

For Advanced Prostate Cancer Patients on Hormone Therapy

A WARRIOR'S DIARY



PERSONAL PARTICULARS

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About Singapore Cancer Society



The Singapore Cancer Society (SCS) is a community based voluntary welfare organisation dedicated to minimising the impact of cancer through public education, screening, patient services, financial assistance, research and advocacy.

As a self-funded charity, SCS is dependent on public donations to provide quality services to cancer patients, their families and the community at large.

SCS was established in 1964, registered as a society in 1984 and was accorded IPC (Institution of a Public Character) status as a charity in 1995 by the Ministry of Health.

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What You Need to Know About Prostate Cancer

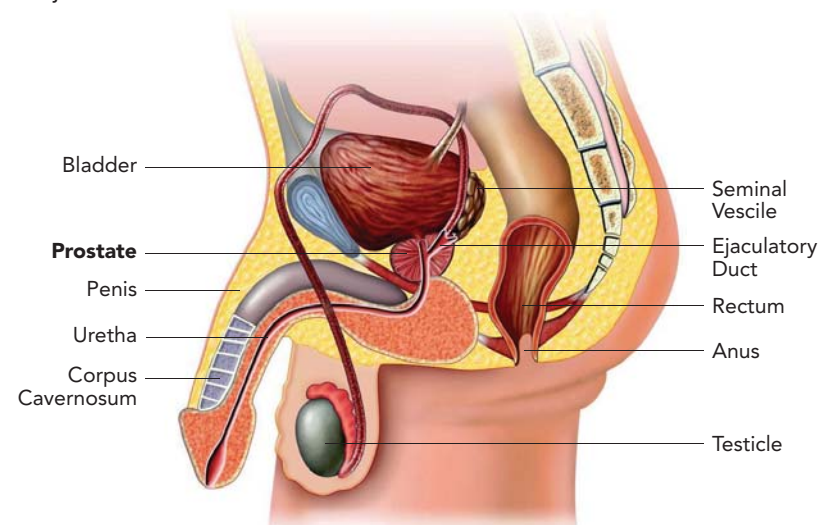
ABOUT THIS BOOKLET

This booklet is specially designed for you if you are on hormone therapy. It contains the pertinent information that you will need to know on advanced prostate cancer, side effects of hormone therapy, chemotherapy as well as ways you could utilise to manage its side effects. Do note that you may or may not experience all of the side effects stated, so use this booklet at to your own discretion.

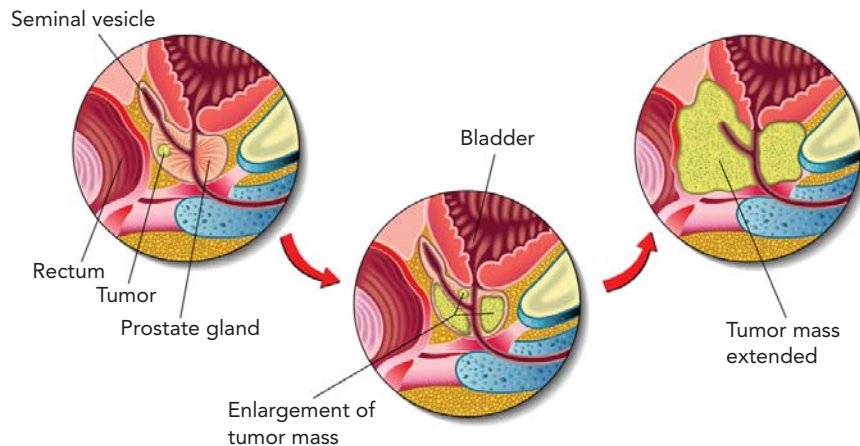
There will be pages for you to monitor your blood results as well as record the different side effects that you may be experiencing. Please fill them up every time before you come for any Doctor's appointment. This will allow healthcare professionals and doctors to have a greater understanding on your health.

WHAT IS A PROSTATE?

The Prostate is a small gland, similar to the shape and size of a walnut, it is situated right below the bladder (a pouch that stores urine when it is produced from the kidney) and in front of the rectum (where faeces are stored). It enwraps a short segment of your urethra, a tube that transports urine from the bladder. It functions by producing semen which carries sperm from the testicles when a man ejaculates.



WHAT IS A PROSTATE CANCER?



The growth of cells in the body are carefully controlled and, as cells die, they are replaced by new ones. Prostate cancer can develop when cells in the prostate gland start to grow in an abnormal and uncontrolled manner.

In many men the cancer is slow growing and may remain within the prostate gland. However in some men, the cancer may grow more quickly and can sometimes cause symptoms such as problems passing urine. The cancer cells can also spread outside the prostate to other parts of the body. This is known as advanced or metastatic prostate cancer. One common place is the bones, which can result in bone pain.

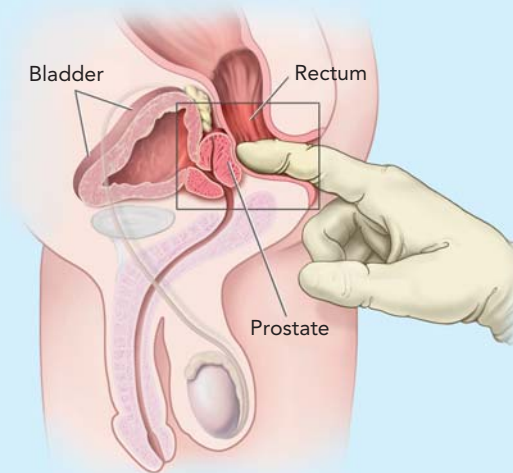
Staging is a way of describing where the cancer is located, if or where it has spread, and whether it is affecting other parts of the body. Doctors use diagnostic tests to find out the cancer's stage, so staging may not be complete until all of the tests are finished. Staging for prostate cancer also involves looking at test results to find out if the cancer has spread from the prostate to other parts of the body. Knowing the stage helps the doctor to decide what kind of treatment is best and can help predict a patient's prognosis, which is the chance of recovery. There are different stage descriptions for different types of cancer.

There are 2 types of staging for prostate cancer:

- The clinical stage is based on the results of tests done before surgery, which includes DRE (digital rectal examination), biopsy, x-rays, CT and/or MRI scans, and bone scans. X-rays, bone scans, CT scans, and MRI scans may not always be needed. They are recommended based on the PSA level; the size of the cancer, which includes its grade and volume; and the clinical stage of the cancer.



