



# Immunotherapy in Kidney Cancer

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This leaflet contains general information about immunotherapy as a treatment option for metastatic kidney cancer. If you have any specific questions about your individual medical situation you should consult your doctor or other professional healthcare provider. No leaflet can replace a personal conversation with your doctor.

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# Immunotherapy in Kidney Cancer

Immunotherapy is a treatment option in metastatic kidney cancer. These therapies are used in specific cases only. If your general condition is good and if you have few metastases in the lungs, your doctor may recommend this treatment.

## What is immunotherapy?

Immunotherapy is a type of treatment that uses your own immune system to fight the tumour cells.

Discuss with your doctor the advantages and disadvantages of immunotherapy and if it is right for you.

Two different types of immunotherapy are used to treat metastatic kidney cancer:

- Interferon-alpha (INF- $\alpha$ )
- Interleukin-2 (IL-2)

Your doctor may recommend Interferon-alpha therapy if your tumour subtype is clear cell renal cell carcinoma, and the tumour has spread to the lungs only. Interferon is usually combined with the antiangiogenic drug bevacizumab. It is applied under the skin. Your doctor will discuss the treatment schedule with you. If your doctor recommends interleukin-2, you will need to stay in the hospital during the treatment because of the side effects.

## What are the side effects of immunotherapy?

Immunotherapy can cause mild, moderate and even severe side effects. The most common include fatigue and flu-like symptoms, such as fever and chills, headaches, and pain in the muscles and joints.

Nearly everyone undergoing immunotherapy has these side effects at first. It usually gets better as your course of treatment continues. These symptoms appear 2 to 4 hours after your injection and last for about 12 hours. Paracetamol can help to relieve these symptoms.

Immunotherapy can also cause a temporary drop in the number of red or white blood cells, or blood platelets. A drop in white blood cells can increase the risk of infection. Lower levels of red blood cells can lead to tiredness and feeling out of breath. You could need a blood transfusion if the

levels become too low. A drop in blood platelets can cause nosebleeds, bleeding gums after brushing your teeth, or lots of tiny red spots or bruises on your arms and legs, known as petechia. Itchy, dry skin, or rashes could also occur.

You should contact your health care team if you have any of these side effects. Your doctor will check your blood counts regularly.

Other symptoms include nausea and vomiting, diarrhoea, loss of appetite, and changes in taste or a metallic taste in your mouth. You could also experience a sore throat and pain when swallowing. Because these symptoms may lead to dehydration, weight loss, or malnutrition, be sure to let your doctor or nurse know if they do not go away.

During the course of treatment you may feel depressed, anxious, or have trouble sleeping. These feelings can be a side effect of immunotherapy, but they may also be a response to your diagnosis. You can ask your medical team about psychological support if you feel you need to have someone to talk to.

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