

Cancer

Immunotherapy (IO) + Tyrosine Kinase Inhibitor (TKI) Combination Treatment

A Patient's Guide to Treatment
and Side Effect Management

My current treatment regimen
(medication and dosing schedule):



Please scan this QR code to
watch a short video on IO +
TKI combination therapy.



Understanding Immunotherapy (IO) + Tyrosine Kinase Inhibitor (TKI) Treatment

You may already be familiar with some forms of cancer treatment, such as surgery, chemotherapy, and radiation therapy, but as our knowledge of cancer continues to grow, we continue to discover new and effective ways to treat it.

Two newer ways of treating certain forms of cancer are with medications known as **immunotherapy** (or “IO” for short) and oral **tyrosine kinase inhibitors** (or “TKIs” for short).

Each of these medications may be used to treat cancer on its own, or they may be used together for a better effect.

While IO + TKI combination treatment has been proven to be effective for some types of cancer, it may cause side effects. Not everyone gets them, but it’s important to be aware of them. This guide discusses some of the more common side effects you may experience and offers tips to help manage them. This includes knowing when to seek help from your oncology team.



If you have any questions about your condition or treatment at any time, please reach out to your oncology team.



What is IO + TKI Treatment?

IO + TKI treatment consists of two different types of medications that are taken together to treat certain cancers of the **kidney** and **endometrium**. In the future, other types of cancer may be treated with IO + TKI treatment, but more research still needs to be done.



kidney (kid-nee): your kidneys are located just below the ribcage, towards the back side of your body – one on each side of your spine. Kidneys remove waste and extra fluid from the body.



endometrium (en-doh-MEE-tree-um): the layer of tissue that lines the uterus – the part of the body where a baby grows.

Why Combine IO + TKI Medications?

Both IO and TKI medications have been shown to be effective in treating certain forms of cancer on their own; however, when used together, their effect is **synergistic** (si-ner-ji-stik). This means the positive effect of combining these medications is better than the positive effect of each drug alone.

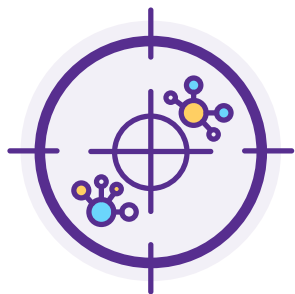
Together, IO + TKI medications have been shown to:

- Decrease the amount of cancer in the body or make it disappear completely;
- Increase the length of time before the cancer gets worse; and
- Increase the length of time people are alive.

There are four ways IO + TKI are able to work together to treat the cancer:



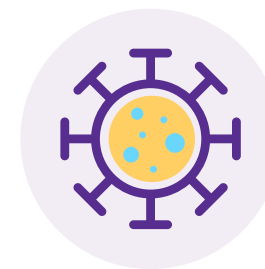
1. Recognize: TKIs help the immune system to better recognize cancer cells so T cells can attack.



2. Recruit: TKIs help the immune system access the tumour by changing the blood vessels surrounding the tumour.



3. Re-program: TKIs re-program the tumour environment so that the immune system can better identify and attack cancer cells.



4. Restore: TKIs help IOs to tell T cell soldiers to “ATTACK,” which restores their ability to find and destroy cancer cells.

To better understand how combination IO + TKI treatment works, it is important to also understand how each type of medication works.

Examples of IO + TKI Medication

Below are some examples of medications used in combination treatment that your oncology team may have prescribed.

IO (Immunotherapy)

Keytruda® (pembrolizumab)

Opdivo® (nivolumab)

TKIs (Anti-Cancer Tablets/Capsules)

Cabometyx® (cabozantinib)

Inlyta® (axitinib)

Lenvima® (lenvatinib)

Note: Listed alphabetically by brand name.

Immunotherapy (IO)

IO works with the body's immune system to help fight cancer.

The immune system is made up of immune cells, including **T cells**, that act like soldiers protecting the body from harmful invaders. T cells are able to tell which cells might be harmful – such as cancer cells – and trigger the immune system to attack and kill them.

Sometimes, cancer cells can hide from the immune system and trick the T cells into thinking they are normal healthy cells. This allows the cancer to grow and spread to other parts of the body.

IO was developed to re-program T cells to better recognize cancer cells and control their growth.



Receiving Your IO

How: Intravenous (IV) infusion through a vein in your arm.

Location: Hospital or clinic setting.

Frequency: Every 3-6 weeks depending on the treatment.