Digital Rectal Examination (DRE)

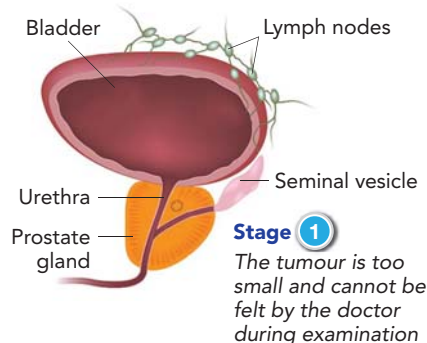


- The pathologic stage is based on information found during surgery, plus the laboratory results, referred to as pathology, of the prostate tissue removed during surgery. The surgery often includes the removal of the entire prostate and some lymph nodes.



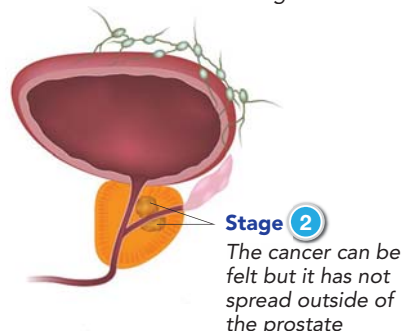
Stage I

Cancer is found in the prostate only, usually during another medical procedure. It cannot be felt during the DRE or seen on imaging tests. A stage I cancer is usually made up of cells that look more like healthy cells and is usually slow growing.



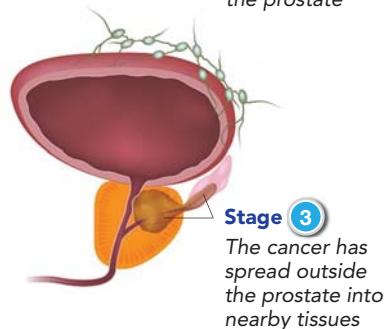
Stage IIA and IIB

This stage describes a tumor that is too small to be felt or seen on imaging tests; or, it describes a slightly larger tumor that can be felt during a DRE. The cancer has not spread outside of the prostate gland, but the cells are usually more abnormal and may tend to grow more quickly. A stage II cancer has not spread to lymph nodes or distant organ.



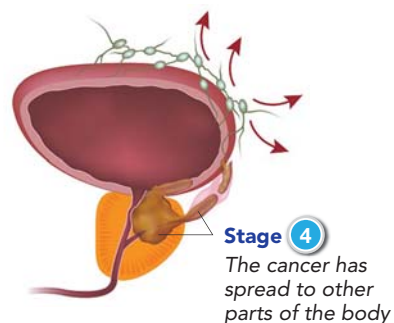
Stage III

The cancer has spread beyond the outer layer of the prostate into nearby tissues. It may also have spread to the seminal vesicles.



Stage IV

This stage describes any tumor that has spread to other parts of the body, such as the bladder, rectum, bone, liver, lungs, or lymph nodes.



METASTATIC PROSTATE CANCER

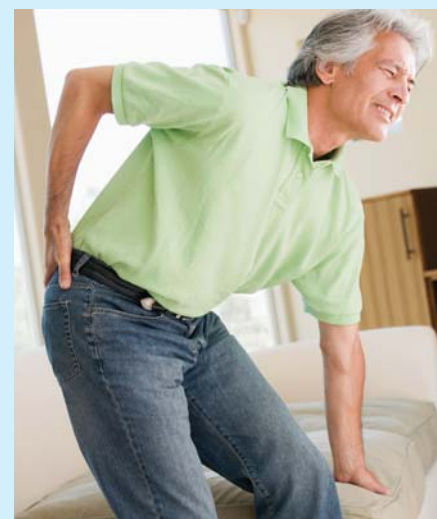
Metastatic prostate cancer occurs when groups of cancer cells leave the prostate region (the original tumor location) and spread out into other parts of the body. These deposits of cancer cells outside the prostate region are known as metastases. The most common site of metastases are the nearby tissues and lymph nodes in the pelvis, and the bones. Other potential sites of metastases include other organs like the liver and lungs.

Signs and Symptoms

Symptoms of metastatic prostate cancer vary depending on the site, and amount of involvement, by metastatic cancer cells. In the early stages or if the metastases is small, there are likely to be no

symptoms. In advanced stages, bone pain, back pain, weight loss and unusual tiredness are some symptoms of metastatic prostate cancer. Specific symptoms include:

- Pain in the lower back, upper thighs and hips – from tumor involvement of bones.
- Bone fractures after low speed trauma that ordinarily should not cause fractures – from weakening of bones by cancer cells.
- Numbness/pin-like feelings in the arms and legs – from cancer spread pressing on the spinal cord/nerves.
- Weight loss and/or loss of appetite.



- Tiredness/looking pale – from a low blood count because of cancer involvement of the bone marrow which produces red blood cells.
- Urinary Symptoms – from blockage of the urethra from the prostate cancer.

To evaluate further on whether the cancer cells have spread to the lymph nodes, bones or other parts of the body, your doctor will ask you to go for the following tests:

- **PSA Test** – Once prostate cancer is proven, a PSA level above 20ng/ml is associated with higher risk of spread outside of the prostate.

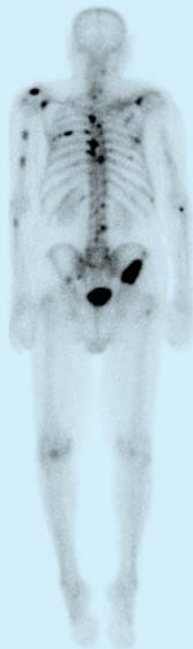


- **X-rays** – May be used to examine areas where pain is reported (such as the bones).
- **CT and MRI Scans** – These scans will show to what extent surrounding tissues outside the prostate are affected as well as other areas in the



body (e.g. looking for cancer cells that may have spread to the lymph nodes or liver).

- **Bone Scans** – Bone scans are done to look for cancer spread to the bones.



TREATING METASTATIC PROSTATE CANCER

Hormonal Therapy

Hormonal therapy, also known as androgen deprivation therapy or castration, is administered to a patient to block the male hormone (also known as an androgen) testosterone, from interacting with prostate cancer cells, thereby causing the cancer to shrink.

Androgens are needed for prostate cells and prostate cancer cells to multiply and survive. And since testosterone is produced in the testicles, reproduction will be markedly reduced and all its action in the body tissues will be stopped during hormonal therapy. This causes the prostate cancer cells to die away in a process known as apoptosis.

