In this section, you will learn about:

- What is drug therapy (systemic therapy)?
- What to expect while in the clinic
- Side effects
- When to call for help
  - Fever card while on chemotherapy
  - Immune-mediated adverse events while on immunotherapy
- Drug therapy and safety in the home
- Pharmacy - Medication Coverage
- Complementary and alternative therapies
- Clinical Trials
Introduction to Drug Therapy

What is Drug Therapy (Systemic Therapy)?

Drug therapy, also known as systemic therapy, spreads throughout the body to treat cancer cells. This can include chemotherapy, immunotherapy or targeted therapy. The type of cancer you have determines the medication(s) you receive. Your doctor will discuss your treatment plan with you.

- **Chemotherapy** uses one or more drugs to destroy or control the growth of cancer cells. Chemotherapy drugs are designed to kill all fast-growing cells including cancer cells and some of your own healthy cells.
- **Immunotherapy** drugs work by getting your own immune system to recognize, find, and kill only specific cancer cells, not your healthy cells.
- **Targeted therapy** drugs target specific molecules (e.g. proteins) inside cancer cells or on their surface to stop them from growing and dividing.

How is Drug Therapy Given?

- Through a vein (Intravenous - IV)
- By mouth (oral)
- If you will be receiving your drug therapy in a different way, your health care provider will discuss it with you.

Is Drug Therapy Painful?

- No. It does not hurt to get drug therapy.
- If you feel burning or notice redness or swelling in the area of the needle, tell your Nurse immediately.
- When you are home, if you feel pain or notice redness or swelling in the arm where you received drug therapy, call the Telephone Triage Nurse immediately. If it is after hours, call CAREChart@home nursing line or go to the Emergency Department.

Can I Take Other Medications While I am on Drug Therapy?

- Some medication and natural health products can affect systemic therapy.
- Some systemic therapy medication can affect other medications you take.
**What to Expect While in the Clinic**

- Most patients get drug therapy treatment on a separate day from their doctor’s appointment.
- You will check into the clinic with the receptionist.
- You will be given a pager.
- You will be asked to complete your symptom screen at the kiosk.
- Your doctor or nurse will request blood work when it is required. If blood work is requested, you will be given a paper requisition. You will go to the lab as directed by the clerk. This may be in LRCP or elsewhere in the hospital.
- If an x-ray is requested, you will be given directions to the x-ray department. After you complete the x-ray, you will return to the clinic. Let the receptionist know you are back.
- There are volunteers in the drug therapy suite to provide comfort and support to you and your family.

**What to Bring:**

Some treatments are very short but others can take up to 8 hours. Your nurse will let you know how long you will be. Come prepared with what you need for that length of time.

- A list of all the medicines, vitamins, herbs, and minerals you take
- Medicine that you normally take during the day for other conditions (e.g., pain, blood pressure, etc.)
- A list of your questions (if you have any)
- Insulin, if you are diabetic
- Lunch or snacks
- Books, magazines, or iPad
- Your insurance forms, including drug plan information
- Debit or credit card to pay for medicine that you will bring home
- Dress comfortably and in layers in case you get hot or cold
- Have a driver to take you home

**Remember**... Bring your medication list, including natural health products, to your appointments. Keep this list with you at all times in case of an emergency.
When you arrive for treatment:

1. Check-in at reception. You will be given a card with a number on it. You may have a seat in the waiting area until your appointment time.

2. The nurse will greet you at the door and take you to a bed or chair where you will receive your drug therapy treatment. A visitor may join you.

3. The nurse will go over the information about your drug therapy treatment with you. This is a good time to ask questions about your treatment and possible side effects.

4. The nurse will begin your treatment. This may include putting in an IV.

Remember... only one person can be with you while you are having treatment. The systemic therapy suite is not a safe place for infants and children under the age of 16.
Side Effects While on Drug Therapy

- You may not have any side effects. Everyone is different.
- In most cases, you will be able to manage the side effects on your own.
- Side effects usually go away after you finish your treatment.
- Keep track of any side effects that you may have in a diary, on a calendar, or in a notebook.

More Information on Side Effects

There are information sheets available from your health care team on most side effects. They can go over these in detail with you while in clinic. Side effects vary depending on the specific drug(s) you are given.

See the ‘Side Effects’ section for common side effects associated with each treatment and where to go for more information.