Timing: Approx. 30 minutes per infusion.

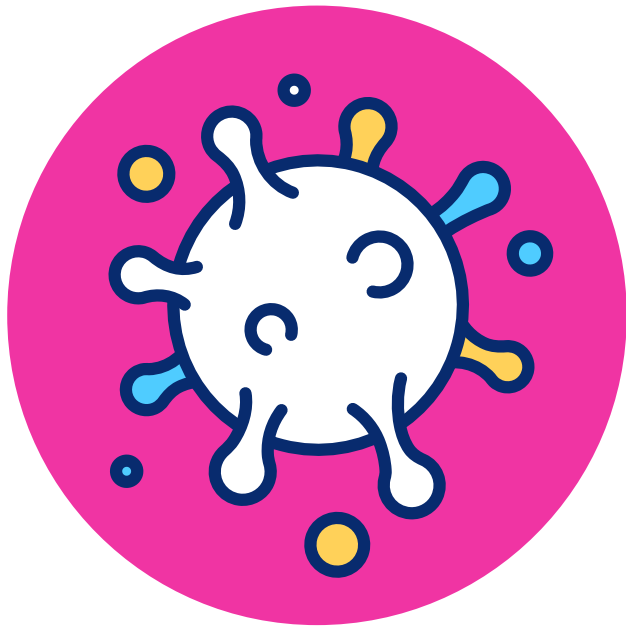


A-Z

immunotherapy (i·myoo·now·theh·ruh·pee): a type of cancer treatment that can change how the immune system works so it can find and attack cancer cells. Immunotherapy can be given alone or with other cancer treatments.

Tyrosine Kinase Inhibitors (TKIs)

Tyrosine kinases are a specific type of chemical signal (enzyme) inside all cells – including cancer cells – that helps them grow and divide. TKI medications **block** this signalling and reduce the chance that cancer cells will be able to grow and divide. These anti-cancer medications slow down how quickly a tumour can grow and can reduce the chance of cancer spreading to other areas of the body.



Receiving Your TKIs

How: Tablets or capsules taken by mouth.

Location: Usually dispensed from a pharmacy for you to take at home.

Frequency/Timing: Please refer to instructions from your healthcare professional about how many pills you need to take, and how often.

Side Effects of Your Combination Treatment:

Why They Happen, What to Look Out For, and How to Manage Them



Why Side Effects Happen

All drugs – including IO and TKIs – have the potential to cause side effects. Because the human body is so complex, it can be difficult to predict who will get side effects and who won't. It can also be difficult to predict how severe these side effects might be, should they happen.

IO works by “hyperactivating” or “re-programming” the immune system to help it recognize and destroy cancer cells.

- **Reason for Side Effects:** IO can cause the immune system to become unpredictable, which can lead to inflammation in different parts of the body (e.g., skin, joints, digestive tract, lung, liver, etc.).

TKIs work by blocking growth signals in the cancer cells, reducing their growth and killing them.

- **Reason for Side Effects:** Normal cells also use these signals to divide and grow, which can result in side effects.

When these medications are combined, there is an increased potential for side effects. In some cases, these side effects may even overlap, making it difficult to tell which medication might be causing the problem.



It is important to tell your oncology team about any symptom or side effect you may experience while taking your medications, so they can identify which medication might be causing the problem. This way, they can provide better guidance on how to help manage these symptoms.

Medication-Specific Side Effects

IO-Specific Side Effects



Nervous system inflammation: nerve or brain inflammation ["neuropathy"], brain swelling ["encephalitis"] - fever, confusion, mood/behavioural changes, neck stiffness, seizures, extreme sensitivity to light, numbness or tingling in hands or feet, unusual weakness in legs, arms, or face ⊕



Eye inflammation: blurry, double vision or other vision problems, eye pain, redness ⊕



Hormone gland inflammation: inflammation of thyroid gland ["thyroiditis"], adrenal gland ["adrenolitis"], pituitary gland ["hypophysitis"], and pancreas ["autoimmune diabetes"] - excessive sleepiness/feeling tired, changes in weight, mood, or behaviour, loss of appetite, hair loss, feeling cold, constipation, excessive thirst or increased urination ⊕ ⊕ to ⊕ ⊕ ⊕



Heart inflammation: inflammation of the heart muscle ["myocarditis"] ⊕



Lung inflammation: inflammation of the lung tissue ["pneumonitis"] - cough, shortness of breath ⊕ ⊕



