
- No immune effector cell associated neurotoxicity syndrome
- Improved quality of life