Immunotherapy

MESOTHELIOMA UK
Supporting People With This Asbestos Cancer
Introduction

Immunotherapy is now a standard treatment for some cancers such as melanoma and lung cancer. Early studies indicate it is also a useful treatment for mesothelioma. Before it can become a standard treatment further evidence from clinical trials is necessary. There are various clinical trials open in the UK that include immunotherapy.

Immunotherapy is a form of treatment that helps the immune system to fight disease including cancer. The immune system is made up of white blood cells, tissues and organs (glands also known as the lymphatic system). Cancer cells have various properties that allow them to hide from the immune system.

Immunotherapy treatments work in different ways. Some “mark” the cancer cells making it possible for the immune system to find and destroy them.

Other forms of immunotherapy work to boost the immune system to work more effectively against cancer.

What are the benefits of immunotherapy?

Benefits of immunotherapy include:

• Using the natural processes of the immune system to fight cancer internally

• A targeted approach that only targets cancer cells in comparison to chemotherapy which damages both healthy and cancerous cells

• Side effects are few, and more manageable compared to other anti-cancer therapies

How is immunotherapy given?

The immunotherapy for mesothelioma is given directly into a vein (intravenously). How often and how long you receive immunotherapy depends upon:

• The immunotherapy drug you are given

• How your body reacts to the treatment

• Whether the immunotherapy is working effectively
How will I know if the immunotherapy is working?

Before each treatment you will have a blood test and a doctor or nurse will assess your health before you continue with the next treatment.

You will also have regular CT scans to monitor how your mesothelioma is responding to the treatment.

What are the possible side effects?

Immunotherapy sometimes results in the immune system attacking healthy cells, which can cause side effects.

The most common side effects are:

- Changes in your breathing - cough, fever, shortness of breath, low oxygen levels
- Diarrhoea - blood or mucus in your stools, increase in the number of stools, abdominal pain
- Rash, itching, red skin
- Feeling tired and weak (fatigue)
- Muscle or joint aches
- Loss of appetite
- Nausea and vomiting
- Changes in thyroid function
- Changes to the liver – possible right upper abdominal pain
- Inflammation of the pituitary gland – known as hypophysitis
- Diabetes
- Pain, redness or swelling at site of needle insertion (to deliver immunotherapy)

Side effects of immunotherapy can be mild, moderate, or even life-threatening. Depending on how severe your side effects are, your doctor may pause your treatment or prescribe a type of medication called corticosteroids. If side effects worsen or do not improve, you will probably have a longer break in treatment or even need to stop immunotherapy.
It is extremely important that you discuss with your oncology team any:

- changes with your breathing or cough
- frequent diarrhoea with any signs of blood or mucus,
- abdominal pain
- any new skin rashes

Immunotherapy can also cause changes to glands that control and release hormones.

This includes:

- your thyroid gland, which is a butterfly-shaped organ located in the base of your neck. It releases hormones that control your metabolism (the way your body uses energy).
- Your adrenal glands, which are located above your kidneys and are responsible for releasing a variety of hormones. Adrenal gland disorders can occur when the adrenal glands produce incorrect quantities of these hormones.

Both your thyroid and adrenal function are monitored through regular blood tests. Symptoms that your thyroid or adrenal glands may not be functioning as they should include tiredness, muscle and or joint aching, dizziness.

Patients receiving immunotherapy will be given a 24 hour telephone number to call for advice and support if they feel unwell or are concerned.

If you would like to know more about the role of immunotherapy in mesothelioma or about clinical trial opportunities please discuss with the oncology team looking after you or contact Mesothelioma UK.