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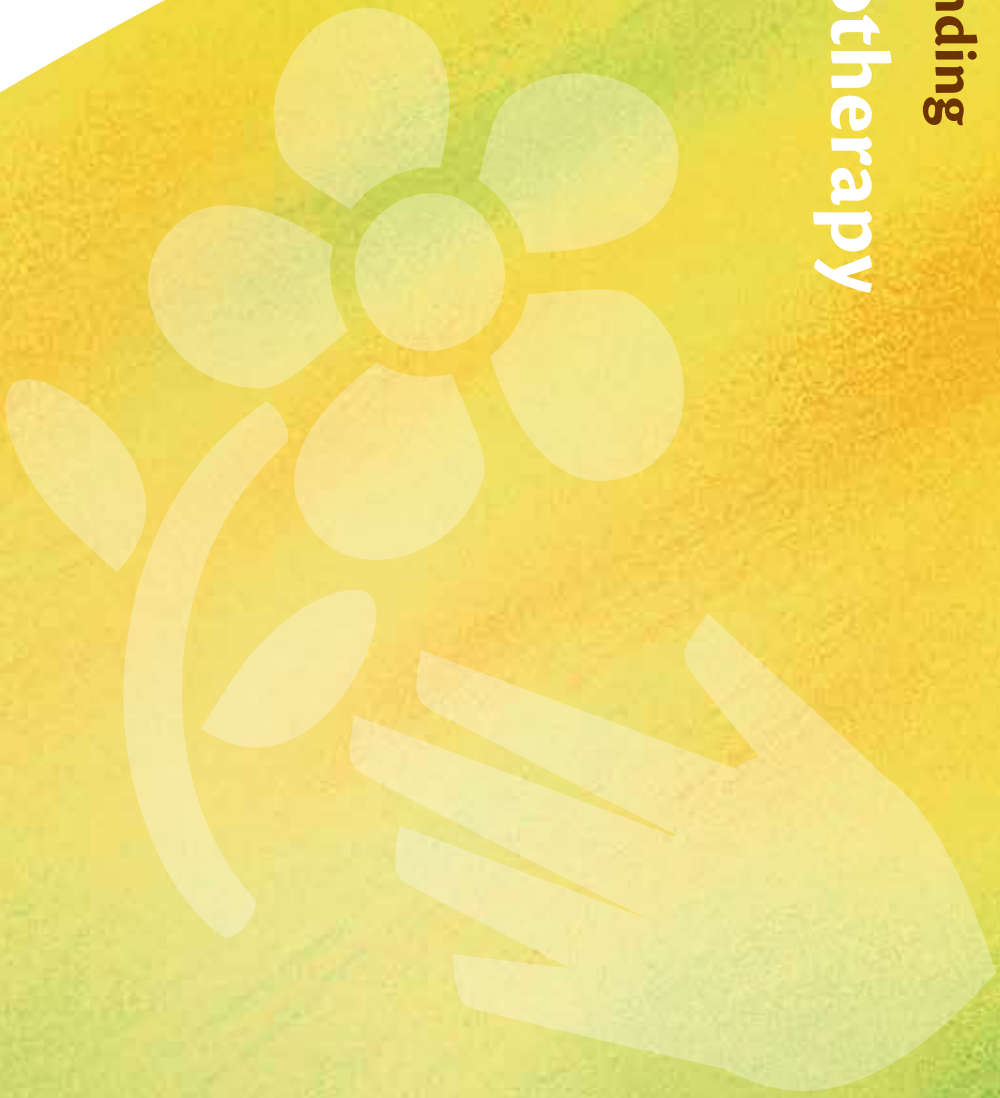
So no one faces cancer alone

understanding Chemotherapy



癌症基金會
CancerFund

Hong Kong Cancer Fund was established in 1987 to provide support, information and care to those living with cancer and to increase awareness and knowledge of cancer in the community.

Our CancerLink support centres offer professional support and connect 22 cancer peer groups to form an extensive service network for those with cancer and their families, providing emotional support and practical assistance.

This publication is one in a series of information booklets that discuss different aspects of cancer, including possible treatment, side effects and emotional issues. They are intended to inform you about available treatments and care. A soft copy of the booklet is also available on our website for free download.

The free services offered by Hong Kong Cancer Fund are made possible only through donations from the public. If you would like to show your support and concern for cancer clients, please contact us. Your generosity will directly benefit those touched by cancer in Hong Kong.

So no one faces cancer alone

FREE service hotline

3656 0800

Donation Hotline: 3667 6333 Website: www.cancer-fund.org

Introduction

We've developed this booklet to help you and those close to you understand chemotherapy (also known as 'chemo').

This booklet will tell you how to cope with chemo side effects, help you choose an appropriate treatment alongside your doctor, and provide advice to help make the treatment process easier.

There are many chemo drugs. Each target cancers in different parts of the body, or at different stages of cancer spread. These drugs also have their own potencies and limitations.

To kill as many cancer cells as possible, two (or, sometimes three) drugs are used to complement one another. In other cases, chemotherapy is used alongside surgery or radiotherapy to enhance treatment.

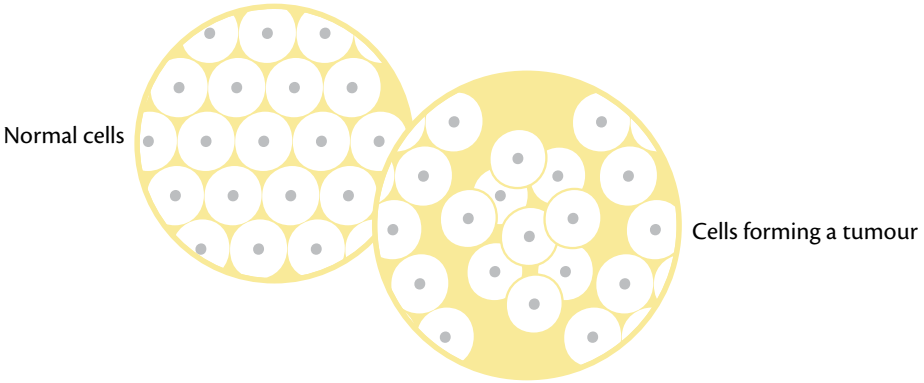
Only an in-depth diagnosis based on your own physical condition can help doctors decide on an appropriate treatment. This entry-level booklet is no substitute for medical advice. Talk with your doctor if you have any doubts about your chemotherapy.

If you find this booklet useful, you're welcome to pass it on to those close to you or call us on 3656 0800 to share your thoughts.

Contents

What is cancer?

Cancer is a disease of our cells, which are the body's building blocks. Our cells divide constantly to enable us to grow, to replace worn-out cells, and to heal damaged cells after an injury.



Cells normally divide in an orderly way, guided by their genes. But, occasionally, genes can be damaged due to our living environment or hereditary problems in the family, causing cells to divide and multiply uncontrollably, forming a lump called a tumour.

Not all tumours are cancerous. Benign (non-cancerous) tumours do not spread outside their normal boundary. While some benign tumours are pre-cancerous and must be treated before they turn malignant, most stop growing at a certain point and pose no discernible problem. You can, of course, have it removed by surgery or other means. But in general, unless it becomes too big and presses on tissues and organs or impedes the function of your body, it may be advisable to leave it and have regular check-ups to monitor it.

Malignant (cancerous) tumours are ones in which the cells multiply excessively and uncontrollably and form a lump. They can also migrate to other parts of the body (a secondary cancer site or metastasis) and start to drain our energy. If not treated in time, we can be consumed by them.

Cancer spreads via the body's fluid channels

There are two crisscrossing 'canal' systems in our body: blood vessels compose the blood and circulating systems, and lymph vessels compose the lymphatic system. If cancer cells enter nearby blood vessels or lymph vessels, they can reach other tissues and organs and settle there, forming secondary cancer sites. A cancer that has spread not only causes more harm to the body but is more difficult to treat than one sitting in just the original location.

What is chemotherapy?

There are three common treatments for cancer: surgery (surgically remove the tumour); radiotherapy (destroy cancer cells using radiation); and, chemotherapy (destroy cancer cells using targeted drugs). Chemotherapy often raises eyebrows more than other treatment types due to its side effects.

Surgery and radiotherapy usually act on a particular part of the body affected by a tumour (e.g. breast, lung, stomach or prostate). These local treatments can remove cancer cells in the area they're meant to act on but cannot catch cancer cells that may have spread to other body parts.

Chemotherapy is a systemic (or, whole-body) therapy, which can treat the entirety of your body at once, enabling it to work in places surgery and radiotherapy cannot reach. Chemo drugs travel through the blood to various parts of the body, attacking any cancer cells they discover along the way.

The word 'chemotherapy' derives from the use of chemicals to treat diseases. Drinking cough syrup and taking pills for a cold would once have been thought of as chemotherapy. It's only later that the term 'chemotherapy' started being used exclusively to refer to cancer treatment.

In fact, there are two additional terms that tell us more about the use of chemical drugs to treat cancer: 'antineoplastic' (which means to fight the tumour); and, 'cytotoxic'/'cyto' (ingesting materials toxic to cancerous cells).