Joint/muscle inflammation: arthritis, muscle inflammation ["myositis"] - joint pain, muscle weakness ⊕ ⊕



Skin problems: skin rash and itching ⊕ ⊕ ⊕



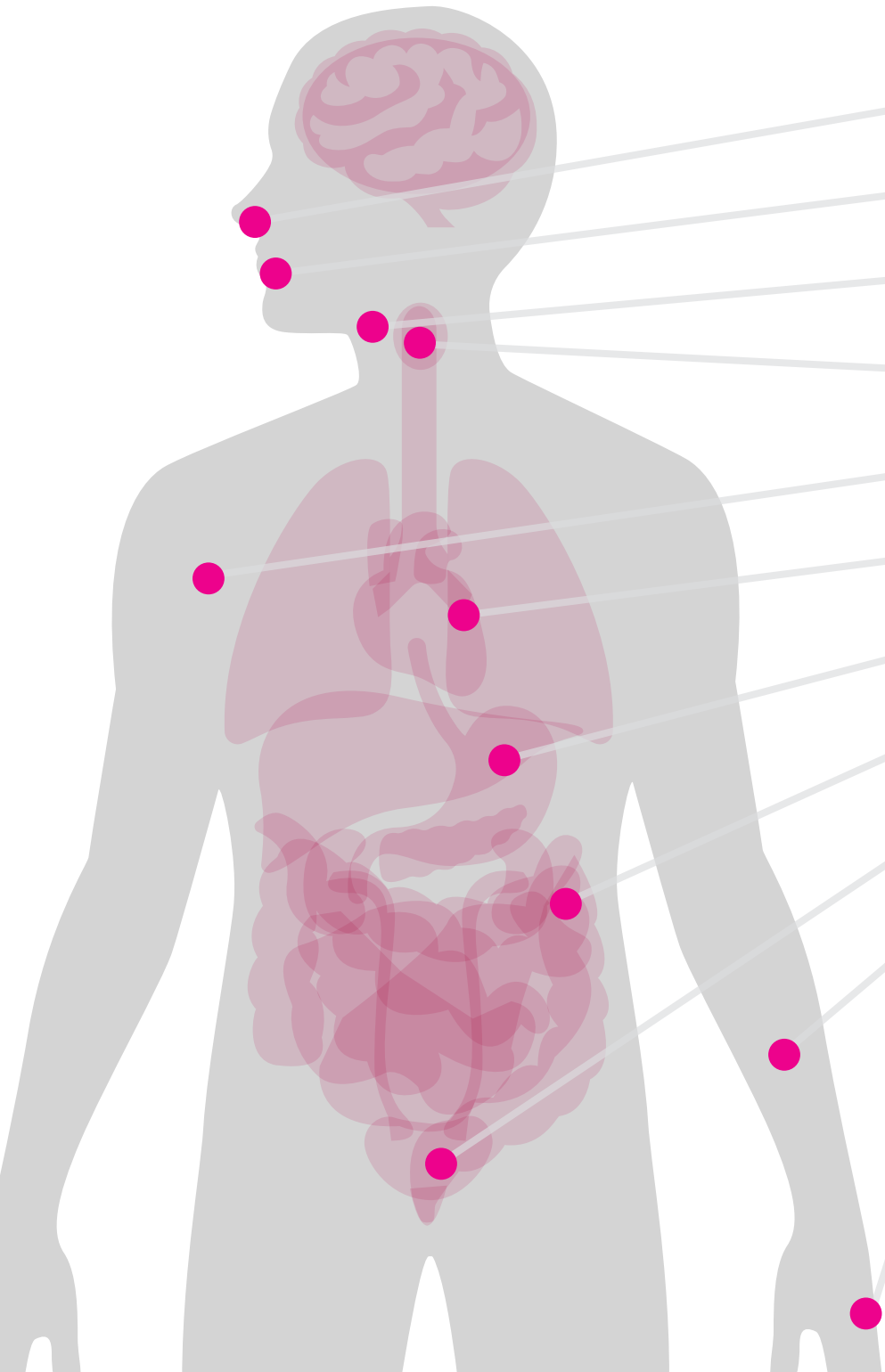
Bowel problems: inflammation of bowel ["colitis" or "enteritis"] - diarrhea, blood in your stool, severe pain in your belly, nausea or vomiting ⊕ ⊕



Liver inflammation: inflammation of liver ["hepatitis"] - yellowing of skin or whites of eyes, severe nausea or vomiting, pain on the right side of the stomach area, dark urine (pee), bleeding or bruising more easily than normal ⊕ ⊕



