

PD-L1 Fact Sheet

If your biomarker test shows a high percentage of PD-L1 in your nonsmall cell lung cancer (NSCLC), what does that mean? This fact sheet explains the diagnosis and how it might affect your treatment.



WHAT IS PD-L1?

PD-L1, which stands for programmed cell death ligand 1, is a protein that plays a role in the immune system. At normal levels, it prevents the immune system from attacking healthy cells, the cause of autoimmune disease. But when PD-L1 fuses to a PD1 receptor, it can also prevent the body from killing cancer cells. There are several immunotherapy treatments that can prevent these proteins from binding, so that the immune system can resume fighting cancer.



WHAT DO THE RESULTS OF A PD-L1 TEST MEAN?

Your PD-L1 results show a percentage — known as PD-L1 expression — that indicates the level of PD-L1 in your tumors. The higher this percentage, the more likely you are to respond to PD-L1 immunotherapy.



HOW DO DOCTORS TREAT PD-L1+ LUNG CANCERS?

If you have a high level of PD-L1 expression, the doctor may choose a type of immunotherapy called a checkpoint inhibitor. Here's how it works. The fusion of PD1 and PD-L1 effectively turns off the "switch" that tells the immune system to fight cancer. A checkpoint inhibitor blocks the proteins from fusing and the switch turns back on, so that your body is again able to destroy cancer cells.

The checkpoint inhibitors listed below have been approved for PD-L1 NSCLC by the U.S. Food and Drug Administration. All are given intravenously and may be used in advanced cases of PD-L1 NSCLC and advanced small cell lung cancer. These drugs are sometimes used in combination with other treatments. Other drugs may be available in clinical trials. If the one you're taking isn't working, ask your doctor if you can try another.

- Atezolizumab (Tecentriq)
- Cemiplimab (Libtayo)
- Durvalumab (Imfinzi)
- Ipilimumab (Yervoy)*
- Nivolumab (Opdivo)
- Pembrolizumab (Keytruda)

* Used in combination with nivolumab (Opdivo)

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The following are common side effects of these drugs. Most are manageable with early treatment. In rare cases, however, they may lead to more serious conditions — so be sure to report any side effects and changes to your doctor immediately.

- Constipation
- Cough
- Diarrhea
- Fatigue
- Flu-like symptoms (chills, fever, headache, nausea)
- Loss of appetite
- Low blood pressure
- Pain or soreness
- Rashes, redness or itching

Rare, but serious, side effects may include:

- Hepatitis
- Colitis
- Swelling in the lungs (shortness of breath)
- Severe infections
- Severe skin problems
- Problems in the kidneys, hormone glands, liver or other organs



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