Hormonal therapy may control the cancer, often for a number of years, but it is not a cure. Usually, the cancer will change over time into a form that no longer needs testosterone to grow. When that happens it is called castrate resistant, and other treatments such as Chemotherapy, must be considered (see *page 18 on Chemotherapy*).

Hormone therapy will treat all prostate cancer cells, wherever they are in the body. It is generally used for locally

advanced and metastatic prostate cancer. The therapy basically works to:

- Reduce the androgen production by the testicles.
- Block androgen action in the body.
- Block the production of androgens throughout the body.

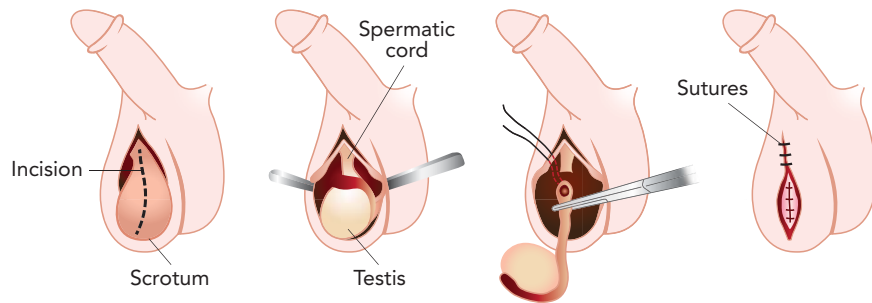
Types of Hormone Therapy

There are two main approaches to hormone therapy – surgical removal of the testes (orchidectomy) or medical castration. Both treatments are equally effective in controlling cancer growth and the side effects are also similar.

Orchidectomy

This is a surgery which removes the testicles. It is a procedure performed by a surgeon with the patient under anesthesia. The procedure occurs by making an incision to remove the testicles, leaving the scrotal sac intact. This is a safe, minor surgery which can be done as a day procedure. However, as a patient's fertility is affected, men planning to have children may need to consider sperm banking (where sperm is taken from patient) before his surgery so that it may be stored for later use.

Orchidectomy



The advantage of orchidectomy over medical castration are:

- Patients do not need to have regular hormone injections.
- Compliance to treatment is not an issue.
- The effectiveness is as good as medical castration, but the costs of this one time procedure is much less than regular hormonal treatment.

The drawbacks of orchidectomy are:

- The invasive nature of surgery and its attendant risks such as infections and anesthetic complications.
- Some men may find the loss of their testis psychologically distressing.

LHRH Agonists

LHRH agonists are used to stop the production of testosterone. A patient receives the drug through an injection into his abdominal fat or muscle area.

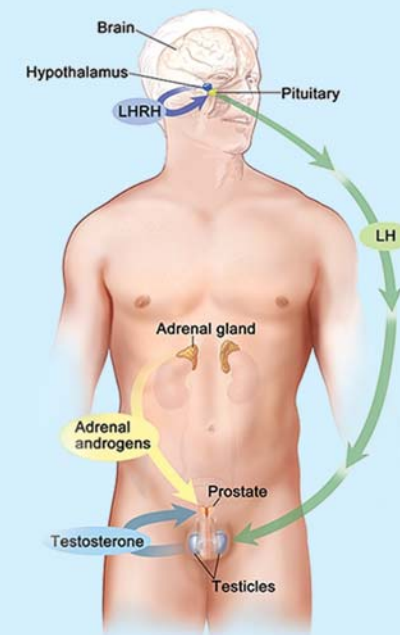
They do this by initially stimulating leuteinising hormone (LH) that triggers release of testosterone by the testicles causing 'flare' (see page 11). Testosterone production drops. As a result, the drug is delivered by injection into the fat or muscle and can be given monthly, quarterly or half-yearly. The effect is reversible in most patients (in that if the medication is stopped, testosterone levels return to normal after some months). Examples of LHRH agonists are goserelin and leuprorelin (Zoladex®, Lucrin® respectively). Because these drugs may not be fully effective in reducing testosterone levels in all men, it is normal to check blood testosterone levels some months after starting the hormone or when they are no longer working. Unless you choose a form of androgen deprivation called intermittent androgen ablation (described on page 11), it is normal to continue this form of androgen deprivation indefinitely.

FLARE PHENOMENON

One temporary effect of using one of the LHRH agonist is called 'flare'. Specifically, when an LHRH agonist (an agent which causes stimulation) is first started, it can cause a rise in the pituitary hormone LH during the first 5–12 days. The LH rise in turn stimulates the testicles to make testosterone. After prolonged binding of the LHRH agonist to its receptor, it turns off production of the LH and testosterone levels then decrease. The initial surge in testosterone can be seen in a blood test.

Occasionally it briefly stimulates tumour growth (i.e. in the first month only, before the testosterone levels decline). If there are metastases (tumour deposits) close to important structures such as the spinal cord, this can trigger symptoms such as paralysis, nerve pain, obstruction of urinary flow or increase in bone pain.

Flare can be prevented by using anti-androgens which block the testosterone from getting to tumour DNA and stimulating the cell proliferation. This class of drug (e.g. bicalutamide, also known as Casodex®,) is given just before or at the same time as commencing LHRH agonist therapy.





LHRH Antagonists

LHRH antagonists (Degarelix also known as Firmagon®) work like LHRH agonists, but they reduce testosterone levels more quickly and do not cause tumor flare like LHRH agonists. They also have the advantage of less cardiovascular related side effects compared to LHRH agonists, and this may be an advantage to patients who are at higher risk of such events. It is given as a monthly injection under the skin. The most common side effects are problems at the injection site (pain, redness, and swelling). Other side effects are the same as those faced with LHRH agonists.

Anti-Androgens

Anti-androgens (e.g bicalutamide, also known as Casodex®) are taken in tablet form, and work by blocking the action of testosterone on the cancer cells, without decreasing the testosterone levels in the body. They work best when combined with LHRH Agonist therapy or an orchidectomy to achieve both a halt of testosterone production and action in

the body. If side effects from orchiectomy or LHRH agonist/antagonist are of concern, consideration can be made to take antiandrogens alone to treat metastatic prostate cancer. The anti-androgens have the advantage of less sexual and bone related side effects, as the testosterone levels and function outside of the prostate are not reduced. They do however, carry the risk of liver dysfunction, and liver function must be monitored if antiandrogens are taken. However, they are less effective than standard androgen deprivation therapy with LHRH agonist/antagonist therapy or orchiectomy. As discussed above, anti-androgens are often taken at the initiation of therapy with LHRH agonists to prevent the flare phenomenon.