The latter tells us why chemotherapy is known for its side effects. The toxicity of chemo drugs means they do not only act on cancer cells, but they'll affect normal cells as well. However, as medical science advances, new drugs are proving more effective while also making side effects easier to control.

How does chemotherapy fight cancer?

Cytotoxic drugs do not fight cancer by picking out cancerous cells and poisoning them. Instead, they target cells that divide fast.

While cancer cells are attacked by cytotoxic drugs, normal cells that divide fast in order to replace body tissues will also be targeted.

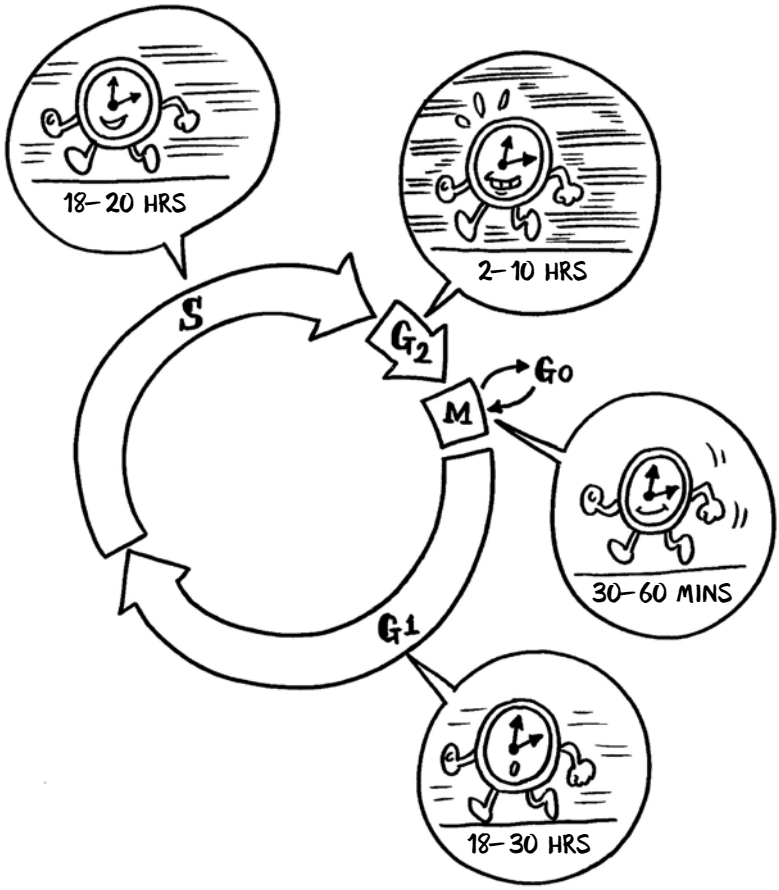
The types of normal cells most likely to be affected include cells that generate blood cells, grow hair or line our digestive tract. This can give rise to side effects such as: fatigue; susceptibility to infection; nausea; loss of appetite; and, hair loss.

Therefore, while doctors want to use drugs that can kill the highest number of cancer cells, they have to take your physical condition into consideration and choose drugs that have fewer side effects.

The chemistry of chemo drugs is very complicated. Chemo drugs are usually known by their trade names, which are easier to remember than their chemical names.

Chemo drugs do not actually work by killing cancer cells directly. Instead, they stop cancer cells from dividing, causing them to die without generating additional cancerous cells.

Even when the same type of cancer cells is being targeted, variations in the spread of these cells may require a range of drugs at different dosages. In turn, this may produce different side effects.



Doctors may have to match around 100 different drugs to roughly 100 cancer types, taking into consideration how these cells have spread, as well as the physical condition of the patient. This makes choosing drugs and the relevant combinations a highly complex process.

We'll do our best to explain all these factors using everyday language to help inform your choices. However, at the end of the day, only your doctor is best positioned to explain your treatment. Before you make a decision, make sure you understand everything your doctor has told you.

Cells generated by the splitting of a parent cell will eventually grow into mature cells themselves, before splitting into two once again. This lifecycle is shared by all cells regardless of whether they're normal or abnormal (like cancer).

Cells undergo five phases from initial birth through to division:

G0 phase (Resting): Depending on the cell type, this phase can take hours, or even years. Here, the cell is in its pre-split stage (think of it like a pre-pubescent child).

G1 phase (Growth): This phase lasts roughly 18-30 hours. Here, cells grow fast, produce more protein and expand in size in preparation to be split (think of this as the adolescent stage).

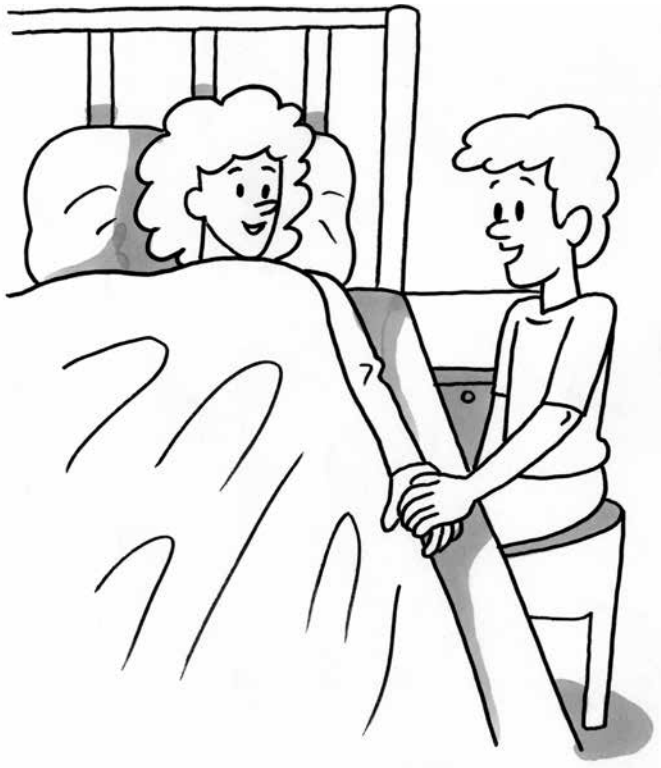
S phase (Replication): This phase lasts roughly 18-20 hours. Here, the DNA (genetic codes) of the cell replicate so that when it eventually splits, both new cells will have identical DNA.

G2 phase (Final check): This phase lasts roughly 2-10 hours. The cell makes a final check to confirm it has two identical pairs of genetic codes before splitting.

M phase (Splitting): This phase only lasts about 30-60 minutes. The cell splits into two identical cells. Here, M stands for mitosis, which refers to the process by which the cell splits into two.

Chemo drugs treat cancer by attacking fast multiplying cells during one of their four multiplication phases (G1 to M). As each drug only targets cells during a specific phase, using an M phase drug together with an S phase drug can help to kill more cancer cells than using either in isolation. However, by using both M and S drugs, normal cells undergoing these two phases will also be affected, leading to more side effects than if M or S drugs were used individually.

Using 2 M drugs or 2 S drugs cannot kill cancer cells in other phases and will only aggravate your side effects. As the duration of the four multiplication phases vary widely, the order of drug usage and the time separation between doses are very important when using two drugs to target two phases.



Different stage calls for different usage

There are three levels of chemotherapy used for different stages of cancer: to cure cancer in its early stages; to control the spread of cancer in the mid-to-late stage; and, to alleviate cancer symptoms in the late stage.

Early-stage – It's possible to remove all cancer cells with chemo and achieve a full recovery.

Mid-stage – Curing the cancer at this stage might be too ambitious. However, chemo can be used to shrink the tumour and control its spread. This reduces the problem to something similar to that of a chronic disease like arthritis, allowing you to live an enjoyable lifestyle. Regular check-ups will follow to watch out for a possible recurrence.

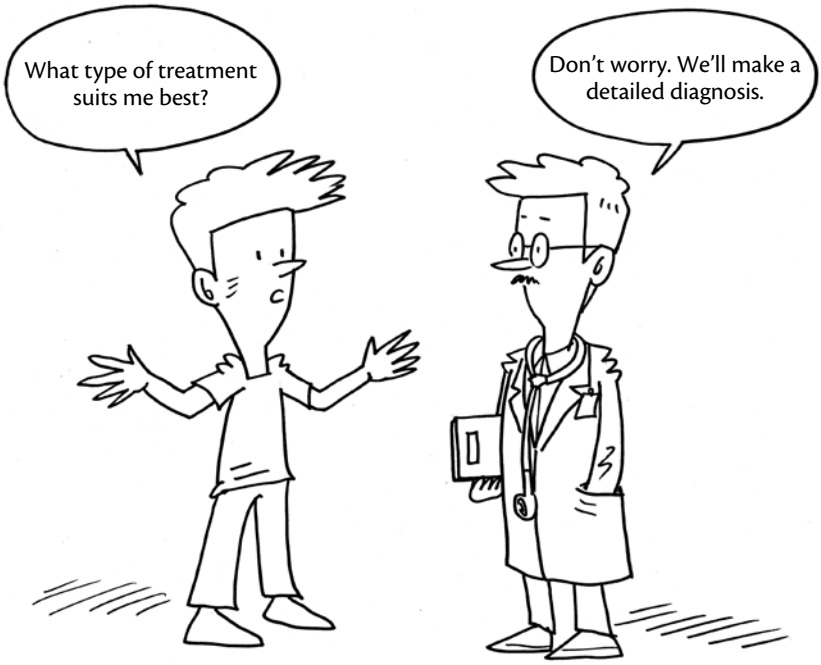
Late-stage – Controlling the spread of cancer might be too ambitious at this stage. However, chemo can be used to alleviate your discomfort and improve your quality of life. This is known as palliative treatment.