Side Effect Timeline Example

<table>
<thead>
<tr>
<th>Chemo Day</th>
<th>Day 5</th>
<th>Day 10</th>
<th>Day 15</th>
<th>Day 20</th>
<th>Day 25</th>
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<tbody>
<tr>
<td>Fatigue</td>
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<td>Neutropenia/ (emergency)</td>
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<tr>
<td>Nausea/ Vomiting</td>
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<td>Mouth Sores</td>
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<tr>
<td>Hair Loss</td>
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</table>
When to Call for Help

If you experience any changes in your condition listed below, call:

- LRCP Telephone Triage Nurse at 519-685-8600 and press ‘1’ for patient, then ‘3’ to talk to a nurse (Monday to Friday 8:30 a.m. to 4:00 p.m.)
- CAREChart@home after hours nursing line at 1-877-681-3057 (Monday to Friday 4:00 p.m. to 8:30 a.m. and 24 hours on weekends and statutory holidays)

- Fever of 38°C (100.4°F) or higher
- Nausea lasting for more than 2 days (48 hours) even after taking anti-nausea medicine
- Vomiting that lasts more than 1 day (24 hours)
- Constipation that lasts for more than 3 days (72 hours) and is not relieved by laxatives
- Diarrhea that lasts more than 2 days (48 hours)
- Cankers or sores in your mouth

If you experience any of the following conditions, call 9-1-1:

- Chest pain or breathing problems
- Increased pain or any unusual, strong, or new pain, especially in the spine
- Loss of feeling or movement in your arms or legs
- Bleeding that will not stop
- Confusion or increased sleepiness
- Seizures and convulsions
- Sudden swelling or pain in your arms or legs
- Arms or legs which suddenly feel hot or cold to the touch

If at any time you are concerned about your symptoms or are unable to contact the nursing lines, call your family doctor or Telehealth Ontario’s toll-free # at 1-866-797-0000. If it is an emergency, seek medical attention at your nearest Emergency Department.
Fever While on Chemotherapy

Keep a good quality thermometer with you.

If you have a fever of 38°C (100.4°F) or higher:

If you go to your family doctor or the Emergency Department, tell staff that you are receiving chemotherapy and that you have a fever. **Show them your fever card.**

DO NOT take acetaminophen (e.g. Tylenol®) for your fever until you speak with a doctor or nurse.

Having a fever is a medical emergency. Have a good thermometer that you can read and understand.

Immune-mediated Side Effects While on Immunotherapy

Your provider will tell you what side effects to watch out for, depending on what medication you received. Write these down if you are not given an information sheet.

If you go to your family doctor or the Emergency Department, tell staff that you are receiving immunotherapy and what your side effect is. **Show them your immunotherapy card.**
Handling Your Drug Therapy Medication Safely at Home

Special safety measures are needed to help prevent the chemotherapy and some immunotherapy and targeted therapy drugs from touching others by mistake. Your provider will tell you if the information below applies to your immunotherapy or targeted therapy treatment. Equipment and items (e.g. needles) that touch systemic therapy medicine are seen as contaminated and hazardous.

The sections below provide information on how to safely handle drug (systemic) therapy and the waste from drug therapy in your home.

How does the body get rid of drug therapy?

The body gets rid of drug therapy in the urine and the stool. Regardless of how you take this medicine, it can stay in your body for hours and sometimes even days after the treatment is finished. Traces of drug therapy may also be present in vomit, vaginal fluid, and semen.

Pregnant women should never touch or handle drug therapy medication and contaminated waste.

What should I do when I go to the bathroom?

You may use the toilet as you normally would. However, for the first two days (48 hours) after receiving drug therapy, you should flush the toilet two (2) times with the lid closed when you go to the bathroom. This is to make sure that there is no waste left in the toilet.

Sharing the bathroom with your family is safe as long as all urine and stool are cleaned from the toilet. Septic and sewer systems are not affected.

Wash your hands well with soap and water afterward, and wash your skin if urine or stool gets on it.

If you use a bedpan, urinal or commode, wear gloves when cleaning or emptying containers. Wash the container daily with soap and water.
What should I do if I do not have control of my bladder or bowel?

Use a plastic-backed pad, a disposable diaper or a sheet to absorb urine or stool. Change your soiled clothes right away and wash your skin with soap and water.

If you have an ostomy, gloves need to be worn when emptying or changing bags. Put all disposable ostomy supplies and gloves into two plastic bags and throw away with your regular garbage.

How do I care for my skin?

Drug therapy can irritate the skin. If you accidentally touch drug therapy medications, carefully wash the area with soap and water, then dry. If your skin is irritated or red for more than one hour, call your doctor.

To prevent drug therapy medications from touching the skin, wear gloves when working with drug therapy medication, equipment, and waste.

What should I do if drug therapy gets into my eyes?

If any drug therapy splashes into your eyes, flush them with water for 10-15 minutes and call your doctor.

What should I do with my laundry?

Wash your clothing and bed linen as you normally would unless they become soiled with systemic therapy.

If this happens, use gloves to carefully handle the laundry and to avoid contact with your skin. Wash the contaminated laundry two (2) times. Do not wash contaminated laundry with regular laundry.

If you do not have a washer, place the soiled items in a plastic bag and seal it with rubber bands until they can be washed at the laundromat.
How should I store the drug therapy?

