Systemic therapy is a type of cancer treatment that travels through the blood to reach cells all over the body.

Systemic therapy includes:
- Chemotherapy drugs (also called chemo) that kill, stop or slow the growth of cancer cells.
- Hormones that change hormone levels to stop or slow cancer growth.
- Biological therapies that stop or slow cancer growth.

**How does systemic therapy work?**

Systemic therapy may be your only cancer treatment. Or you may also get it along with surgery and/or radiation therapy.

Systemic therapy can:
- Slow or stop cancer growth.
- Reduce the risk of cancer coming back.
- Kill cancer cells that stay after treatment, have come back or spread to other parts of your body.
- Shrink a tumor before other treatments are given.
- Ease symptoms, such as pain.
- Help other treatments work.

Your health care team will decide and explain which systemic therapy will work best for you.

**How will I get systemic therapy?**

There are several ways systemic therapy is given:
- By mouth in a pill, capsule, or liquid form.
- By needle (liquid drugs will go right into your skin or muscle).
- By needle into a vein (liquid drugs will drip into a vein). This is called an intravenous (IV) infusion.

Systemic therapy may be given in cycles. A cycle means you will receive treatment for a period of time, such as a few weeks, and then take a break from treatment. Then you will begin again, followed by a break, and so on. Most cycles are 3 or 4 weeks long. Your health care team will tell you how many cycles you need.

Not all the systemic therapy will be used up in your body. Some of it will still be in your body fluids. In order to protect your family, you will need to follow your doctor or nurse’s advice for a short period of time. Your doctor or nurse may give you more details about this, depending on your type of treatment.
Where do I get treatment?
Where you receive your treatment may depend on how it is given. For example, some people get systemic therapy in the hospital. Others have it at a cancer clinic, in their doctor’s office, or at home. Your doctor or nurse will discuss the choices with you.

How long will my systemic therapy treatment last?
How long you have systemic therapy depends on:
• The type of cancer you have.
• What type of therapy you will be taking.
• How your cancer responds to the therapy.
• How well you feel when you are getting therapy.

Most people have treatment for a set period of time, such as 4 to 6 months. Your doctor will discuss this with you. You will get your treatments once a day, once a week, or once a month. Your doctor and nurse will see you during your treatments to make sure you are able and willing to continue.

What are the side effects of systemic therapy?
The systemic therapy drugs are supposed to either kill or slow the growth of cancer cells. However, they can also damage your healthy cells (such as hair and blood cells). This can cause side effects. Some people do not have any side effects. Other people have a few or many side effects. No one knows exactly which side effects you will have until you begin your treatment.

Your side effects depend on the type of systemic therapy you get and how your cancer affects your body.

The most common side effects are:
• Feeling very tired (fatigue).
• Losing hair.
• Low blood cell levels, such as anemia or neutropenia (low white cell count).
• Feeling like you might throw up (nausea).
• Throwing up (vomiting).
• A sore mouth or sore throat.
• Not feeling hungry OR feeling very hungry.
• Changes in how you feel about sex.
• For women, changes in their period (menstrual cycle).
• Not being able to have a bowel movement (constipation).
• Having diarrhea.
• Feeling numb or tingling in your hands or feet.
• Pain.

Most of your healthy cells will go back to normal after treatment. In fact, for most people, the side effects go away soon after the treatment ends.

While you are having systemic therapy, your doctor will likely prescribe medicine to reduce your side effects. Your doctor, pharmacist, or nurse will give you more details about the side effects that you might have, and how to cope with them.

Please keep in mind that side effects are NOT a sign of how well the drugs are working against your cancer.
What is the difference between systemic therapy and radiation treatments or surgery?

The main difference is that systemic therapy treats the whole body rather than just one part of it. It can also be used to kill cancer cells that have spread throughout your body.

How can I cope with my cancer and systemic therapy?

It is normal for you and your family to have many feelings at this time. Talk with your doctor, nurse, or someone else on your health care team about your feelings. Your doctor and nurse are there to answer your questions and to help you.

Questions to ask your health care team

- Why is systemic therapy the best treatment for me?
- What are the benefits and risks of chemo for me?
- How and where will I get my systemic therapy?
- Can I have someone with me during my treatments?
- How will we know if the treatment worked?
- Will I be able to go to work when I’m having systemic therapy?
- Can I keep doing things that I used to do? What should I not do?
- Will the treatment affect whether or not I can have children?
- Can I travel or take a vacation when I’m having treatment?
- How often will I see my cancer doctor during my treatment?
- What happens when my systemic therapy ends?
Looking for more information on this topic?

You can contact the Canadian Cancer Society at www.cancer.ca or call the Cancer Information Service of the Cancer Society at 1-888-939-3333. You can also contact your local public library for books, videos, magazine articles and online health information. For a list of public libraries in Nova Scotia go to http://publiclibraries.ns.ca.

For more information visit Cancer Care Nova Scotia’s website www.cancercare.ns.ca