To enhance surgery and radiotherapy

Aside from treating cancer directly, chemotherapy is also used to enhance the effect of surgery and/or radiotherapy.

Adjuvant therapy: First, the main tumour is removed using surgery or radiotherapy. Then, chemo is used to catch residual cancer cells and prevent recurrence. For example, people with prostate cancer are treated with hormone therapy (a treatment similar to chemotherapy) after a course of radiotherapy.

Neoadjuvant chemotherapy: Also known as 'leading treatment', this method involves using chemo to shrink large tumours (or, tumours near sensitive places) to make way for surgery or radiotherapy.



In addition, it can be used to remove cancer clusters too small to be detected by imaging scans and X rays, which therefore cannot be removed using surgery or radiotherapy.

The choice of chemo drugs depends on at least three factors: the type of cancer (the location in the body and type of cell affected); the extent of the spread; and, the physical condition of the patient (whether surgery will be safe/side effects will be too strong).

When treatment begins, doctors may not be able to decide on the most impactful drug with fewest side effects right away. A combination of two or three drugs may be required to complement one another.

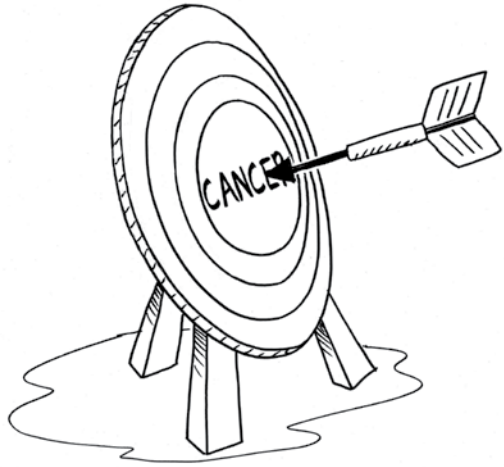
As mentioned previously, because chemo drugs usually act on only one multiplication phase of cancerous cells, each drug in the combination must target a different phase. To get the most out of the combination, each drug must be used according to a carefully planned time sequence as determined by the duration of the multiplication phases. For example, drug B will be given 1.5 hours after drug A, and drug C will be given 3 hours after drug B, etc.

Non-traditional chemo drugs

Traditional chemo drugs target cells that divide fast. During this process, normal cells that deplete fast and require constant replacement will be affected too, causing side effects such as: fatigue; vulnerability to infection; hair loss; nausea; and, vomiting.

Some recently developed drugs can target cancer cells more precisely, avoiding normal cells. However, as they're still in the early stages of development, few drugs of this nature are currently available. These only cover a few cancer types and cost more than traditional chemo drugs. They're often used for late-stage cancers where chemo drugs may not work, or to supplement chemo drugs in order to enhance treatment.

These drugs included:



Hormone therapy
Despite the name, this treatment is distinctly different from hormone replacement therapy (HRT), which is used to treat menopausal symptoms.

Hormones are substances secreted into the bloodstream in tiny amounts to regulate various bodily functions, such as growth. Some hormones can help cancer cells grow faster.

Hormone therapy uses drugs to suppress the level of these cancer facilitators, or to block their effects. This method only works for a fraction of all cancers (those that can be stimulated by hormones). For example, thyroid cancer can be treated with thyroid hormone.

Immunotherapy
Immunotherapy is a relatively new cancer treatment that offers much potential for development over the next 10 years.

Cancer cells disguise themselves in order to evade our immune system. Immunotherapy involves the use of drugs to help our own defensive systems recognise cancer cells and launch an attack.

Choosing and using cancer drugs

To enable chemotherapy to have the maximum effect, the choice of drug(s), dosages, timing of administration (when they're given to the patient) and potential side effects all require careful calculation.

In some cases, only one drug is required and at a precise dosage, which can make things easier. More often than not, several drugs have to be used in conjunction as each drug can only deal with part of the problem. In such instances, doctors will need to carefully plan the sequence of when and how each drug is to be taken.

Factors that can affect the choice of drugs and the way they're used include:

- The type of cancer (where the tumour is located/the type of cancerous cell) and spread of the cancer (tumour size/size of area invaded by cancer cells)
- The age and physical condition of the patient
- Additional health problems (e.g. chronic disease in major organs, such as the heart, liver or kidney)

- Whether the patient has received certain cancer treatments before (e.g. radiotherapy)
- The extent of the side effects the patient is willing and able to take

In general, high dosages are often able to remove more cancer cells but will also cause additional side effects. A moderate dosage of two drugs with weaker side effects is usually preferred to a high dosage of one drug with stronger side effects.

When using multiple drugs, make sure they don't pose the same side effect risks. Extra caution is required if a drug has the potential

to harm a vital organ. During the treatment cycle, doctors will adjust the dosage and timing the drug(s) given according to the patient's response to optimise treatment and minimise side effects.

Drug interactions

Before chemotherapy starts, show your doctor all the medicine you take regularly (with or without prescription). This includes conventional medicines, arthritis drugs, nutrition supplements, Chinese medicines and any other forms of medication.

The doctor should check that they will not undermine your treatment or aggravate treatment side effects.

Vitamins

Nutritional supplements can interfere with chemo drugs, too. For example, some chemo drugs treat cancer by releasing free radicals in order to damage the DNA (genetic codes) of cancer cells. .

Ask your doctor if you can take vitamin supplements during chemotherapy. However, a balanced diet may be better for your health than vitamin supplements.

Dosage and cycles

Medicine that does not require a prescription can generally be used with some flexibility. However, that's not the case with chemo drugs , as they're toxic by nature.

A slightly higher dosage may aggravate the side effects you experience and undermine your ability to fight cancer. Always follow your doctor's instructions on both the dosage and time of use for each combination of chemo drugs you're given.

Dosage

Every chemo drug has a base dosage given in milligrams (mg), which is equivalent to one-thousandth of a gram. This dosage is determined by the pharmaceutical industry.

The dosage each patient should take is calculated by taking the base dosage and multiplying it by your body weight (in kilograms) or body surface area (in square metres). As body surface area is difficult to measure, it's generally calculated using your height and body weight.

For example, if the base dosage of a drug is 10mg per kg of body weight, a patient weighing 50 kg will be prescribed 500 mg (10mg/kg x 50kg) of that drug.

Obviously, this age-old formula doesn't take into account the age, gender or physical condition of the patient. Today, the actual dosage a patient receives has to be adjusted to take on board such factors on a case by case basis.

Similarly, older patients, or those who're overweight, have a low blood cell count, lack nutritional balance, are taking other medicines, have liver/kidney problems or have previously received chemo all need their dosages adjusted as per the age-old formula.

Treatment cycle

After deciding on the drug(s) and dosage, your doctor will calculate the best time to give you the drug so that it acts on the highest possible number of cancer cells.

When using more than one drug, administration requires careful planning in order to make them work together for optimal treatment.

To enable treatments to work in combination while minimising side effects, the sequence in which the various drugs are given, and the time separation between the use of each, can be just as important as dosage.

Chemo drugs are given in cycles. Within a treatment cycle, you may be given drugs daily, or on alternate days for the period of a few weeks. In-between cycles, you'll have a break for a few days or weeks to recover from the side effects.

The number of cycles required depends on the location and the spread of the tumour. This will be adjusted according to how you respond as treatment progresses.

Adjustment

Due to their toxicity, the use of chemo drugs requires extra caution. You need to follow the instructions you're given closely. It's not easy to achieve optimal treatment while also keeping side effects in check. If your side effects turn out to be too strong, ask your doctor whether the dosage and time schedule need adjustment.

Where can I receive chemotherapy?

Most chemo drugs are given intravenously (IV) by injection or taken orally. Patients generally receive new batches on a daily basis from day clinics or outpatient departments in hospitals.

Only in rare instances whereby an IV takes several hours to administer, or when the patient feels unwell while receiving the IV, they required to spend a night in hospital.

If your IV takes a long time to drip, you may be given a portable pump attached to the IV with which to carry on with the treatment at home. You'll be well looked after when you return to the clinic the following day to complete the IV. Ask your doctor about possible reactions to this drug before taking the setup home. If you accidentally exceeded the dosage limit, inform your doctor straight away.

How is chemotherapy administered?

Systemic chemotherapy

Systemic (body-wide) chemotherapy is usually given by injection.