Other Androgen-suppressing Drugs

Estrogens (female hormones) were once the main alternative to orchiectomy for men with advanced prostate cancer. Today, due to its possible side effects (i.e. blood clots and breast enlargement), it is less frequently used compared to LHRH analogs and anti-androgens.

MANAGING SIDE-EFFECTS OF HORMONE THERAPY

As male hormones have many functions in the body, depriving androgen can cause side effects. Common examples include loss of sex drive, erectile dysfunction, hot flushes, breast enlargement, weight gain, lack of energy and mood swings. Osteoporosis or softening of the bones is a long-term concern.

Hot Flushes

Due to dropping levels of testosterone, hot flushes may occur. You may feel heat sensations building up in your face, neck, chest and back areas. Sweating, nausea and reddening of skin typically accompany hot flushes. Stress, heat and hot liquids are some contributing factors towards causing hot flushes.

Severity of hot flushes is categorized into 3 groups.

- Mild hot flushes could last for less than 5 minutes and may make you feel warmer than usual and cause slight discomfort.
- Moderate hot flushes can cause you to feel too hot. You might sweat and find that you need to remove your clothing to feel cooler.

- Severe hot flushes can make you feel very hot and sweaty and there may be a need to change your clothes or bed sheet. They can sometimes make you feel uncomfortable and sick.

The following may help:

- If you smoke, try to stop. Speak to your healthcare professionals or join the Smoking Cessation Programme at the Health Promotion Board on how you could effectively quit smoking.
- Try to keep a healthy weight by having a healthy diet.
- Drink enough fluids per day. Aim for 1.5 – 2 litres per day.
- Reduce the amount of spicy food and caffeinated drinks.
- Keep your room temperature cool, use a fan.
- Wear loose cotton clothes.
- Use light cotton bed sheets. If you perspire a lot at night, use a cotton towel on top of your sheets that you can change easily.
- Take cooler showers.

A number of drugs can be used to treat hot flushes, including low dose of Androcur®, progestins, some anti-depressants



drugs called SSRIs (selective serotonin reuptake inhibitors), and small doses of oestrogens. Some alternative treatments reported to be helpful include acupuncture, soy products (probably for their phyto-oestrogen content) and vitamin E, or even drinking an ice cold drink when you feel a hot flush coming on. Most drugs have their own set of side effects and so the benefit of these treatments needs to be balanced against any new side effect they may cause.

Sexual Problems

Sexual problems such as include erectile dysfunction and a decreased interest in sex (libido) and intimacy may arise. These side effects may affect men and how they feel about themselves including relationships with their spouses.



Loss of libido – hormone therapy will change your sex drive and may mean you have less interest in sex. This is because hormone therapy lowers your level of testosterone. Other physical and emotional factors can also affect how you feel about sex. Feeling depressed, anxious and tired are how some men describe feeling. Tell your doctor if you need to speak to someone about this.

Erection problems – hormone therapy can cause problems getting or keeping an erection. Having less interest in sex can also play a part. You can be referred to a specialist service. There are different treatments for erection problems available. They include oral medications called PDE-5 inhibitors e.g. Viagra®, Cialis®; penile injections, vacuum erection devices and insertion of penile implants.

Bone Pain and Fractures

Testosterone helps to keep bones strong. Long term hormone therapy may cause your bones to gradually lose their bulk. This can happen within 6 to 12 months after starting treatment. The amount of bone loss may increase the longer you are on treatment. Factors such as age and the timing hormone therapy administered on a patient can introduce adverse effects. For instance, older men who receive hormone therapy are more likely to sustain a higher number of bone fractures than those who not on the treatment.

It is recommended to have a bone density scan every one or two years and supplementary vitamin D and Calcium for men on hormone therapy.

These are a few lifestyle changes that may help reduce your risk:

- Eat calcium rich foods such as dairy, tofu, sardines (with bones).
- Absorb vitamin D from the sun. About 15 minutes of mid-day sun exposure,



2 to 3 times a week. You may also take calcium and vitamin D supplements.

- Cut down on smoking and alcohol, which increases the risk of osteoporosis.
- Regular exercise keeps you strong and prevents falls which could lead to bone fractures. Walking, swimming and using light weights are recommended. Enrol in Singapore Cancer Society's Resistance Exercise Programme geared towards Prostate Cancer patients undergoing Hormone Therapy.
- Keep a healthy weight. Men who are underweight have a higher risk of bone thinning.

Note: For more information, please refer to pages 20 – 23 in the **For Prostate Cancer Patients – All About Your Diet** booklet. Singapore Cancer Society conducts a weekly resistance exercise programme free of charge for patients called the **Man Plan Exercise Programme**. It is highly recommended for men undergoing hormone therapy.

Anxiety and Depression

Men on hormone therapy may be prone to frequent mood changes. Anxiety and depression may settle in and affect you immensely. Coping with them may take the toll on you and affect your day-to-day life. Research shows that men on hormone therapy treatment are more prone to anxiety and depression than men who undergo other treatments.



Memory function may also be affected due to depression and low testosterone levels.

It is important to identify these problems early and seek a consultation with a specialist who can help provide you

with appropriate coping strategies or medical support. It will be also better for you to keep yourself engaged in activities, be they social or recreational as well as regular exercise. They could give a boost to your well-being and how you feel.

Fatigue

Fatigue is common with men who are undergoing hormone therapy. Your muscle loss, mood changes and anaemia might also be contributing factors. Fatigue may cause you to lose interest or energy to continue with your normal daily activities. However, exercise can be a helpful remedy as body muscle mass and fitness can be improved thereby helping you sustain energy.

Hormone therapy can cause extreme tiredness. Some men find that it affects their daily life. Fatigue can affect energy levels, motivation and emotions. Some men find that tiredness can come on quite suddenly – for example, when you are driving. These are a few ways to manage fatigue:

- Maintaining an active lifestyle by exercising regularly.
- Organise your day by prioritising important tasks to be done in the morning when you are feeling most energetic.
- Keep a regular sleep schedule so that you can get sufficient rest. Do not lie in bed or sit in a chair more than you

in bed or sit in a chair more than you have too. Too much rest can lower your energy levels. In other words, the more you rest, the more tired you will feel.

- Stick to a healthy diet.

Note: For more information, please refer to pages 7 and 14 of the booklets **For Prostate Cancer Patients – Your Emotional Well-Being** and **For Prostate Cancer Patients – All about Your Diet** respectively.

