

Miracle Cancer Drug: Dostarlimab

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“A cure for cancer?”

“An evolutionary drug that can save multiple lives”

“A magic drug”

A non-chemotherapy drug that vanished rectal cancer...

The results have raised hope for patients suffering from this disease as dostarlimab is possibly a potent drug for treating one of the most lethal cancers.

Everyone is talking about it, and here is everything you need to know about Dostarlimab and the study.

1. If not chemotherapy, then what?

It is an immunotherapeutic drug. In the last few years, immunotherapy for cancer has become an important part of medical treatment for various types of carcinoma. Immunotherapy is a treatment that acts by stimulating the patient's immune system to work harder to attack cancer cells.

2. Where did the trial take place?

The study took place at Memorial Sloan Kettering Cancer Center, New York and

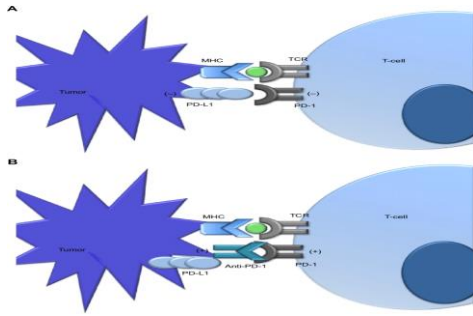
was against rectal cancer. The results were presented at the annual meeting of the American Society of Clinical Oncology in early June 2022.

3. What is Dostarlimab?

It is an immune checkpoint inhibitor. Cancer cells modify these checkpoints to avoid being attacked by the immune system and this drug prevents that from happening.

4. How does Dostarlimab act?

Dostarlimab is a programmed death receptor-1 (PD-1)-blocking monoclonal antibody. It inhibits the signaling pathways of the PD-1 receptors. As the signaling pathways become unable to produce further signals to inhibit the antibody production, T-cells activation or T-cell mediated immune response against tumor cells initiates, resulting in the eradication of tumor cells in the host body.



5. What were the patient selection criteria?

The study was a phase 2 clinical trial which enrolled 12 patients who had locally advanced rectal cancer (stage II or III) were selected. They had a defect in mismatch repair. At the trial, patients were given Dostarlimab IV every 3 weeks for six months.

6. What was the result of this clinical trial?

A complete clinical response was seen in 100% of the patients. No evidence of tumor on magnetic resonance imaging, positron-emission tomography, endoscopic evaluation, digital rectal examination, or biopsy. None of the patients required chemotherapy, radiation therapy or surgery.

7. What is the standard of care for rectal cancer?

The current standard of care in most rectal cancers is radiation with chemotherapy followed by surgery and completion of chemotherapy.

8. Is the drug currently approved by FDA and can it be used on all patients?

Yes, the drug can be used on patients. However, only rectal cancer patients who are positive for mismatch repair defect are eligible for this drug. This genetic variation can only be seen in about 5% of colorectal cancer patients; hence, majority of rectal cancer patients would not be able to receive this drug.

9. What is the cost of this drug?

About ₹ 8 Lakhs per dose. Hence, nine doses would cost around ₹ 77Lakh.

10. Are there any contraindications to checkpoint inhibitors?

- a. Patients who have autoimmune disease such as multiple sclerosis, rheumatoid arthritis, systemic lupus erythematosus can worsen with the use of this drug.
- b. Patients who have previously had a severe or life-threatening side effect to the immune inhibitor.

Dr Luis A. Diaz J., head of the Division of Solid Tumor Oncology in Memorial Sloan Kettering's Department of Medicine, said, 'I believe this is the first time this has happened in the history of cancer.'

Even with the promising result, further research on a large group of patients is required to assess the response duration. Only then, can it be called the ultimate 'cancer cure.'