

# CHEMOSATURATION THERAPY

A PATIENT'S GUIDE  
TO TREATMENT



This booklet should only be provided to patients who have been selected for chemosaturation therapy.



# WHAT IS CHEMOSATURATION THERAPY?

LIFE WITH LIVER CANCER  
**AGAINST  
THE  
ODDS**



## WHAT IS CHEMOSATURATION THERAPY?

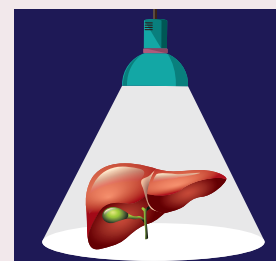
Chemosaturation therapy is a method of treating cancers in the liver.

It is a procedure carried out under general anaesthetic. The concept of chemosaturation therapy is to temporarily isolate the liver from the body's blood circulation and deliver a concentrated dose of an anti-cancer drug directly to the liver, "saturating" the entire organ.

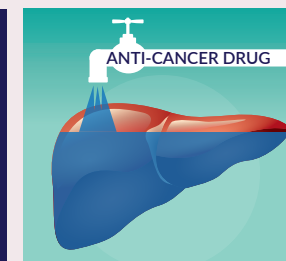
Blood leaving the liver is directed outside of the body to filters that remove most of the anti-cancer drug before returning it to the body. The anti-cancer drug can be given at higher concentration levels than is possible in systemic chemotherapy because the liver is isolated from the rest of the body. By delivering this drug to the entire liver, treatment is administered to potentially both visible tumours and undetected micro tumours.

Chemosaturation therapy is a repeatable treatment that may help doctors manage cancers in the liver for appropriate patients.

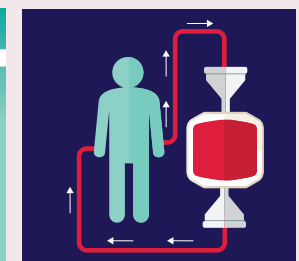
Chemosaturation therapy is a specialist procedure that involves a highly skilled team and is usually carried out by a team of doctors including a Consultant Radiologist, Consultant Anaesthetist and Perfusionist (they are responsible for the filter and ensuring that the correct procedure is carried out when the filtration stage commences). The procedure can take anything from 3-5 hours but is dependent on a number of factors. You should discuss this with your doctor.



1. ISOLATION



2. SATURATION



3. FILTRATION



## WHAT IS CHEMOSATURATION THERAPY?

### How is chemosaturation therapy different from other treatments?

There are several important differences between chemosaturation therapy and other treatments for cancer in the liver treatments:

- With chemosaturation therapy, your doctor can give a high dose of chemotherapy directly to your liver which may help destroy the cancer.
- By delivering this drug to potentially the entire liver, tumours both seen and unseen by your doctor can potentially be treated.
- Because chemosaturation therapy keeps most of the drug from spreading to the rest of your body, you may not have as many side effects.

### What type of cancer is chemosaturation therapy suitable for?

Liver cancers may originate in the liver or spread to the liver from other parts of the body. Because healthy liver function is essential to life, cancerous tumours in the liver can cause serious illness and are often life-threatening.



Chemosaturation therapy can potentially treat primary liver cancers (cancers that start in your liver) and secondary/metastatic liver cancers (cancer that starts in a different part of your body and then spreads to the liver). Chemosaturation therapy has proven particularly effective in patients with ocular melanoma liver metastases. It is classified as a whole organ based therapy which means it can potentially treat both visible and non-visible tumours in the liver.

For some patients, tumours can be surgically removed. Unfortunately, sometimes because of the number and location of tumours in the liver, surgery is not a viable option for many patients.

For patients who are not candidates for surgery, doctors may recommend systemic drug therapy, focal therapy, or both. Each of these therapeutic approaches has their own benefits and limitations:

#### • **Systemic chemotherapy**

Anti-cancer drugs are administered to the entire body (either orally or intravenously). In addition to attacking cancerous cells, the drugs will damage some healthy cells, causing significant side effects.

#### • **Tumour focused therapy**

This family of techniques use heat, intense cold and other methods to destroy cancerous tissue directly. Focal techniques can be used on tumours doctors can see, but may miss micro tumours that are often present in a diseased organ.

### Who is suitable for chemosaturation therapy?

Chemosaturation therapy can potentially treat:

- **Primary liver cancer:** cancer that starts in your liver
- **Secondary/Metastatic liver cancer:** cancer that starts in a different part of your body and then spreads to the liver

You and your doctor will talk about whether chemosaturation therapy is the best treatment for you. It will depend on:

- The stage and grade of your cancer
- Your age
- Your overall health
- How much cancer you have and whether the cancer is mainly in your liver
- The health of your liver (including the parts that do not have cancer)
- The location of vital veins and arteries to the tumours in your liver
- The type of treatment you have had in the past (including any surgeries that you have had in the past)

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# WHAT TO EXPECT DURING YOUR CHEMOSATURATION THERAPY PROCEDURE

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## SCANS & TESTS

In the weeks leading up to your procedure, your doctor will arrange different tests:

Scans of your liver and other parts of your body will help your doctor be sure you are healthy enough for the procedure and will help your doctor get ready for your procedure.