Metabolic Changes

As hormone therapy causes metabolic changes of fat and sugar in the body which subsequently increase the risk of cardiovascular disease and diabetes. Exercise and careful monitoring of your levels of bad cholesterol (low density lipoprotein cholesterol) and fasting insulin (sugar levels) by your doctor are recommended to minimize and anticipate these changes.

Gynaecomastia

Hormone therapy may cause swelling and tenderness in the chest area. This is caused by the effect that hormone therapy has on the balance of the hormones oestrogen and testosterone in the body. The amount of swelling can vary from a small amount to a more noticeably enlarged breast. Tenderness can affect one of both sides of the chest and can range from mild sensitivity to ongoing pain.

It is less common if you are taking an LHRH agonist or GnRH antagonist, have had surgery to remove the testicles, or are having combined hormonal therapy. To relieve the discomfort, a warm compress may help to relieve tenderness and swelling. Medication such as Tamoxifen controls oestrogen levels and could be a remedy to prevent breast growth.

Amnesia and Poor Concentration

Feeling tired, stressed or anxious can all affect your memory or ability to concentrate. It can also happen as you get older too. You may find some of these tips useful:

- Keep a list or reminder notes.
- Concentrate on doing one thing at a time.
- Avoid things that distract you when you need to concentrate on something.
- Keep your mind active (i.e. doing crosswords, playing mahjong or other games).
- Gentle physical activities might also help.
- Make sure you get enough rest.

CHEMOTHERAPY

Chemotherapy might be offered when the prostate cancer is not responding well to hormone therapy. This is called castrate resistant prostate cancer. Unlike other kinds of cancer, prostate cancer is not usually treated with chemotherapy at an early stage. It will not get rid of prostate cancer but it can help control or delay symptoms such as pain.

Chemotherapy can be in the form of a single drug or a combination of drugs.

Chemotherapy can cause side effects in different parts of your body. You will need to be fairly fit to have chemotherapy because the side effects are sometimes

hard to deal with. They occur because chemotherapy also kills normal cells but these cells will regrow, so the side effects are temporary. It usually goes away once treatment is completed. If your doctor thinks you might benefit from chemotherapy, they will do some tests to make sure it is suitable for you.

Common Side Effects

Not every patient will experience the same side effects. Below listed are the common side effects that you may experience.

Common Side Effects	
Alopecia (Hair Loss)	Fatigue
Anaemia	Infection
Arthralgia and Myalgia (Joint and Muscle Aches)	Kidney and Bladder Effects
Bleeding	Mucositis (Sore Mouth)
Constipation	Nausea and Vomiting
Diarrhoea	Numbness/Tingling Sensation in Hands and Feet
Effects on Skin and Nail Changes	

MANAGING SIDE-EFFECTS OF CHEMOTHERAPY

Alopecia

Alopecia or Hair Loss occurs with certain chemotherapy and it usually begins 10 to 21 days after commencement of chemotherapy. Hair on the head is usually loss first, but hair over the entire body can also be lost as time goes by. There will be regrowth of hair when chemotherapy regime is finished.

How Does Hair Loss Affect You?

Hair loss may change the way you feel about yourself but always remember that hair loss is a temporary side effect of chemotherapy. It is perfectly normal for you to feel angry or depressed about this loss. Talking to someone on how you feel can help you to feel better.

How to Manage Hair Loss?

- Hair loss may be inevitable. You could get a wig or a cap to cover up before you commence on your treatment. Choosing a wig before you start on your treatment allows you to find a good match of your original hair color and style.
- Have your hair trimmed short. A shorter style will make your hair look thicker and fuller. It also makes hair loss easier to manage.
- Exposed scalp can be sensitive to the

- Exposed scalp can be sensitive to the effects of sun and temperature. Do consider using a sunscreen when exposed under sunlight and a Bandana when in a colder temperature.
- Use mild shampoo and a soft hair brush.
- Avoid using hair dyes when you are on an active chemotherapy treatment.



Resources

You may wish to obtain hair wigs from preferred hair wigs shop. Alternatively, you can contact National Cancer Centre's Wig Bank managed by **Cancer Helpline** at **6225 5655** to fix an appointment for wig fitting, styling and loan of wigs.

Anaemia

Anaemia occurs when chemotherapy reduces the number of red blood cells that carry oxygen to all parts of the body. When there are too little red blood cells, body tissues do not get enough oxygen to perform their role. This condition is called Anaemia.

What are the Signs and Symptoms of Anaemia?

You may experience little or no symptoms if you suffer from mild Anaemia. When Anaemia is significant, you may experience tiredness, dizziness and shortness of breath. Do inform your doctor if you experience any of the mentioned symptoms.

How Can You Manage if You Are Feeling Tired or Experiencing Fatigue?

- Prioritise your daily activities. Choose the most important things to be done in the morning.
- Balance rest with activities and short rest/naps throughout the day (limit



nap times to 1 hour. Anything more than that makes you feel even more fatigue).

- Have a regular sleeping pattern. Have at least 8 hours of rest every night.
- Have a well-balanced diet such as:
 - High protein food such as meat, tofu, beans and eggs.
 - Food that are in iron such as red meat, tuna, dark leafy vegetables e.g., spinach and kale.
 - Drink at least 8 glasses of water unless advised otherwise by doctors.

You can also request to be referred to a dietician if you need further help in your dietary intake.



Arthralgia and Myalgia (Joint Pain and Muscle Ache)

You may experience Arthralgia (joint pain) and Myalgia (muscle ache) when on chemotherapy. This discomfort often occurs in the large joints such as the hips, knees, or the shoulders and can range from mild to severe pain.

Pain in the large joints of the arms and legs can occur any time from 48 to 72 hours after receiving chemotherapy. These symptoms may not occur with every treatment; you may experience pain after one treatment and not feel any after the next treatment.

How to Manage Joint Pain and Muscle Ache?

- Take medication prescribed by your doctor.
- Get plenty of rest and plan your activities to include rest periods.



- Heating pads may help to soothe muscle and joint discomfort. Use the heating pads with caution over short periods ranging from 5 – 10 minutes each time.
- Gentle massages may help to relieve pain and discomfort.

Bleeding

Bleeding happens when blood escapes from a blood vessel. Bleeding can happen anywhere in the body. It can happen as an open cut, bruise, bleeding piles, or it may occur inside the body (stomach, lung, brain, or bladder).