Even if a drug exists in both injection and oral forms, the type you're prescribed depends on both your tumour and your physical condition. Convenience of use is not a high priority.

Injection

Systemic chemo drugs are usually given by injection.

Some chemo drugs will irritate skin or muscle. Most injections are given intravenously (into a vein). Chemo drugs then enter your bloodstream directly, bypassing your tissue.

Only a few drugs are injected into the muscle (known as an intramuscular injection, or 'IM') or beneath the skin (known as a subcutaneous injection, or 'SQ').

With IV injections, a catheter is inserted into your vein. The flow is controlled by the attached syringe. The drug enters your bloodstream drop by drop. Apart from a slight pinch as

the needle is inserted, you'll feel practically nothing as it drips.

Drugs given intravenously circulate in your bloodstream, reaching various parts of your body and attacking cancer cells along the way. The needle will usually be inserted into a vein in your arm or wrist.

Small veins in your arms and legs are called 'peripheral veins', as opposed to the larger veins present in your torso. The transparent plastic tube attached to the needle that's inserted into a peripheral vein is called a peripheral line.

With IV treatments, the needle is inserted for each treatment dose before being pulled out again afterwards. This is likely to hurt and may damage the vein, leaving visible pink marks on the skin. If the drug is a vesicant (such as Adriamycin), occasional leakage from your vein could damage surrounding muscle and skin.

CVC is designed for multiple use in order to avoid these problems. The needle is inserted into a large vein at the beginning of your treatment cycle and remains there for the entirety of the cycle. After your daily treatment has finished, the plastic tube that delivers the drug is removed, but the needle remains attached to your vein. Your nurse will teach you how to keep the needle and insertion point clean and dry.

If you're prescribed more than one drug at the same time, you may have a one-off IV in your arm as well as a multiple-use CVC implanted into the large central vein in your chest. The latter is also called a 'vascular access device' (VAD).

Depending on the length of your treatment cycle, duration of each treatment session, cost/maintenance of the arrangement and preferences of you and your doctor, there are a range of CVC catheters and joints to choose from.

As the needle will remain in a large vein for your entire treatment cycle, you should ask your doctor before deciding on the best type of CVC for you. Ask questions such as "Why does this setup suit me best?" and "What is the next

best option?" Select a setup that's safe, easy to clean and will cause the least interference to your life.

The risks of inserting a CVC are roughly the same as performing an IV. Though these risks only come to fruition in rare instances, they include:

- The needle damaging a vein, leaving bruising and causing bleeding or infection.
- Blood leaking from the vein, resulting in bruising and additional pressure on blood vessels and nearby organs.
- Puncturing a lobe of the lung causing collapse (pneumothorax). Using a fluoroscopy or ultrasound device to guide the insert can help to avoid this.
- Increased heart beat as the catheter enters the vein. This will usually return to normal soon after the position of the catheter is adjusted.
- Accidental insertion into an artery. If this happens by mistake, the doctor will just pull it out and re-insert it into your vein. The artery will heal itself. In the absence of other health problems, this should not cause long-term side effects.

Chemo administered at home

Some chemo injections can be administered at home using a portable pump. A CVC will be inserted into your chest at the clinic. At home, you just have to attach the pump to the catheter, administer the dosage according to your given schedule, and ensure the device is correctly maintained. This method saves you from regular trips to the clinic/hospital, as well as the administration costs of frequent injections.

Oral drugs

Patients may prefer to take chemo drugs in an oral form, using tablets that

can be taken anywhere. However, oral chemo drugs are not as common as injection for the following reasons:

1. Their potency may be diluted by stomach acid
2. Some chemo drugs cannot be absorbed by the digestive system
3. Some chemo drugs may damage the lining of the stomach

In addition, chemotherapy often requires two or more drugs. If any of these drugs are only available as an injection, the other drug(s) will have to be administered in the same way to ensure they all work together. This limits the oral use of chemo drugs even further.

Different chemo drugs act on cancer cells during different phases of cell division. Not only important to have the right drug, you also have to take it at a time when a high proportion of cancer cells are in that particular phase.

If you don't take these drugs according to schedule even on only one occasion, you may have to take the drug for an extra period of time in order for its concentration to return to an optimal level within your body. With oral drugs, you need to carefully follow the doctor's instructions as to when to start, stop and take a break.

Drug safety

To ensure optimal treatment and safety, follow your doctor's instruction closely.

Write down: the name of the drug(s); the dosage; the first and last day of treatment; the frequency and time of the day to administer treatment (e.g. morning, noon or evening); how it should be taken alongside food, drink or other medication; and, all possible side effects.

Call your doctor at once if you experience any discomfort, especially after using the drug(s).

When taking chemo drugs orally, make sure you do the following:

1. **Take them on time and in the exact dosage recommended**

   After taking them for several weeks, you may be asked to take a break for a few weeks in order to recover from any side effects. Keep the first and last day of treatment in mind and ensure you know what to do if you don't take the drugs as scheduled.

   If you deviate from this schedule or accidentally take too large a dose, go to see your doctor immediately (bringing the remaining drug(s) with you). Avoid taking the drug after your scheduled window, or increasing your dosage next time to make up for the loss. Don't curtail or prolong the treatment cycle without the consent of your doctor.

   Record your schedule using the calendar function on your mobile phone, or use a traditional calendar alongside an alarm clock. Record the time on every occasion that you take these drugs for future reference.

2. **Check for negative drug interactions**

   Oral chemo drugs may interact negatively with other medications. Before starting treatment, show your doctor all the medication you take regularly.

   This includes all medication for chronic diseases (such as arthritis), health supplements (e.g. vitamins), and traditional Chinese medicine.

3. **Know what food and drink to avoid**

   Some food may interact with chemo drugs. For example, you should avoid eating grapefruit when taking certain targeted therapy drugs.

   To reduce the risk of drug interaction, stay away from alcohol and caffeine

during your treatment.

Ask your doctor before treatment starts about the food or drink you should avoid. You need all the energy you can muster to fight cancer. Don't wait until unwanted side effects arise to make adjustments.

4. **Understand how the food you eat affects treatment**

   Some chemo drugs will irritate your digestive tract. Drugs taken on a full or empty stomach may have different effects. Make sure the food you eat and times you eat complement the oral drug you're taking, rather than working against it.

5. **Recognise potential side effects**

   Before starting treatment, make sure you understand all the possible side effects to avoid an unnecessary scare.

   For example, after taking Zavedos (a leukaemia drug) for one or two days, your urine may start to appear red. This is not blood, but rather a discolouration caused by the medication.

6. **Have a place to store your drugs safely**

   Store your drugs in a tightly-sealed container.

   In warm and humid regions such as Hong Kong, you're best off keeping drugs in the refrigerator (in a separate corner, away from food or drinks).

   Avoid the bathroom as the humidity and temperature differences could damage the drugs.

   Most importantly, keep your chemo drugs away from children.

7. **Know what hygiene/safety steps to take**

   Always wash your hands before taking chemo drugs. Handle them gently using a spoon and gloves.

If powder from your chemo drugs is suspended in the air, it can cause a respiratory hazard.

When taking chemo drugs at home, apply extra care regarding your bodily fluids and excrement. Flush your waste down the toilet gently to avoid spillages or splashing. Cover the toilet when flushing and flush twice after each use.

Store any paper used to wipe a running nose or clean vomit in a sealed container before disposing of it.

Return any unused chemo drugs to the hospital/clinic. Don't throw them in your garbage or flush them down the toilet.

8. Have a plan to handle an upset stomach

Diarrhoea and vomiting are some of the most common side effects of chemo.

However, either can cause you to lose part of your dosage, which can nullify the treatment effects.

Call your doctor if this happens after taking the drug. You may need additional medication to prevent this from happening again.

9. Complete the full treatment period

Take all your medicine and ensure you take the relevant doses at the relevant times throughout your course of treatment.

For example, a five-year daily dosage of the drug Tamoxifen is recommended for breast cancer patients in order to reduce the risk of

recurrence. However, curtailing this dosage may mean these drugs failed to have the desired effects.

10. Report any issues to your doctor immediately

Tell your doctor if you have or develop a problem relating to your mobility, memory or ability to swallow.

Also, inform your doctor if you have trouble opening the medicine containers (e.g. the lid), or have no one at home to help you take your medication.

You may be given a tonic form of the drug, or a special container that's easier to open.

Regional Chemotherapy

Most chemo drugs circulate within the blood, making it difficult to avoid side effects altogether.

Regional chemotherapy can help alleviate this problem by placing a large dose directly at the site of the tumour.

There are generally considered to be seven types of regional chemotherapy:

Intra-arterial infusion
A catheter is inserted into an artery that leads to the tumour site. This is then attached to a portable pump (or, one implanted under the skin) to maintain fluid pressure. This method is known as 'isolated hepatic perfusion' when used to treat liver cancer, and 'limb perfusion' when used to treat cancer in the hands and feet.

