



## What is chemotherapy?

Chemotherapy simply means treatment with chemicals. Those used to treat cancer are called cytotoxic drugs because they poison cells in your body. Chemotherapy drugs are carried by the bloodstream throughout your body. The drugs affect both normal healthy cells and cancerous ones. However, healthy cells are able to repair themselves, unlike cancer cells which die. The growth of cancer cells is not well controlled, so they increase continually (although not always faster than normal). Chemotherapy treatment can interrupt and reverse this process.

Most types of chemotherapy for lung cancer are given directly into a vein through a drip (intravenously). However, there are some types of chemotherapy which are given as a tablet.

Chemotherapy may be used on its own or as part of a combined treatment. It may be given after surgery – this is called adjuvant. It can also be given at the same time as radiotherapy – this is called concurrent.

There are lots of different drugs available to treat lung cancer. They can be given either on their own (single agent) or in a combination. After discussing the treatment options with you, your cancer doctor will decide which chemotherapy drugs are most suitable for you.

## Why am I getting chemotherapy?

There are several reasons why you may be receiving chemotherapy as a treatment for lung cancer. These include:

- Cure early stage inoperable lung cancer in combination with radiotherapy (chemoradiotherapy).
- Extend length of life when a cure is not possible (palliative).
- Remove any cancer cells which may still exist after surgery for lung cancer (adjuvant).
- Reduce symptoms, such as breathlessness (palliative).



### **Chemotherapy for small cell lung cancer**

If you have small cell lung cancer (SCLC), chemotherapy is usually the first type of treatment you receive. SCLC cells can often grow and spread quickly (metastasise). Chemotherapy travels in the bloodstream, and throughout most of your body. This usually leads to relief of symptoms and longer survival. Radiotherapy may be given after chemotherapy to try to stop the cancer coming back.

There are a variety of different types of chemotherapy drugs. The most common combination of chemotherapy drugs for people with SCLC contains platinum (cisplatin or carboplatin) and etoposide. Other drug combinations that may be used as further treatment after initial chemotherapy, include: cyclophosphamide, doxorubicin, vincristine and topotecan.

### **Chemotherapy for non-small cell lung cancer**

Chemotherapy can also be used to treat non-small cell lung cancer (NSCLC). If lung cancer surgery is not suitable for you, you may be offered either chemotherapy on its own or in combination with radiotherapy (if you are fit enough).

If you have had surgery for lung cancer and all of the cancer cells have been removed, you may be offered chemotherapy afterwards. However, if you have had surgery and cancer cells remain, your cancer doctor will discuss whether you should have radiotherapy and/or chemotherapy.

There are a variety of different types of chemotherapy drugs used to treat NSCLC. The most commonly used chemotherapy for people with NSCLC contains platinum (cisplatin or carboplatin) mixed with one of the following drugs: docetaxel, gemcitabine, paclitaxel, pemetrexed and vinorelbine. Your cancer doctor may use a variety of drugs to treat your lung cancer either as a first treatment after diagnosis or if it comes back (relapse).

\* Note that pemetrexed and gemcitabine are only licensed in combination with cisplatin in NSCLC.



## Maintenance chemotherapy

If your lung cancer gets smaller after your first course of chemotherapy and you are coping well with few side-effects, your cancer doctor may offer to continue your treatment with more chemotherapy. This is called maintenance therapy. Maintenance therapy is only suitable for some people with certain types of lung cancer.

It may help to continue to slow down the growth of your lung cancer and keep the symptoms of your disease under control for longer.

## GIVING HELP AND HOPE

The charity has two aims:

**Supporting people living with lung cancer** - Working closely with lung cancer nurses, we provide information, run lung cancer support groups and offer telephone and online support. Our patient grants offer some financial help to people affected by lung cancer.

**Saving lives** - We fund lung cancer research, campaign for better treatment and care for people who have lung cancer, and raise awareness of the importance of early diagnosis. Our lung cancer prevention work helps people to quit smoking and encourages young people not to start smoking.

**Call us on 0333 323 7200 (option 2)**

This information has been taken from the following sources:  
Lung cancer—answering your questions: Chemotherapy for lung cancer 2014