Slow bleeding has little effect. It may make you tired, weak and short of breath. Sudden bleeding can cause severe weakness, dizziness and pain.

When Does Bleeding Occur?

Chemotherapy can affect the bone marrow's ability to make platelets. Platelets are blood cells that help in blood clotting. If your blood does not have enough platelets, bleeding will not be easily stopped. As a result, you may bleed or bruise more easily than usual even from a minor injury.

How Can You Prevent Bleeding From Happening?

- Do not take any medicine without first checking with your doctor or nurse. This includes Chinese herbs, vitamins, dietary supplements.

- Do not drink any alcohol/alcohol beverages unless approved by your doctor.
- Shave using an electric razor. This minimizes cuts caused by razor blades.
- Trim and cut nails regularly.
- Use skin lotions to prevent dryness and breaks in skin.
- Use soft bristle toothbrush to clean your teeth. Stop flossing your teeth (temporarily) if you have tendency to bleed.
- Blow your nose gently. Do not dig your nose.
- Handle sharp objects (scissors, needles, knives or tools) with care so as to avoid accidental cuts.
- Avoid contact sports and activities that might result in injury.
- Do house chores with care, avoid injury.



What Are The Signs And Symptoms Of Bleeding?

Skin

- A fine rash that looks like pinpoint dots, usually appearing on the feet and legs.

Digestive System

- Blood in vomitus
- Blood in stools
- Black tarry stools

Eyes

- Bleeding into the whites of the eyes
- Inability to see normally

Urination/Genitals

- Blood in urine
- Pain or burning sensation during urination
- Unusually heavy vaginal bleeding (or any bleeding for post menopause women)

Mouth and Nose

- Blood blisters
- Bleeding from gums
- Blood-tinged saliva
- Bleeding mouth sores
- Nosebleeds

Others

Severe headaches, dizziness, increased weakness, difficulty waking up, pain in joints and muscles.

When to Seek Help?

If you have any signs and symptoms of bleeding, please call your doctor or nurse to make an appointment to seek medical advice.

Constipation

Constipation means having to push harder to move your bowel, or moving them less often than usual. Feces are dry and hard.

When Does Constipation Happen?

Constipation happens when you get less exercise, or when you eat and drink less than usual. Some medicine also causes constipation.

How Does Constipation Affect You?

Constipation can cause pain and discomfort. Maintaining good bowel habits and routines are important to reduce constipation. Your bowel should move everyday with little or no strain.

Preventing Constipation:

- Eat a well-balanced diet with plenty of fibre. Good sources of fibre are fruits, vegetables, legumes, and whole-grain bread and cereal (especially bran).
- Drink 6 to 8 glasses of water and other fluids a day (unless your doctor has you on a fluid-restricted diet). Fibre and water work together to keep your bowel movement regular.



- Avoid caffeine. It can be dehydrating and causes hard stools.
- Exercise regularly. If you are unable to increase your exercise, tighten and relax the muscles in your abdomen and move your legs often while sitting or resting in bed.
- Try to move your bowel at your usual time. Many people find it easier to move bowels after having breakfast.
- Go to the bathroom when you feel the urge.

When to Seek Help?

Inform your doctor or nurse if you do not have bowel movement for more than three days. You may need to take laxatives or stool softener or use enema, but do not use these remedies unless you have asked your doctor.



Diarrhoea

Diarrhoea is defined as more than 2 times of loose or watery stools per day. It can be caused by your cancer treatments.

How Can Diarrhoea Be Controlled?

- Drink plenty of fluids to replace those you have lost through diarrhea. Mild clear liquids such as water, clear soup, rice water or sports drinks are the best. Drink them slowly, and make sure they are warm in temperature.
- Eat small frequent meals.
- Avoid high-fiber foods e.g., fruits, vegetable, whole-grain breads and cereals, beans, nuts.
- Avoid pickled and spicy foods.
- Avoid coffee, tea, alcohol and sweets. Stay away from fried or oily food.
- Avoid milk and milk products if they make your diarrhea worse.
- Some foods tend to make your stools "firmer" so try these instead
 - Rice and pasta
 - Potatoes without the skin
 - Dry cracker biscuits
 - Baked foods
 - White bread
 - Pretzels
 - Bananas
 - Chicken, beef or fish

When to Seek Help?

- Having diarrhea that is uncontrolled and/or does not stop even when you take anti-diarrhoea medication.
- Having a fever.
- Have blood in stool.
- Are not able to retain fluid.
- Notice your urine becoming darker in colour.
- Become dizzy.

Effects on Skin and Nails

Minor skin problems may occur while you are receiving chemotherapy. Possible side effects include redness, itching, peeling, dryness and acne. Your nails may become brittle or cracked or develop vertical lines or bands.

Protecting Your Skin and Nails:

- Protect your nails by wearing gloves when washing dishes, gardening or performing other work around the house.
- Use nail oils or moisturizing creams if your nails are flaking.
- Don't worry about marks on your nails as they will grow out in time.
- Cover marked nails with nail varnish if you like but avoid quick drying ones as they can make your nails even drier.

Fatigue

Fatigue is a condition of being very tired as though no energy at all. People sometimes think they are just being lazy or depressed.

What Are the Symptoms of Fatigue?

- Weakness
- Dizziness
- Difficulty concentrating
- Tiredness

How to Manage Fatigue?

- Go to bed at a regular time.
- Do things that relax you before bedtime so that you can sleep better.
- Take short naps during the day.
- Take a short walk with relative or friends when you have energy. Rest when energy is low.
- Take well-balanced meals and drink sufficient fluids.
- Do your work when you tend to have most energy. Finish only what you can, delegate the rest to others.
- Ask for help when you need it. Ask your family and friends to help with things like cooking, shopping and house work.



- Check with your doctor whether you need to do anything to protect your skin.
- Tell your doctor if you have any rashes or itching.
- Water containing chlorine can make rashes worse. Avoid swimming if you have a rash.
- If your skin gets dry or itchy, apply moisturisers/lotions.
- Wear a sunscreen lotion with at least SPF 15 if you are going out in the sun – remember to put sunscreen on your head if you have lost any hair.
- If you develop acne, try to keep your face clean and dry by using mild medicated creams or soaps.

When to Seek Help?

- Sudden or severe itching, your skin breaks out in a rash or hives.
- Wheezing or any other trouble breathing.

Infection

Risk of infection due to chemotherapy or side effects of chemotherapy is common. The body protects itself by using white blood cells to destroy germs after they enter the body. When the number of white blood cells is lowered from chemotherapy, you become more prone to infection. If you ignore the signs of infection, you may become very ill.

