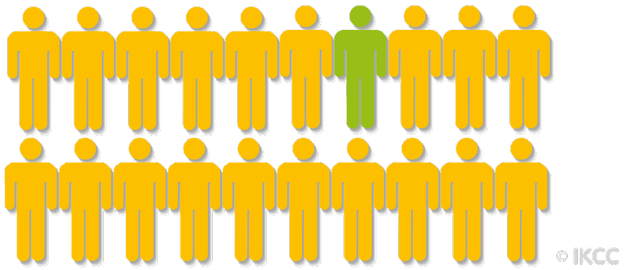
What is Kidney Cancer?

IKCC
International Kidney Cancer Coalition

Kidney cancer is diagnosed in over 300,000 people worldwide every year. Kidney cancer is the 12th most common cancer in the world, the same numbers as pancreatic cancer.

Fewer than 1 in 20 people with cancer have kidney cancer, meaning that it is quite a rare disease.



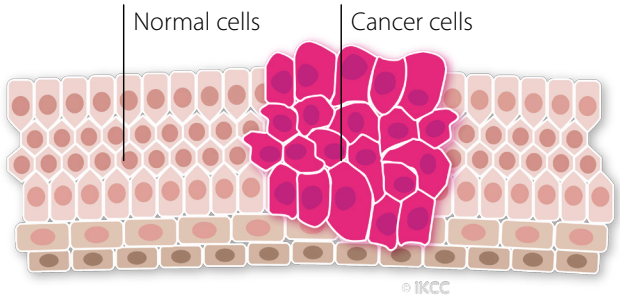
What is cancer?

Cancer, tumour, mass, lump, bump, swelling, spot, shadow, lesion... You might have heard a number of these words to describe cancer. A more formal word is neoplasm, which means "new growth". Medical experts might define cancer as a "neoplasm of abnormal tissue, the growth of which exceeds and is uncoordinated with normal tissue and persists once the stimulus for its growth is removed".

Our bodies are made up of cells. Each tissue, each organ, every part of our body is made of these cells, which are all very different depending if they are in the liver, heart, blood or kidney. Our bodies are always making new cells: so we can grow, to replace worn-out cells, or to heal damaged cells after injury. Usually this process is very controlled.

For example, when you get a cut, skin cells receive a 'go' signal to start dividing. When the cut has healed, the skin cells get a 'stop' signal and stop dividing. This process is controlled by instructions and recipes within the cells, the so called "genes". All cancers are caused by changes to these genes, called mutations. Changes to genes that cause cancer usually happen during our lifetime, although a small number of people inherit these changes from a parent.

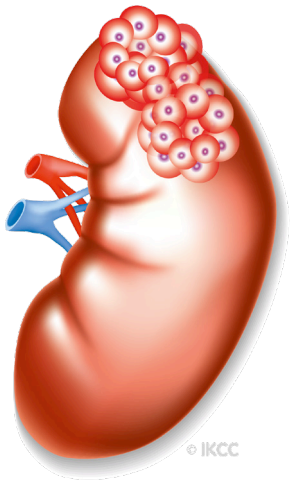
There are many different types of cancer and cancer can affect almost any organ in the body. Where the cancer is, what type of tumour you have and what genetic mutations have caused the cancer could influence what treatment is best for that cancer.



What is kidney cancer?

Kidney cancer is a type of cancer that arises from the cells of the kidney. Another name for kidney cancer is "renal cell carcinoma". The most common type of kidney cancer is "clear cell carcinoma".

Kidney cancer describes all tumours that form in the kidney. But not all kidney cancers are the same. It's important to know the type of kidney cancer you have. Cancers that come from the lining of the ureter, the tube that runs down from the kidney to the bladder, are typically more like bladder cancers, and so are usually not called kidney cancer.



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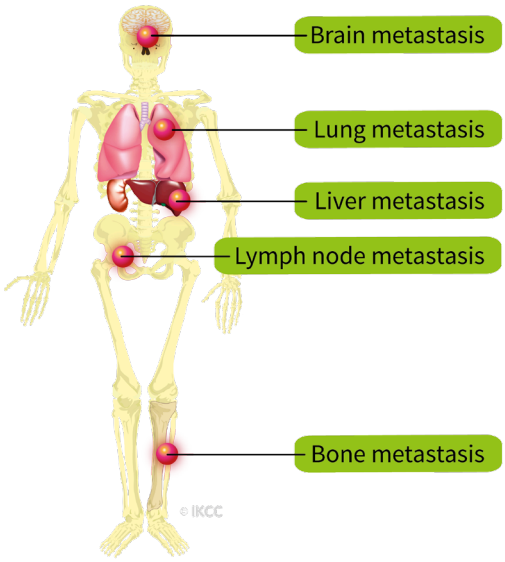
Mutations that cause cancer usually accumulate during our lifetime, so like most cancers, kidney cancer tends to occur in older people. The average age of people found to have kidney cancer is 55 years. Kidney cancer is rare in children.

Average age of getting kidney cancer is 55 years

Kidney cancers begin small and can grow larger over time. Kidney cancers usually grow as a single mass but more than one tumour may occur in one or both kidneys.

If kidney cancer is treated in its early stages it is most likely to be cured. If kidney cancer cells spread, they may spread into surrounding tissue or to other parts of the body. When kidney cells reach a new organ or bone they might continue to grow and form another tumour (a "metastasis") at that site. Primary cancer is a cancer that has formed in an organ (in this case the kidney) but has not spread elsewhere. Other words like "localised" or "early" apply if the primary cancer has not spread. Advanced (or metastatic) kidney cancer is the same cancer that started in the kidney, but has now spread somewhere else.

These secondary cancers or "metastases" or "mets" are still made up of kidney cancer cells even if they appear in the lung or elsewhere in the body. It is rare for a cancer from another part of the body to spread to the kidney.



Good to know!

Cancer
A term for diseases in which an uncontrolled growth of abnormal cells happens which can invade and destroy nearby healthy tissues. Cancer cells can also spread to other parts of the body through the blood and lymph systems

Kidney
One of a pair of organs located behind the abdominal cavity. Kidneys remove waste from the blood (as urine), produce erythropoietin (a substance that stimulates red blood cell production), and play a role in blood pressure regulation.

Renal Cell Carcinoma
The most common kind of kidney cancer. It arises in the small tubes of the kidneys. In the majority of cases, this is the clear cell type.

Metastasis
The spread of cancer from its original (primary) site to other parts of the body. A tumour formed by cells that have spread is called a "metastatic tumour" or a "metastasis." The metastatic tumour contains cells that are like those in the original (primary) tumour. The plural form of metastasis is metastases.

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The International Kidney Cancer Coalition (IKCC) is an independent international network of patient organisations that focus exclusively, or include a specific focus, on kidney cancer. It is legally incorporated as a Foundation in the Netherlands. **www.ikcc.org info@ikcc.org**