

Dostarlimab

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In news— Recently, a study has found that a drug named Dostarlimab has helped **treat rectal cancer without chemotherapy or surgery.**

Key findings of the study-

- The clinical trial comprised a group of 18 patients, all **of them were battling rectal cancer at the Memorial Sloan Kettering Cancer Center in Manhattan, US.**
- In all patients, **rectal cancer was locally advanced**, which means the tumours had spread within the rectum and in some cases, to the lymph nodes, but not to other organs.
- **The trial used a monoclonal antibody called dostarlimab** every three weeks for six months for the treatment of a particular kind of stage two or three rectal cancer.
- **Dostarlimab works by “unmasking” cancer cells**, which in turn helps the immune system identify and destroy them.
- This has been described as a **“first time in history” kind of result in cancer treatment with the disease simply vanishing in patients** after the experimental treatment.
- The trial showed that **immunotherapy alone – without any chemotherapy, radiotherapy, or surgery could completely cure the patients** with a particular kind of **rectal cancer called ‘mismatch repair deficient’ cancer”.**
- **‘Mismatch repair deficient’ cancer is most common among colorectal, gastrointestinal, and endometrial cancers.**
- Patients suffering from this condition lack the genes to correct typos in the DNA that occur naturally while cells make copies.
- The immunotherapy belongs to a category called **PD1 blockades** that are now recommended for the treatment of such cancers rather than chemotherapy or radiotherapy.
- PD1 is a type of protein that regulates certain

functions of the immune system, including by suppressing T cell activity, and PD1 blockade therapy looks to release the T cells from this suppression.

- **The study was sponsored by the drug company GlaxoSmithKline of the US.**