Intravesical chemotherapy
Often used to treat early-stage bladder cancer, the treatment period for intravesical chemotherapy generally lasts 4-12 weeks. A flexible tube is inserted into the bladder via the urethra each time the drug is given. The drug stays in the bladder for about two hours, before leaving the body alongside urine.

Intraperitoneal chemotherapy
Intraperitoneal chemotherapy is a treatment for ovarian cancer. It can also be used for recurrent bowel cancer, appendix cancer and stomach cancer that has spread to the lower abdomen. An implant attached to the catheter can be installed in the lower abdomen to help drain any built-up fluid. In cases of excessive fluid build-up, a special type of catheter called 'Tenckhoff' may be used.

Chemo drugs are then delivered directly into the lower abdomen. Regional

chemo delivers a large dose to a small area, giving your body plenty of time to absorb it. There may be more side effects compared with an IV injection.

Intrathecal chemotherapy

With intrathecal chemotherapy, drugs are injected into the spinal fluid (cerebrospinal fluid, or 'CSF'). This is generally prescribed to treat cancer of the central nervous system (leptomeningeal cancer), which is generally caused by the invasion of cancer cells from other parts of the body ('leptomeningeal spread').

This happens most often with leukaemia. However, lymphoma and late-stage breast or lung cancer can also invade the brain, too. This treatment does not work for cancer that originated in the brain or spine.

Intrathecal chemo can be delivered in one of two ways:

- A needle with syringe is inserted into the lower end of the spine to deliver the drug. This lumbar puncture (spinal tap) is performed each time chemo is given.
- A small, drum-shaped device (known as an 'Ommaya reservoir') is placed under the scalp. The catheter attached to this device penetrates the skull and enters the brain cavity (ventricles). A special needle is used to penetrate the scalp and reach the interface in order to deliver the drug.

Special techniques are used to treat cancer that has spread to the brain as this organ is protected by a special shield known as the 'blood brain barrier' ('BBB', or 'blood-cerebral barrier'). This prevents substances from the wider bloodstream entering the brain.

Intralesional/intratumoural chemotherapy

Intralesional/intratumoural chemotherapy involves injecting chemo drugs directly into the tumour. As the needle has to bypass other organs before reaching the tumour, this method is only applicable to skin cancer, or cancers in other tissues located close to the surface of the body (especially for tumours near the body surface that cannot be removed via surgery).

Topical chemotherapy

Topical chemotherapy drugs come in the form of a cream that can be rubbed onto the skin. This technique is most often used for skin cancers including 'basal cell carcinoma' (BCC) and 'squamous-cell carcinoma' (SCC), as well as pre-cancerous growths on skin. As with oral chemo drugs and other medications that can be taken at home, this medicine requires extra caution in terms of use and disposal. Follow the doctor's instructions closely.

Chemotherapy Tips

Dos and don'ts of food and drink

During chemotherapy, you need more nutrition than usual to fight cancer and recover from the side effects of treatment.

Make sure your diet includes a variety of amino acids and plenty of protein. As an integral part of our muscle, organs, red blood cells, insulin, antibodies etc., protein can help to mend cells damaged by cancer.

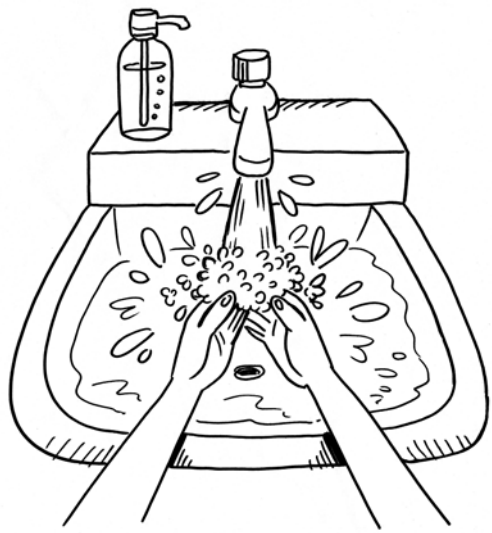
A balanced diet can keep your spirits high, too, helping you get the most out of your treatment.

Stay away from raw food throughout your treatment in order to avoid infection.

A high level of liver enzymes may force you to pause chemotherapy, which will delay your treatment. Avoid Chinese medicines that can have this effect.

Here's some advice on food to follow during chemotherapy:

- Always wash your hands before preparing or eating food.
- Cook your food thoroughly.
- Avoid using wooden chopsticks as they can harbour bacteria.
- Drink only boiled or distilled water. Avoid water that claims to have added health benefits.
- Eat peeled fruit only.
- Avoid raw salad, seafood, sushi, sashimi, hot pots and buffets.
- Think twice before eating out. A crowded restaurant can make you vulnerable to infection.



Maintaining a positive mood

Chemotherapy can add to the fatigue that cancer causes.

Try to relax and accept your own emotions. To fight cancer effectively, you need energy and a positive attitude.

While waiting in the outpatient area for your IV to drip, try listening to light music, watching funny videos on your smartphone, or using social media to speak with family and friends. Alternatively, you could simply close your eyes and meditate.

During your time in hospital, you may come across patients with the same type of cancer and think about sharing your experiences. Generally, people with similar experiences can share stories and support one another if they so choose. Having a fellow patient to talk to could be an important factor in your fight against cancer from an emotional perspective.

If you want to talk with fellow patients but worry about sharing your thoughts with strangers, ask your doctor or nurse to refer you to a patient support groups, or call us on 3656 8000.

Home hygiene

Chemotherapy doesn't cause any radiation or virus-related hazards. But it's important to note that body fluid and excrement contain residual drugs that must be disposed of carefully. Other than that, you don't have to worry about interacting with other people, including children.

However, you'll be vulnerable to infection. Wear a face mask when in public areas and avoid getting too close to people with a cold or flu. If you really want to talk to them face-to-face, use your smart phone or tablet to make a video call. Tell them you're receiving chemo and they're sure to understand.

Chemo drugs are generally toxic. While in your body, they will break down within about 48 hours, then leave your body in your urine, faeces, saliva or vomitus. To avoid contamination by their residual toxicity, dispose of your bodily waste using hygiene standards similar to those used in hospital.

The toilet is the part of your home that poses the greatest risk. Avoid spillages or splashing when depositing bodily waste into the toilet. Cover the toilet bowl before flushing and clean it thoroughly after each use.

Make sure to:

- Gently pour any secretions (including vomit) into the toilet bowl. Cover it before flushing twice.
- Designate a toilet for your exclusive use that will be avoided by visitors and other family members if your situation allows.
- Sit on the toilet to pee (which is likely to require a habitual change from male patients).
- Wash your hands with soap and warm water after using the toilet, then dry your hands with tissue paper.
- Clean any containers used for bodily waste with warm water and detergent. Gently pour your waste into the toilet bowl, cover it, then flush twice.

- Wear disposable gloves when getting rid of your waste. Wash your hands with warm water and soap afterwards.
- Avoid sharing cutlery when eating with others during treatment, and for up to a week afterwards. Wash your eating utensils and clothes in a separate batch at home.
- Steer clear of kissing on the lips and use a condom during sex. Continue this practice until your doctor says you can relax your hygiene practices.
- Place worn, unwashed clothes in a sealed plastic bag.
- Get rid of used disposable adult diapers, underwear and tampons using a sealed plastic bag.

Controlling side effects

While attacking fast-multiplying cancer cells, chemo drugs will also affect cells of fast depleting tissues such as those of your blood, hair, digestive tract and reproductive system.

This can make you feel tired; leave you vulnerable to infection; cause you to lose hair or your appetite; become constipated; develop diarrhoea; or, find it difficult to have children.

Side effects usually appear two to three weeks after chemotherapy begins. The extent of these side effects can vary widely from person to person. However, most side effects will gradually subside after treatment ends. Residual effects will rarely cause much of a problem.

Both the effects of treatment and associated side effects tend to increase in line with the amount of dosage prescribed. However, more side effects do not guarantee more effective treatment, and fewer side effects does not necessarily mean treatment will be less effective.

Before deciding on the relevant drug and length of treatment, ask your doctor to list all the possible side effects (including long-term effects) and means of relief.

Side effects depend not only on the type of cancer and the drug(s) used, but also on the physical condition and temperament of the patient. The actual side effects can vary widely from person to person.

Keep a daily log of your side effects and how you deal with them. This will help your doctor find a better balance between treatment results and associated side effects.

Tell your doctor if you find the side effects hard to manage. If a dosage adjustment is unlikely to make you feel better, your doctor may prescribe a different drug.

Side effects can appear hours, or even years after you first take the drug(s). These effects can be grouped into four categories according to their order of appearance after treatment commences:

- **Hours to days:** Nausea and/or vomiting
- **Days to weeks:** Low white blood cell count, mouth ulcers and/or hair loss.
- **Weeks to months:** Nerve palsy and/or muscle cramps.
- **Months to years:** Cancer appears in a different part of the body (e.g. bladder cancer appears in a patient who previously had stomach cancer), brain damage, infertility and/or deformed embryos.