Kidney problems: inflammation of kidney ["nephritis"] - decreased urination or dark urine, pain in the flanks of your back, swelling in the ankles ⊕



TKI-Specific Side Effects



Bleeding: ["hemorrhage"] - bleeding from the nose or other parts of the body +++



Mouth problems: ["stomatitis"/"mucositis"] - inflammation or sores in the mouth +++



Voice changes: ["dysphonia"] - hoarse or scratchy voice +++



Decreased thyroid gland function: ["hypothyroidism"] - fatigue, constipation, dry skin, weight gain +++



Skin problems: rash +++



High blood pressure: ["hypertension"] +++



Diarrhea: loose or watery stools (poops) +++



Nausea/vomiting: feeling sick to your stomach or throwing up +++



Protein in the urine: ["proteinuria"] - higher than normal levels of protein in the urine +++



Blood clots: in the veins or arteries ++



Hand-foot skin reaction: redness, swelling, and blistering on the palms of hands and/or soles of feet +++

+++ **Very common:** > 10% of patients

++ **Common:** 1-10% of patients

+ **Uncommon:** 0.1-1% of patients

Overlapping Side Effects



Thyroid gland problems: underactive thyroid ["hypothyroidism"] from IO or TKI, overactive thyroid ["hyperthyroidism"] from IO or TKI, thyroid inflammation ["thyroiditis"] from IO +++



Skin problems: rash and itching from IO or TKI +++



Liver problems: liver inflammation from IO ++ to +++



Bowel problems: diarrhea from TKI, diarrhea/colitis from IO ++ to +++

Even though IO and TKIs work very differently, they do have some side effects in common. Sometimes it can be challenging trying to figure out which drug is causing the side effect. Your oncology team will use different strategies to find out which drug might be causing the issue and work to improve it.

How Side Effects Are Managed

IO Side Effects

- Usually less common than TKI side effects.
- Often do not improve with time or by reducing the dose.
- If not treated, usually get worse over time.

How they are managed:

- Mild side effects can usually be managed at home with supportive measures.
- Medication may need to be stopped temporarily. If side effects are severe, the medication may be stopped permanently.
- Can be dangerous if not treated promptly with the correct medication.
- May require treatment with steroids (by mouth, IV, or creams), hormone replacement (i.e., thyroid medication), or anti-itch medications.

TKI Side Effects

- Usually more common than IO side effects.
- Can improve when medication is paused or when the dose is reduced.

How they are managed:

- Medication may need to be paused in certain situations to help identify the drug causing the side effect.
- Can be treated with supportive medications, such as blood pressure pills (for high blood pressure), loperamide (for diarrhea), anti-nausea medications, hormone replacement (i.e., thyroid medication), mouth wash (for mouth sores), or creams applied to hands and feet (for hand-foot skin reaction).

Overlapping

It is important to identify which medication is causing the side effect. Depending on severity and origin of the side effect, it may be managed by:

- Treating symptoms;
- Temporarily pausing one or both medications;
- Treatment with corticosteroids ("steroids") for more moderate to severe side effects; and
- Treatment with stronger, immune-slowng drugs for severe side effects.

In cases with severe or persistent symptoms a referral to a specialist may be necessary.



Intestinal or Abdominal Area (Tummy)

Side Effects: IO



TKI



Overlapping



Diarrhea (frequent, loose, or watery stools [poops])



How to manage at home:

- Over-the-counter anti-diarrheal medication (e.g., loperamide [Imodium[®]]) for 24 to 48 hours may be helpful.*
- Drink 8-10 cups (or 2-3 litres) of water or electrolyte drinks (e.g., Pedialyte[®], Gatorade[®], Powerade[®], etc.) to avoid becoming dehydrated.
- Eat low-fibre foods (e.g., "BRAT" diet - bananas, rice, applesauce, toast).



Contact your healthcare professional if:

- Your diarrhea does not get any better, becomes worse, or any new symptoms appear after 24 to 48 hours of using anti-diarrheal medication (e.g., loperamide);
- You see blood in your poop, have new tummy pain or cramping, or have a temperature above 38°C (100.4°F);
- You become dehydrated (watch for: thirst, headache, tiredness, weakness, decreased/dark pee); and
- You feel that you need to stop your medication due to side effects.†

If you are diagnosed with diarrhea or a condition called "colitis" as a result of taking your IO, you may need steroid medication. This will be given to you by mouth or through a needle inserted into a vein in your arm (intravenously).