Blood tests will help your doctor be sure you are healthy enough to have the procedure.

## THE DAY BEFORE YOUR PROCEDURE

The day before your procedure, you will go into hospital. If you take any medicines, please bring them with you. You will go to your hospital room and get settled in for the night. Your nurse may give you medicines to help you get ready for the procedure.

## THE DAY OF YOUR PROCEDURE

On the day of your procedure you will be taken to the procedure room. Your doctor will give you general anaesthesia (medicine to put you into a deep sleep). You will not feel anything during the procedure.

When you are asleep, your doctor will place three catheters (small plastic tubes) in your body, two in your groin and one in your neck.

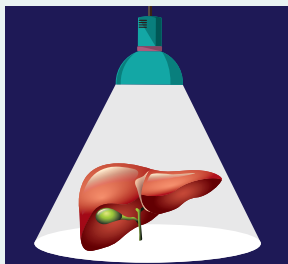
- One catheter will be used to put two small balloons around your liver to “seal off” the blood in your liver from the rest of your body.
- Another catheter will be used to give the anti-cancer drug during your procedure.
- A third catheter, placed in the neck, will be used to return the filtered blood back into the body



## YOUR PROCEDURE

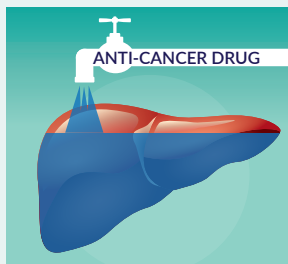
A multi-disciplinary team including an Interventional Radiologist, Perfusionist and Consultant Anaesthetist will deliver your treatment.

Chemosaturation therapy involves 3 key steps:



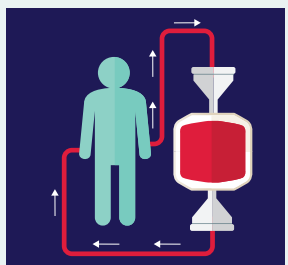
### 1. ISOLATION

Your doctor will put a catheter with 2 small balloons around your liver. The balloons will “seal off” the blood in your liver from the rest of your body.



### 2. SATURATION

Next, your doctor will give you a powerful anti-cancer drug. The drug will go directly to your liver. The balloons will keep the drug from spreading to other parts of your body.



### 3. FILTRATION

After the anti-cancer drug has been delivered to your liver, the chemosaturation filter will remove most of the drug from your blood. This is an important step because it can help reduce side effects after your procedure to a level that you can manage better.



## AFTER YOUR PROCEDURE

The balloons around your liver and the catheters in your groin will be removed and you will be moved to a recovery room. Your doctor may leave the catheter in your neck after the procedure in case they need to give you more drugs.

Your doctor will be monitoring you closely after the procedure. You may feel tired and you may have an upset stomach but this should not last very long.

### How long does the procedure take?

The treatment usually takes about three to five hours, this may include preparation, the procedure itself and post procedural care. Talk to your doctor to find out more information.

### When can I go home after the procedure?

Every patient is different, but typically the procedure requires an in-patient stay of 2-4 nights.

### What happens after I am discharged from hospital?

Much is happening inside your body and your doctors will need to watch carefully for any known or unknown side effects.

#### After your procedure, you will have:

- Blood tests while in the hospital and for up to 3 weeks following your procedure.
- New drugs if you need them to help with your recovery.
- Scans after 6-8 weeks to monitor how your tumour has responded to chemosaturation therapy.

The post procedure follow-up will be dependent on individual and clinical needs.

### What about going back to work?

You and your doctor will talk about when you may feel able to return to your normal activities, including work.

**After your procedure, you will be in contact with your doctor and your care team often. Do not be afraid to let your doctor or nurse know if something does not feel right.**



# QUESTIONS TO ASK YOUR DOCTOR

Your doctor will meet with you to explain how the procedure works. Your doctor will explain how chemosaturation therapy may help you and will also explain any side effects you might have. Your doctor will discuss with you about other choices for treatment. Some common questions to ask your doctor include:

- What will happen in the weeks leading up to my procedure?
- What happens during my procedure?
- Who will carry out the procedure?
- What happens when I'm released from hospital?
- Are there any side effects I need to be aware of?
- How long will my recovery take?
- What sort of follow-up is required post procedure?
- When should I call the doctor?



# CHEMOSATURATION THERAPY SIDE EFFECTS

As with any cancer therapy, treatment with chemosaturation therapy is associated with side effects. During chemosaturation therapy you will also undergo a general anaesthesia, which may result in you feeling drowsy and nauseous, with a headache and sore throat. These side effects usually pass relatively quickly.

Some of the side effects are listed below, please note this is not an exhaustive list, your doctor will advise you in more detail of what to expect.

- Fever
- Vomiting
- Pain
- Fatigue
- Constipation
- Hair loss
- Nausea
- Diarrhoea





# HOW CAN I LEARN MORE ABOUT CHEMOSATURATION THERAPY?

For more information speak to your doctor or visit  
[www.againsttheodds.com](http://www.againsttheodds.com)