Fatigue

Chemo drugs suppress the production of red blood cells, which help to carry oxygen to various parts of your body. This lack of oxygen in your blood will make you feel tired and weak no matter how much you sleep.

ed, anxious or unable to concentrate.
or the entire duration of treatment,
dually return to normal afterwards.
ur doctor if you have difficulty
ing. Don't take sleeping pills bought
r-the-counter in pharmacies as they
ay interact badly with chemo drugs.

Tips: plan your daily routine; do only what you feel comfortable with; take a nap or two during the day; eat well and drink extra water;

take a walk or do some light exercise; and, ask family members/friends to help share your responsibility.

Nausea and/or vomiting

Nausea and/or vomiting often appears a few hours after IV treatment is given. This may last for several hours, making you feel depressed, lose your appetite and become dehydrated.

To replenish what you lose when vomiting, eat as much as you can whenever you feel up to it. Forget about usual meal times. If your appetite is strongest in the early morning, make breakfast your main meal for the day, change your lunch to a light meal and have a snack at dinner time. Try a variety of foods, cooking methods and eating arrangements until you find a model that suits you.

Vomiting can destroy your appetite. Ask your doctor to add antiemetics (anti-vomiting and nausea drugs) to your chemo IV, or give you tablets to be used whenever necessary. Anti-vomiting drugs usually work better when taken at regular intervals. You may have to try a few types of antiemetics to find the one that suits you best.

Tips: Have soup or congee before IV treatment and water or juice afterwards; eat whenever you feel up to it (forget about traditional meal times); have several light meals per day; eat soft food to aid digestion; avoid hot or greasy foods; drink more water than usual; and, take a nap after each meal.

To alleviate nausea, stay away from the strong smells of the kitchen. The scent of perfume may make you nauseated too. Take a deep breath whenever you feel sick.

Read our 'Diet and Cancer' booklet

Constipation and diarrhoea

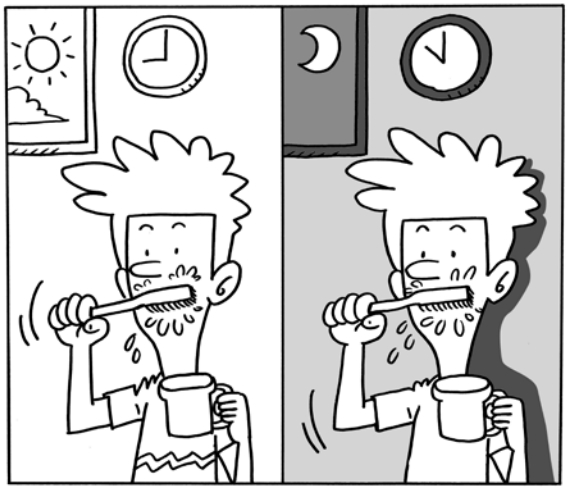
Some chemo drugs as well as pain killers and antiemetics used to relieve side effects can affect the lining of the digestive tract to give you constipation or diarrhoea.

Notify your doctor if you have constipation. You may have to adjust dosage or change drug.

Mild diarrhoea can usually be relieved with medicine without prescription. Tell your doctor if diarrhoea causes dehydration. Resume eating as soon as diarrhoea ceases.

Tips: high fibre foods like fruits and vegetables can relieve constipation; try light meals like soup and biscuits to avoid diarrhoea; avoid spicy, greasy, pan fried or cold food; use soft food to make up for lost fluids; take a walk; and, eat whenever you can.

Mouth sores



Some chemo drugs can cause infection of the mouth lining (mucositis), which can make chewing and swallowing difficult. Call your doctor if:

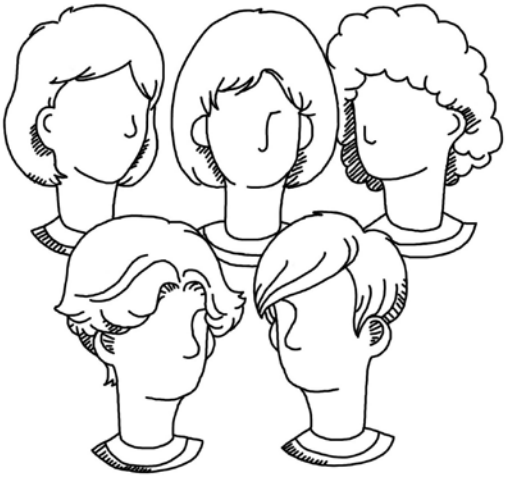
- your mouth swells,
- you feel pain,
- your saliva turns thick or
- your teeth feel strange

When visiting your dentist, tell them that you're having chemotherapy.

Tips: rinse your mouth four times per day by drinking a saline solution comprised of one teaspoonful of salt dissolved in a cup of warm water; use painkillers if necessary; ask your doctor whether you need medication for the infection; drink more water if a lack of saliva makes your mouth dry; eat more soft foods, like soup and noodles; use a soft toothbrush.

Hair loss

Hair loss is perhaps the most visible side effect of chemotherapy as it affects our appearance. However, it is actually the side effect that has the least impact on our health.



Cells responsible for hair growth (hair follicles) are affected by chemo drugs because they divide fast to replace our lost hair, just like cancer cells. New hair usually starts to grow soon after treatment.

Nowadays, most people understand hair loss can be caused by chemo. So, you do not need to be too worried about how people perceive you.

Hair usually starts to shed within the first two weeks of chemotherapy and reaches its peak during the second month. The extent of hair loss varies widely from person to person, ranging from almost no loss to complete baldness.

Your scalp may feel hot and itchy when hair starts to shed. Wash your hair regularly using mild hair products and avoid irritating your scalp. Try wearing a hat, scarf or wig.

When new hair grows out one or two months after treatment, it may look different from your original hair. However, when it grows back fully, it shouldn't be too different from your original look. As with shedding, your scalp may feel itchy as your hair grows back. Keep it clean and dry during this time.

Hair on your face and/or body may also shed during chemotherapy and grow back after treatment. Your appearance is unlikely to be changed significantly by this, though the loss of your eyebrows and eyelashes may be noticeable.

Tips: before your hair grows back in full, protect your scalp by using mild hair products like baby shampoo, a large comb or soft brush and cotton or silk pillow; don't perm or dye your hair; avoid using a hair dryer or hair curler; put on a hat or scarf, and use an umbrella and sunscreen when going out; cover your head with a scarf to keep warm when sleeping; and, use sunglasses to protect your new eyelashes.

The Cancer Fund has wigs of various styles that we can lend you free of charge. Chemo patients are welcome to call us on 3656 0800 to reserve one.

Itching and peeling skin

Chemotherapy may make your skin look darker, start to peel, or become dry, itchy or sensitive to sunlight. Wear a hat, long sleeves and long trousers and sunscreen when going out during the summer.

Tips: rub itchy spots with corn powder and dry spots with skin cream; and, notify your doctor if the spot where the IV needle enters the skin swells.

Numbness and tingling

Some chemo drugs can affect your nerves, causing numbness and tingling (like being pricked by pins) in your fingers and/or toes.

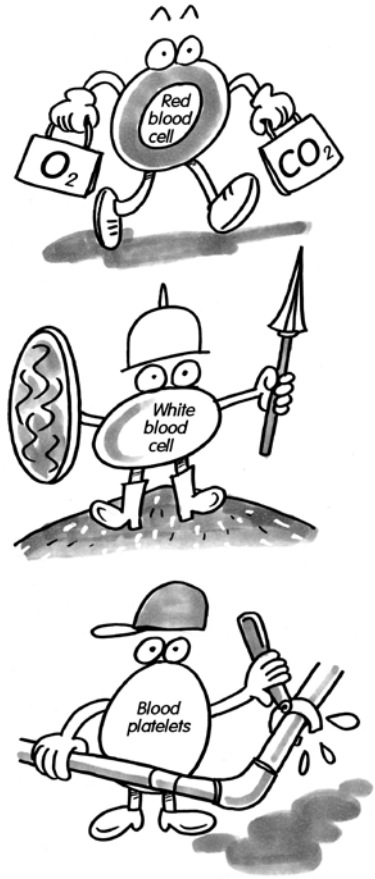
Notify your doctor if you notice any of the following: weakness on your feet; shaking as you walk; cramps in your legs; feeling of dizziness; twitching eyeballs; constipation; urine retention (an inability to completely empty the bladder); numbness in your face; thickening of your voice (hoarseness); blurred vision; ringing in the ears; or, muscle loss (atrophy).

Low blood cell count

We have three types of blood cells: white cells (for fighting infection); red cells (for carrying oxygen to various parts of our body); and, platelets (that prevent haemorrhages/bleeding in case of injury). They're all produced in your bone marrow, a tofu-like substance embedded in the central cavity of your major bones.

To maintain our bodily functions, blood cells are constantly being replaced as they deplete. The rapid division of blood-making cells makes them vulnerable to attack by chemo drugs, resulting in low blood cell count.

After receiving each dose of chemo, you'll be given a blood test to make sure your blood cell counts are safe for further treatment.



