

## CANCER IN THE LIVER

### The liver is one of the most complex organs in the body

The liver is like a 'chemical factory' that performs hundreds of tasks to keep the body healthy and alive, including:

- Fighting infection and disease
- Metabolising poisons and drugs in the blood, including alcohol
- Removing unwanted substances from the blood
- Controlling cholesterol levels
- Storing vitamins, minerals and sugar
- Processing nutrients absorbed from food that has been digested
- Helping to control blood clotting
- Releasing bile (a liquid that breaks down fats and helps digestion)

Cancer in the liver can disrupt these functions or cause them to fail. This may lead to liver failure and eventually death.

### Cancer in the liver is difficult to detect

The liver is very good at repairing itself and can even function normally with just a small part of it in working order. This means that liver cancer symptoms often don't appear until the cancer is at a late stage and may then only include vague effects such as weight loss, feeling sick, vomiting and tiredness. As cancer in the liver progresses, symptoms can include yellowing of the skin and eyes (jaundice) and an associated itch, as well as stomach pain and swelling.

### Types of liver cancer – primary and secondary

Types of liver cancer can be divided into those that originate in the liver, known as primary liver cancers, and those that have spread from other parts of the body, known as secondary liver cancers or liver metastases. Knowing the type of cancer helps doctors to choose the right type of treatment.

#### Primary liver cancer

- **Hepatocellular carcinoma (HCC)**, also known as a hepatoma, is the most common type of primary liver cancer. It's more common in men and occurs mostly in people with irreversible liver cirrhosis (scarring of the liver) due to alcohol or hepatitis.
- **Bile duct cancer (cholangiocarcinoma)** is a rare type of primary liver tumour that grows on the narrow tubes used for carrying bile (a fluid made in the liver) to the bowel where it helps to digest fats.
- **Hepatoblastoma** is a very rare liver cancer that is usually seen only in very young children.
- **Angiosarcoma** is a very rare liver cancer that develops in the blood vessels of the liver.

#### Secondary liver cancer

- Cancerous cells may also break-off from a tumour located somewhere else in the body and spread to the liver. These 'breakaway' cells are called metastases or secondary cancers. Secondary liver cancer is more common than primary liver cancer.<sup>1</sup> Any cancer has the potential to spread to the liver with the most common being bowel, breast and lung cancers.<sup>2</sup>

## Cancer in the liver is difficult to treat

Once cancer exists in the liver, the patient's life is at serious risk. Removing the tumours by surgery provides the only realistic possibility of providing a cure. The following techniques may be used:

- Resection – surgically removing the cancer;
- Ablation – destroying cancer cells directly through heat (radiofrequency and microwave ablation), cold (cryotherapy) or chemicals (ethanol injections);
- Liver transplant – replacing the liver.

Because liver cancer symptoms can be so general, many patients do not know they have cancer until it is at an advanced stage, when a cure may not be possible. At this point, chemotherapy, drugs called biologics, and Selective Internal Radiation Therapy (SIRT) can be used to shrink tumours, slow progression, relieve symptoms and prolong life.

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*For more information please visit:*  
[www.sirtex.com](http://www.sirtex.com)

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1. Ananthakrishnan A *et al.* *Semin Intervent Radiol* 2006; **23**: 47–62.
2. Cancer Research UK. Secondary cancer in the liver. Available at <http://www.cancerresearchuk.org/about-cancer/secondary-cancer/secondary-liver-cancer/about>. Last accessed March, 2017.