How you can minimize the risk of getting an infection:

- Shower daily.
- Practice good oral hygiene – brushing your teeth twice daily & flossing once a day.
- Wash hands before eating and after using the toilet. Proper hand washing minimizes cross contamination of germs.
- Stay away from large crowds and anyone feeling unwell. Wear a mask for protection.



- Avoid people who have recently received immunizations, such as vaccines for flu, measles, mumps & rubella.
- Avoid uncooked food.
- Avoid constipation & straining. Take more fruits and vegetables to ease bowel movement. Seek advice from your doctor if you have problems with your bowels even after amending your diet.
- Avoid keeping fresh flowers and live plants in your home/rooms.
- Avoid contact with animal faeces. If you have to, wear a mask for protection.



What Are the Signs and Symptoms of Infection?

- Fever temperature 38°C or higher.
- Chills and shivers.
- Sore mouth or white coating in the mouth or on the tongue.
- Cough with or without sputum production.
- Pain or burning sensation during urination or cloudy urine.
- Redness or swelling on the body.
- Swelling, redness, pain, itch or discharge from the catheter site.
- Difficulty breathing or painful breathing.
- Persistent vomiting or diarrhea.
- Vomiting blood, blood stained or dark brownish vomitus.
- Bleeding that does not stop after applying pressure.
- Severe abdominal discomfort or cramps.



- Very little or no urine at all for 12 hours or longer.
- An overall feeling of being sick, even if you do not have a fever or other signs of infection.
- Any other abnormal and/or prolonged symptoms, which causes concerns.

If you suspect what you are feeling are not the side effects of chemotherapy but rather an infection, inform your doctor.

Kidney and Bladder Effects

Some chemotherapy may irritate the bladder or may cause temporary or permanent damage to the kidneys.

Drinking at least 1.5 liters of fluid a day (if you are not on any fluid restriction) helps to ensure good urine flow and help prevent problems. This is especially important if the drugs are among those that affects the kidneys and bladder.

Mucositis (Sore Mouth)

Mucositis or Sore Mouth is the painful inflammation and ulceration of the mucous membranes lining the digestive tract. It is usually an adverse effect of chemotherapy and radiation therapy.

How to manage a sore mouth:

- Examine your mouth once a day for ulcers, redness or patches.
- Keep your mouth clean and moist at all times:
 - Brush your teeth after each meal with a soft toothbrush.
 - If your mouth is too sore to use a toothbrush, use an oral swab. An oral swab is a cleaning stick with a soft sponge tip. Hold the swab with the grooves at a 90-degree angle to the gum line. This allows the sponge to reach in between the teeth.
 - Avoid flossing when there is pain/bleeding.
 - Wear your dentures only during meals. Remove them after. Clean & store them in an airtight container.
 - Do not rinse/gargle with mouthwash that contains alcohol. Ask your nurse, pharmacist to recommend a mild mouthwash that can prevent mouth sores.
- Use a homemade salt mouthwash if your mouth is sore. Mix half teaspoon of salt to 250mls of water. Rinse 2 hourly for 1–2 minutes. If your mouth is very sore, rinse hourly.
- Moisturize your mouth and lips with a water-based mouth moisturizer. Coat the inner lining of your mouth & lips.
- If your mouth is very dry, sip water frequently throughout the day (unless advised otherwise by your doctor). Alternatively, chewing sugarless gum/hard candies and artificial saliva helps.

Avoiding the following will be helpful for your sore mouth:

- Chewing tobacco
- Smoking cigarettes/cigars/pipes
- Alcoholic drinks
- Mouthwash that contains > 6% alcohol
- Food and drinks that are hot, spicy or sour



Nausea and Vomiting

Nausea (feeling sick in your stomach) and/or vomiting (throwing up) may happen from your chemotherapy. Nausea and vomiting are usually the worst on the day of your treatment. Sometimes nausea and vomiting can last for 3 or more days after chemotherapy. Nausea and vomiting may be mild or severe. Frequent vomiting may cause dehydration and cause the body from losing salts. It may affect your kidneys or bladder.

Preventing nausea and vomiting:

- Take anti-vomiting medications regularly. These help to control the symptoms.
- If you are vomiting and are unable to take the medication, inform your doctor/nurse.
- If the anti-vomiting medications did help to lessen the nausea and vomiting but not as much as you would like to, inform your doctor/nurse.

How to manage nausea and vomiting:

- Eat small frequent meals throughout the day.
- Eat and drink slowly.
- Take bland foods such as porridge, noodle soup. Dry crackers and sour candies may be helpful too.
- Eat food at room temperature. Odors from hot food may make nausea worse.

- Avoid fatty, fried, spicy or very sweet foods. These may make nausea worse.
- Avoid eating a few hours before treatment if nausea occurs during chemotherapy.
- If possible, have someone else make the meals when feeling nauseated.
- Adopt relaxation techniques, deep breathing exercises to help you be in control and lower anxiety levels.
- Always rinse your mouth after vomiting.

Seek help immediately from your doctor or the emergency department if:

- Nausea > 2 days, or if nausea keeps you from doing things that are important to you.
- Nausea and vomiting that are not controlled by the anti-vomiting medications.
- Vomiting more than once/twice for 2 straight days.



- Being unable to keep any food/fluid down.
- Losing 1kg in a day from vomiting (this is from losing water).
- Vomiting and your urine is dark yellow from not being able to keep any food/fluids down. Not going to the bathroom as often as you usually do.
- Vomiting and feeling light headed/dizzy/confused.
- Vomitus looking like coffee ground fluid.
- Using gloves to grasp hot or sharp objects. This prevents injuries.
- Use of handrails, non-slip socks/shoes/mats in the home and bathroom. This avoids falls.

Seek help immediately from your doctor if you have the following signs and symptoms:

- A feeling of numbness or “pins and needles” in your hands and feet
- Pain in your hands or feet
- Loss of balance, clumsiness and/or walking problems
- Ringing in your ear
- Difficulty hearing
- Changes in your vision
- Difficulty picking up an object or buttoning your clothing
- Any other changes

Numbness and Tingling Sensation

One of the possible side effects from receiving chemotherapy is damage to the nerves. Often in the hands and/or feet. This presents in a feeling of “pins and needles” or numbness.