The potential side effects of chemo drugs on each type of blood cell include:

Infection

A low white cell count will undermine your immune system. This means it will take you more time to recover from colds and wounds which means you will be vulnerable to infection. If you feel unwell during chemotherapy, see your doctor immediately and – take no chances. Before starting chemo, ask your doctor whether you need to be vaccinated. Some patients will be given an injection of granulocyte-colony stimulation factor (G-CSF) to boost their neutral white cell count.

Notify your doctor immediately if you come into close contact with people who have an infection or infectious disease and you may have to take antibiotics. Avoid injury wherever possible. Wash your hands before eating and after going to the toilet.

Bleeding

A low platelet count makes it difficult for wounds to clot, resulting in excessive bleeding. Bruises will appear on the skin and blood may emerge from cracks in the body.

Avoid this risk by taking extra care when handling sharp tools. If you do receive an injury, press hard on the wound to help stop the bleeding.

Anaemia

A low red cell count will make you feel tired, weak, dizzy, restless, breathless and potentially even cause you to develop an irregular heartbeat (palpitation).

Avoid close contact with people who have an infection or infectious disease. Tell people who share the same space as you that you're having chemo.

Infection

See your doctor right away if any of these symptoms should appear: fever of over 38ºC; chills; night sweats; visible blood clots on your skin; abnormal bleeding; sore throat; mouth sores; severe constipation; diarrhoea; abdomen pain; stinging sensation when urinating; swelling/pain where the IV is inserted; or, a sudden deterioration in overall health.

Fertility problems

Patients of both genders may become infertile during chemotherapy, and sometimes on a permanent basis. If you wish to have children, ask your doctor if you and your companion need to save eggs and sperm before chemo starts.

Chemotherapy can cause menstrual disorders during treatment, which sometimes become permanent. You may need a prescription medicine to relieve menopausal symptoms such as hot flushes, night sweats or dry skin. Your bones may lose density and become fragile (osteoporosis) . Nutritional supplements and frequent exercise like weight lifting can slow this loss.

Chemo drugs may reduce your sperm count and diminish the vitality of remaining sperm. In some cases, men may find it difficult to get an erection. However, these problems will generally go away after treatment finishes.

Rehabilitation and post-treatment follow-up

After completing treatment, you'll be asked to attend regular check-ups. This is to monitor whether cancer has come back and ensure timely intervention in such cases. Inform your doctor if you notice any symptoms in-between check-ups.

As you gradually recover from treatment, you may still have lingering side effects and feel weak. Don't be overly concerned and only try to complete tasks within your current ability.

You've gone through months of treatment, which is a remarkable achievement in and of itself. Now is the time to feel relieved. Use this occasion to thank your doctors, nurses, family members and friends for their support. Try to see the world with a big, open heart. Maintaining a positive attitude will help with your recovery.

When your strength first returns to the level it was before your cancer diagnosis, don't overextend yourself. To minimise the risk of cancer returning, you need time to build up your immune system.

Accept the changes in your physical condition and adjust your priorities. Strike a new balance between your career, family and friends. Try to explore the meaning of life. You can indeed be happier and healthier after surviving cancer.

If you feel you'd benefit, ask the hospital to refer you to support groups for post-treatment patients. Or call us on 3656 8000 to find out more.

What to ask the doctor

Make a list of questions to ask before going to the doctor for a diagnosis report or treatment suggestion. You may ask a relative or friend to go with you to help you take notes; they can also remind you of the questions you need to ask, or even help you ask the questions. If you do not understand what the doctor says, ask them to explain until you do understand. Some people may want to record the conversation or video it. Before doing that you must obtain the consent of the doctor, who can reject the request. In a public hospital, you will need to get the consent of the Hospital Authority. The following are common questions that those with colorectal cancer ask.

1. I've been told that there are three levels of aims in cancer treatment, as determined by the stage of the cancer. Will the chemotherapy you suggest cure my cancer, control the spread or relieve my symptoms?

2. Can I write down the trade names of the drugs you suggest? How might they work in my case? Do they offer the best balance between treatment and side effects? Is there a second option and, if so, how does it compare to the first?

3. Will the drugs be given orally or by IV injection? If it's the latter, will an IV injection hurt?

4. When is the best time to start treatment? How frequent is the dosage? Do I get a break after a few doses?

5. How long is the treatment period?

6. Will I receive injections as an outpatient? If I don't live close to a hospital, can I get the injections in a nearby treatment centre?

7. Can you list all the possible side effects? How strong they're likely to be? Which is the worst effect? Am I likely to need medication for relief? Will any of these side effects be permanent?

8. Is there anything I can do before treatment starts to prepare for the side effects?

9. How do I know whether the treatment is working?

10. During treatment, how do I boost my immune system? What should I do more of, and what should I cut out? Are there any foods to avoid?

11. Can I go to work/school as usual while receiving treatment?

12. Will there be long-term side effects?

13. Will this treatment affect my sex life and/or fertility? What adjustments do I need to make? If my companion and I would like to have children, how can I make arrangements to save our sperms and eggs before treatment begins?

14. If I feel severe discomfort during treatment, are there any situations in which I should call the doctor immediately (regardless of the time or my location)?

15. How much will this treatment cost? How much of it will be covered by my medical insurance and how much will be out of pocket?

16. Will I be able to get back to my regular lifestyle (including diet) as usual after completing treatment?

17. I have been taking traditional Chinese medicine for some time. Can I continue this practice during chemotherapy?

Your feelings

Understandably, most people feel overwhelmed when they are told they have cancer. Many different emotions arise that can cause confusion and frequent mood changes.

This does not mean, however, that you are not coping with your illness. Reactions differ – there is no right or wrong way to feel. These emotions are part of the process that many people go through in trying to come to terms with their illness. Partners, family members and friends often experience similar feelings and frequently need as much support and guidance in coping with their feelings as you.

Shock and disbelief

"I can't believe it!" "It can't be true!"

This is often the immediate reaction when cancer is diagnosed. You may feel numb, unable to believe what is happening or to express any emotion. You may find that you can take in only a small amount of information and so you have to keep asking the same questions over and over, or you need to be told the same bits of information repeatedly. This need for repetition is a common reaction to shock. Some people may find their feelings of disbelief make it difficult for them to talk about their illness with their family and friends, while others feel an overwhelming urge to discuss it with those around them; this may be a way of helping them to accept the news themselves.

Anger

"Why me?" "Why now?"

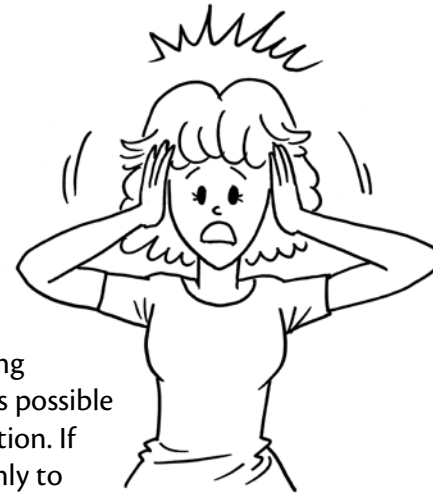
Anger can hide other feelings, such as fear or sadness, and you may vent your anger on those who are closest to you and on the doctors and nurses who are caring for you. If you hold religious beliefs you may feel angry with your god.

It is understandable that you may be deeply upset by many aspects of your illness, so you should not feel guilty about having angry thoughts or being irritable. However, relatives and friends may not always realise that your anger is really directed at your illness and not at them.

If you can, it may be helpful to tell them this at a time when you are not feeling quite so angry or, if you find that difficult, perhaps you could show them this booklet. If you are finding it difficult to talk to your family, it may help to discuss the situation with a trained counsellor or psychologist. Hong Kong Cancer Fund can give you details on how to get help in your area. Call our service hotline on 3656-0800.

Denial

"There's nothing really wrong with me!"
"I haven't got cancer!"



For many people, not wanting to know anything about their cancer, or wishing to talk as little as possible about it, is the best way to cope with the situation. If that is the way you feel, then just say quite firmly to

the people around you that you prefer not to talk about your illness, at least for the time being.

Sometimes, however, it is the other way round. You may find that it is your family and friends who are denying your illness. They appear to ignore the fact that you have cancer, perhaps by playing down your anxieties and symptoms or deliberately changing the subject. If this upsets or hurts you because you want them to support you by sharing what you feel, try telling them how you feel. Start perhaps by reassuring them that you do know what is happening and that it will help you to talk to them about your illness.

Fear and uncertainty

"Am I going to die?"
"Will I be in pain?"

Cancer is a frightening word surrounded by fears and myths. One of the greatest fears expressed by almost all people who are newly diagnosed is: "Am I going to die?"

Some people with cancer may be cured, but even if your cancer is not curable there are things that can be done to help you, both to relieve any pain or discomfort and to control the disease for some time. There is also help available to cope with the emotional aspects of cancer.

"Will I be in pain?" and "Will my pain be unbearable?" are other common concerns. In fact, some people with cancer experience no pain at all. For those who do, there are many drugs and other techniques that are successful at relieving pain or keeping it under control.