Store drug therapy and equipment in a safe place that is out of reach of children and pets. Do not store drug therapy in the bathroom. The humidity can damage the medicine. Check the labels to see if the drug therapy should be kept in a refrigerator or away from light. Be sure that all your medicines have correct labels.

Can I put drug therapy waste in the garbage?

No. Drug therapy waste is hazardous and needs special handling. If you are getting IV drug therapy at home, you will be given a special container to store drug therapy and equipment (e.g. used syringes, needles, tubing, bags, cassettes, vials).

When you finish handling the drug therapy, place any equipment, needles, sharp objects, and gloves into hard plastic containers labeled ‘Chemotherapy Waste’ or ‘Cytotoxic’ and make certain they are shut tight.

Equipment and waste that is too large for the plastic container needs to be placed in a separate plastic bag and sealed tightly with rubber bands.

What if I spill the drug therapy?

A Home Spill Kit will be provided for people who have intravenous (IV) drug therapy treatments in the home.

This kit contains all the materials you need to safely clean up the drug therapy in case you spill some of the medicine by accident. Your nurse will give you the information and provide you with written instructions on how to clean a drug therapy spill.
Is it safe for family members to have contact with me during my drug therapy?

Eating together, enjoying your favourite activities, and hugging are all safe for you to do.

What if I become sick and vomit?

Drug therapy may be present in vomit. Wear gloves when cleaning vomit and emptying the container. Rinse the container with water after each use, and wash it with soap and water at least once a day.

Is it safe to have sex during my treatment?

Traces of drug therapy may be present in vaginal fluid and semen for up to 48 hours after treatment. A condom must be used to protect your partner from being exposed to the drugs in these fluids during sex. It is possible to become pregnant or father a child while receiving drug therapy but is not safe to do so. You will need to use a reliable birth control method (e.g. condom) while getting drug therapy.

Please talk to your doctor or nurse about being sexually active during the time you have drug therapy treatments.

Can I travel with my drug therapy?

Traveling is usually not a problem. However, you may need to make special arrangements if the drug therapy requires special storage, like refrigeration. Talk to your nurse, doctor or pharmacist for more instructions. Always seal your drug therapy medicine in a plastic bag.

Staying in a hotel during your drug therapy treatment?

Be sure to take your Home Spill Kit with you when you travel. Let hotel staff know if you have an accident and let them know of any special cleaning that needs to be done.
Pharmacy - Medication Coverage

Most medicines given in the chemotherapy suite are covered by OHIP. You are responsible for the cost of chemotherapy and other medicines that you take at home. Please let a member of your care team know if you need assistance paying for your medicine.

Most of these costs are covered by the following drug plans:

- Senior Citizens Drug Plan
- Home and Community Care (P-card, Home Care)
- Social Assistance (monthly card)
- Private Drug Plans (e.g., Green Shield, Blue Cross, Manulife, etc.)
- Trillium Drug Plan
- OHIP+ (for patients aged 24 and younger)

It is important to know:

- Your local or home pharmacy may not have the medicines you need
- Contact the LRCP Pharmacist or Telephone Triage Nurse or CAREChart@after hours nurse immediately if you have a reaction to any medicine

Complementary and Alternative Therapies

- Complementary therapies are used with your LRCP cancer treatment plan.
- Alternative therapies are used instead of a conventional treatment.
- Some complementary and alternative therapies may be harmful while you are taking systemic therapy drugs or could make them less effective. It is important to talk with your LRCP health care team about any therapies you are receiving outside of LRCP.
- See the ‘Just Diagnosed’ and ‘Nutrition’ sections for more information on complementary and alternative therapies or visit: https://www.cancer.ca/en/cancer-information/diagnosis-and-treatment/complementary-therapies/?region=on
Clinical Trials

If you are participating in a Clinical Trial, you will need to bring your consent forms every time you are with a health care professional (e.g., emergency doctor, check-up with your family doctor, etc.).

For more information, speak to your health care team or visit our website: https://www.lhsc.on.ca/london-regional-cancer-program/clinical-trials

You can also contact our Clinical Trial Advisor at 519-685-8618 or by email at cancertrials@lhsc.on.ca

Recommended Resources

Please view the ‘Introduction to Chemotherapy’ video on the LRCP website. Follow along with this section of the guide and make notes as you go.

- Go to the LRCP Public Website at: https://www.lhsc.on.ca/london-regional-cancer-program/about-london-regional-cancer-program
- Scroll down and click on the ‘LRCP orientations’ icon on the left side.

Direct link: http://lrcp.tours.lhsc.on.ca/intro-to-chemo/about-chemotherapy

Visit the Canadian Cancer Society website to view the “Chemotherapy and other drug therapies” booklet at https://www.cancer.ca/en/cancer-information/diagnosis-and-treatment/chemotherapy-and-other-drug-therapies/?region=on