The numbness may cause you to have difficulty buttoning your clothing or picking up a coin. Although it is not possible to prevent early nerve damage, it is possible to prevent it from worsening. It is important to highlight to your doctor when this happens/worsens. The treatment plan can be evaluated to prevent further nerve damage.

Managing Numbness or Tingling Sensation:

- Going for physical therapy/rehabilitation to minimize loss of function.

After Chemotherapy

After completing the course of chemotherapy, you will have regular blood tests to monitor PSA levels and how well you are coping with the side effects. Sometimes PSA levels can rise after starting chemotherapy, then come back down again. A rise in PSA does not mean that the chemotherapy is not working.

RESISTANCE EXERCISE PROGRAMME

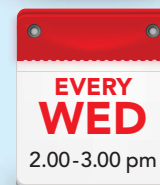
Resistance exercises have been found to help reduce fatigue, improve quality of life and muscular fitness in men with prostate cancer receiving hormone treatment. Individuals have the option of partaking in such activities by SCS.

At SCS, these classes are conducted by trained therapists on the following schedule:



Singapore Cancer Society Multi-Service Centre

9 Bishan Place #06-05
Junction 8 Office Tower
Singapore 579837



SCS Rehabilitation Centre

52 Jurong Gateway Road
JEM Office Tower #08-04
Singapore 608550.



Singapore Cancer Society Multi-Service Centre

9 Bishan Place #06-05
Junction 8 Office Tower
Singapore 579837

Participants are provided with a learner's video & resistance bands, which can be adjusted to keep pace with muscular development. There are 3 levels (Beginner, Intermediate & Advanced) to this 25-30 minutes programme.

Classes are conducted free of charge to SCS Support Group Members. To sign-up or make an appointment, kindly email: elaine_loh@singaporecancersociety.org.sg or call: **6499 9147** with your details (full name, contact number and course name).



SCS Walnut Warriors Support Group

Presently, participants of the resistance exercise programme comprises largely of members from the SCS Walnut Warriors Support Group – for prostate cancer patients and survivors. Hence, new members can further benefit from being in a Support Group that actively engages and connects with its members through a systematic and sustainable programme, via the five main components of: education, engagement, empowerment, enrichment classes and psycho-social. The Walnut Warriors also continue to draw new members, occasionally accompanied by their caregivers/spouses. Daily activities include group sharing, new skills, recreational activities and enrichment classes.




Monitoring Charts
for prostate cancer patients
on hormone therapy

PARAMETERS MONITORING CHART

DIAGNOSTIC PHASE		TREATMENT PHASE					
Patients on Hormone Therapy	Baseline (Before treatment)	1st Visit	2nd Visit	3rd Visit	4th Visit	5th Visit	6th Visit
Injection Date (DD/MM/YY)							
Blood Pressure							
Weight (kg)							
Abdominal Girth							
Body Mass Index (BMI)							
Hot Flushes • Fair • Moderate • Severe • None							
Pain Wong Baker Face Scale 0 1 2 3 4 5 6 7 8 9 10 No Hurt Little Hurt Hurts Hurts Hurts Hurt Little More Even Whole More Lot Bit More Lot							
Location of Pain							
Remarks							

PARAMETERS MONITORING CHART

DIAGNOSTIC PHASE		TREATMENT PHASE					
Patients on Hormone Therapy	Baseline (Before treatment)	7th Visit	8th Visit	9th Visit	10th Visit	11th Visit	12th Visit
Injection Date (DD/MM/YY)							
Blood Pressure							
Weight (kg)							
Abdominal Girth							
Body Mass Index (BMI)							
Hot Flushes <ul style="list-style-type: none">FairModerateSevereNone							
Pain <div>Wong Baker Face Scale</div> <div> 0 1 2 3 4 5 6 7 8 9 10 No Hurts Hurts Hurts Hurts Hurts Hurts Hurts Hurts Hurts Hurts Hurt Little More More More More More More More More More Bit</div>							
Location of Pain							
Remarks							

BLOOD RESULT MONITORING CHART

DIAGNOSTIC PHASE		TREATMENT PHASE					
Patients on Hormone Therapy	Baseline (Before treatment)	1st Visit	2nd Visit	3rd Visit	4th Visit	5th Visit	6th Visit
Injection Date (DD/MM/YY)							
PSA							
Testosterone							
Cholesterol							
HDL Cholesterol							
LDL Cholesterol							
Triglyceride							
Alkaline Phosphatase (ALP)							
Potassium							
Creatinine							
Fasting Blood Glucose							
HBA1C							
Calcium							
Vitamin D							
Bone Mineral Density (BMD)							

*Your doctor may not order all the tests stated. Tests will be ordered according to individual needs.

BLOOD RESULT MONITORING CHART

DIAGNOSTIC PHASE		TREATMENT PHASE					
Patients on Hormone Therapy	Baseline (Before treatment)	7th Visit	8th Visit	9th Visit	10th Visit	11th Visit	12th Visit
Injection Date (DD/MM/YY)							
PSA							
Testosterone							
Cholesterol							
HDL Cholesterol							
LDL Cholesterol							
Triglyceride							
Alkaline Phosphatase (ALP)							
Potassium							
Creatinine							
Fasting Blood Glucose							
HBA1C							
Calcium							
Vitamin D							
Bone Mineral Density (BMD)							

*Your doctor may not order all the tests stated. Tests will be ordered according to individual needs.

FOLLOW-UP VISITS

	Name	Date
Urologist		
Radiation Oncologist		
Medical Oncologist		
Nurse Specialist		
Palliative Care		
Allied Health – Social Worker, Counsellor		

*You may not be seeing all the doctors/allied health stated. Referrals will be made according to individual needs.

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*You may not be seeing all the doctors/allied health stated. Referrals will be made according to individual needs.



Questions For Doctors

[illegible][illegible]

WORDS OF ENCOURAGEMENT

“CANCER IS A WORD, NOT A SENTENCE.”

John Diamon

“WHAT CANCER CANNOT DO?”

It cannot cripple LOVE

It cannot shatter HOPE

It cannot corrode FAITH

It cannot destroy PEACE

It cannot kill FRIENDSHIP

It cannot suppress MEMORIES

It cannot silence COURAGE

It cannot invade the SOUL

It cannot steal eternal LIFE

It cannot conquer the SPIRIT”

“Cancer may have started the fight,
BUT I WILL FINISH IT.”

“Never give up, NEVER surrender!”

Acknowledgements

This booklet was developed by Singapore Cancer Society (SCS) with contributions from the member of the SCS Prostate Cancer Survivorship Programmes Advisory Panel.

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