Most people are anxious about their treatment: whether or not it will work

and how to cope with the possible side effects. It is best to discuss your individual treatment in detail with your doctor.

Often you will find that doctors are unable to answer your questions fully, or that their answers may be vague. It is often impossible to say for certain that the cancer has been totally eradicated. From past experience doctors may know approximately how many people will benefit from a certain treatment; however, it is impossible to predict the future for individuals. Many people find the uncertainty hard to live with, and this can be disturbing for them.

Uncertainty about the future can cause a lot of tension, but fears and fantasies are often worse than the reality. Fear of the unknown can be terrifying, so acquiring some knowledge about your illness can be reassuring, and discussing your findings with your family and friends can help to relieve the tension caused by unnecessary worry. You may gain authoritative medical information on the internet (make sure that the sources are reliable and accurate), or you may share your experiences with those who also have cancer.

Read booklet to cope with your emotion

Blame and guilt

"If I hadn't... this would never have happened."

Sometimes people blame themselves or other people for their illness, or they try to find reasons for why it has happened to them. This may be because we often feel better if we know why something has happened. However, as doctors rarely know exactly what has caused your

cancer, there is no reason for you to blame yourself.

Resentment

"It's all right for you, you haven't got to put up with this."

Understandably, you may be feeling resentful and miserable because you have cancer while other people are well. Similar feelings of resentment may occur from time to time during the course of your illness and treatment for a variety of reasons.

Relatives, too, can sometimes resent the changes that your illness makes to their lives.

It is usually helpful to bring these feelings out into the open so that they can be aired and discussed. Bottling up resentment can make everyone feel angry and guilty.

Withdrawal and isolation

"Please leave me alone."

There may be times during your illness when you want to be left alone to sort out your thoughts and emotions. This can be hard for your family and friends who want to share this difficult time with you. It will make it easier for them to cope, however, if you reassure them that although you may not feel like discussing your illness at this time, you will talk to them about it when you are ready.

Sometimes an unwillingness to talk can be caused by depression. You can discuss this with your doctor, who can prescribe a course of antidepressant drugs or refer you to a doctor who specialises in the emotional problems of those with cancer. It is quite common for people with cancer to experience depression and there is no need to feel you are not coping if you need to ask for help.

Learning to cope

After any treatment for cancer it can take a long time to come to terms with your emotions. Not only do you have to cope with the knowledge that you have cancer but also the physical effects of the treatment.

Cancer treatment can cause unpleasant side effects but some people do manage to lead an almost normal life during their treatment. You likely will need to take time off for your treatment and some time afterwards to recover. Just do as much as you feel like, and try to get plenty of rest. Do not see it as a sign of failure if you have not been able to cope on your own. Once other people understand how you are feeling, they can be more supportive.

Who can help?

The most important thing to remember is that there are people available to help you and your family. Often it is easier to talk to someone who is not directly involved with your illness. You may find it helpful to talk to a counsellor who is specially trained to offer support and advice. Staff at Hong Kong Cancer Fund are always willing to discuss any problems that you might have and can put you in touch with a counsellor or a support group. Call us on 3656 0800 for more information.

Hong Kong Cancer Fund service network

Our five CancerLink support centres and seven cancer patient resource centres in major public hospitals provide free counselling, support and information to those in need. Together they form a seamless service network that meets the needs of people at different stages of their cancer journey.

- **CancerLink support centres**

  We have five support centres outside the hospital setting that cater to the specific needs of those with cancer throughout the different stages of their illness. The centres – located in Central, North Point, Wong Tai Sin, Tin Shui Wai, and Kwai Chung – offer well-designed, holistic rehabilitation programmes that emphasise individual needs.

  We also provide backing to 22 support groups, helping them to share resources so as to offer the best services to people living with cancer and their families. Our volunteer groups, formed by cancer survivors, pay visits to hospitals to provide emotional relief. More than 18,000 participants have joined our support network, which is divided into three groups – one for those with cancer, another for those with specific types of cancer (such as breast cancer, colorectal cancer and nasopharyngeal cancer), and another group for English speakers.

Care specialists – including registered social workers, registered nurses, registered dietitians, art therapists, counsellors and professional volunteers – are available to provide support, information and specialised services.

Private and family counselling is conducted by registered professionals to help those touched by cancer, their families and caregivers deal with the different emotional aspects experienced over the course of treatment.

There are also programmes and rehabilitation classes to develop coping skills, relaxation classes to help relieve mental and physical stress, and dietetic support to provide advice on nutrition.

Our comprehensive range of wellness programmes and therapeutic workshops helps users relax, tackle negative emotions, relieve stress, and restore confidence. We provide free classes, ranging from yoga and meditation to horticulture and insomnia management. The centres also feature well-stocked libraries.

"I managed to go through treatment but was worried about a relapse. A feeling of loneliness was haunting me. I felt especially grateful to have my support group, the members of which stood by me all the time."

CancerLink support centre user

This booklet is published by Hong Kong Cancer Fund, 2019.

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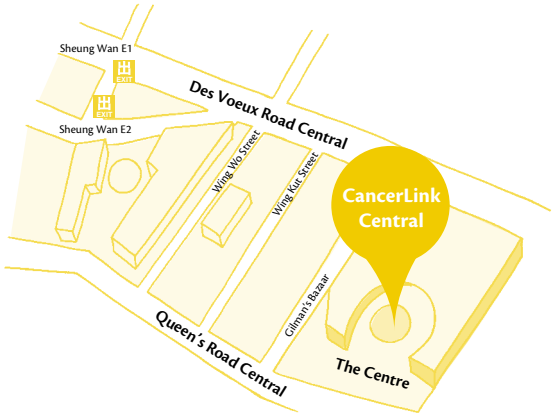
The contents of the booklet are correct as of print

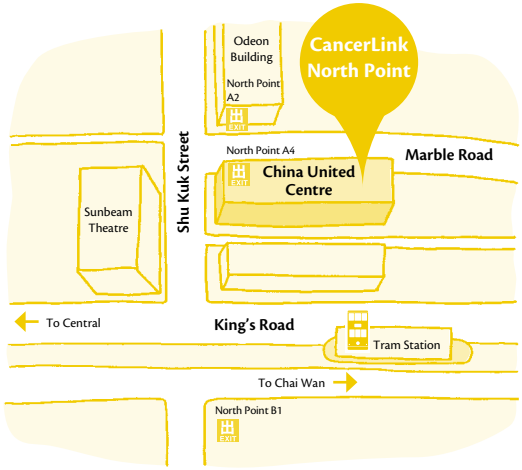
Hong Kong Cancer Fund CancerLink support centres



CancerLink Central

Unit 5, Ground Floor, The Center,
99 Queen's Road Central,
Hong Kong
(MTR Sheung Wan Station Exit E1/E2)

Email: canlinkcentral@hkcf.org



CancerLink North Point

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North Point, Hong Kong
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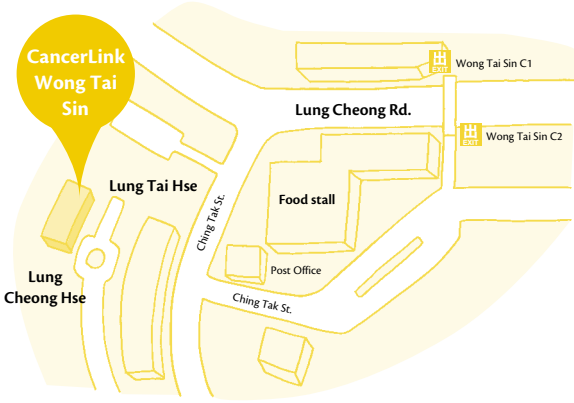
Special Thanks

SATINU
RESOURCES GROUP LIMITED



CancerLink Wong Tai Sin

Unit 2-8, Wing C, G/F,
Lung Cheong House,
Lower Wong Tai Sin (II) Estate,
Kowloon
(MTR Wong Tai Sin Station Exit C2)

Email: canlink@hkcf.org

CancerLink Tin Shui Wai

Shop 201C, 2/F,
Fortune Kingswood Phase 2,
12-18 Tin Yan Road,
Tin Shui Wai, New Territories
(Light Rail Ginza stop)

Email: canlink-tsw@hkcf.org

CancerLink Jockey Club Support Centre, Kwai Chung

3/F, TLP132, 132-134 Tai Lin Pai Road, Kwai Chung, New Territories (MTR Kwai Fong Station Exit A)

Email: canlink-kcc@hkcf.org

Green Minibus Station
(Kwai Chung Road)

94, 302, 313

Kwai Fong Estate Bus Station
(Kwai Chung Road, opposite to Kwai Fong Estate/Outside Yee Lim Factory Building)

237A, 265M, 269A, 269M, 290, 290A, 33A, 36A, 38A, 40, 46P, 46X, 57M, 59A, 61M, 935

Kwai Fong Estate Bus Station
(Kwai Chung Road, near Kwai Yik Road)

240X, 260C, 265M, 269M, 46P, 46X, 47X, 57M, 58M, 58P, 59A, 67M, 269P

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Hong Kong Cancer Fund

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Cancer booklets


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