Nausea & Vomiting (feeling sick to your stomach and throwing up)



How to manage at home:

- Anti-nausea medication can be helpful. These are available over the counter* (e.g., dimenhydrinate [Gravol[™]]) or by prescription from your oncology team (e.g., metoclopramide, prochlorperazine, ondansetron, or olanzapine).
- Drink flat ginger ale or clear soft drinks to ease your tummy and to avoid becoming dehydrated.
- Avoid foods that are overly sweet, greasy, fried, or spicy.
- Sit upright for at least 1 hour after each meal and eat small meals more frequently.



Contact your healthcare professional if:

- Your nausea and/or vomiting do not get any better, become worse, or any new symptoms appear after 24 to 48 hours of using anti-nausea medication;
- You see blood in your vomit;
- You become dehydrated (watch for: thirst, headache, tiredness, weakness, decreased/dark pee); and
- You feel that you need to stop your oral TKI (e.g., axitinib, lenvatinib, or cabozantinib) due to nausea or throwing up.†



Loss of Appetite (not feeling hungry)



How to manage at home:

- Keep track of your appetite and weight.
- Eat small, frequent meals and snacks throughout the day – whenever you feel hungry. Don't feel like you have to eat meals at set times.
- Choose foods that are high in calories, protein, vitamins, minerals, and other essential nutrients. Nuts, nut butters, cheeses, yogurt, and avocados are adequate choices, along with fruits and vegetables.
- Nutrition supplement drinks (e.g., Boost[®], Ensure[®], etc.) are also beneficial ways to get some of the calories and nutrients you need in an easy-to-consume format.
- Pre-make and freeze nutrient-dense foods so they are quick and easy to prepare when you feel hungry.
- Try to incorporate some physical activity into your day – preferably outside – as this can help stimulate appetite.
- If you feel sick to your stomach, you may be able to treat with over-the-counter or prescription anti-nausea medication, as directed by your oncology team.*
- Talk to your oncology team about prescription medications to help with loss of appetite.



Contact your healthcare professional if:

- You are eating and drinking very little or no food/liquids;
- You experience continued weight loss;
- You can no longer do your self-care activities due to weakness (e.g., using the bathroom, dressing, bathing, walking around your home, etc.);
- You become dehydrated (watch for: thirst, headache, tiredness, weakness, decreased/dark pee); and
- You feel that you need to stop your oral TKI (e.g., axitinib, lenvatinib, or cabozantinib) due to appetite loss.†

*Always talk to your healthcare professional before you take any over-the-counter medication.

† Do not stop taking your medication without talking to your oncology team first.

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Mouth

Side Effects: IO



TKI



Overlapping



Mouth Sores (painful blisters on the roof or floor of mouth, on the gums, or tongue)



How to manage at home:

- Rinse your mouth 4-6 times per day for at least 1 minute with a salt-water, baking soda-water, or alcohol-free rinse.
- To make a salt-water or baking soda-water rinse:
 - Add ½ tsp of salt and/or ½ tsp of baking soda to 1 cup of warm water;
 - Stir, then swish around in your mouth (remove dentures before rinsing, if applicable); and
 - **Do not swallow the mixture.**
- If applicable, regularly clean dentures and avoid dentures that do not fit well.
- Blend foods to make them easier to eat.
- Avoid alcohol, tobacco, and salty, spicy, hot, or acidic foods.
- Suck or chew on sugar-free candy or gum to help with dry mouth.
- Use a soft bristle toothbrush to clean your teeth at least twice a day.
- Your oncology team may be able to provide prescription mouthwash if home-made rinses aren't helping to relieve the pain.



Contact your healthcare professional if:

- Your mouth sores do not get better, become worse, or any new symptoms appear after 24 to 48 hours of using mouth rinses and other lifestyle changes;
- You are unable to eat or drink for 24 hours or more due to pain from mouth sores;
- You have new white patches or foul-smelling odour in your mouth;
- You have a fever over 38°C (100.4°F) while you have mouth sores;
- You have uncontrolled bleeding from mouth sores lasting longer than 2 minutes; and
- You feel that you need to stop your oral TKI (e.g., axitinib, lenvatinib, or cabozantinib) due to mouth sores.[†]



Lung

Lung Inflammation (also called ["pneumonitis"])



Contact your healthcare professional if:

- You experience new or worsening shortness of breath, coughing, and/or chest pain to the extent that you can no longer do your usual activities; and
- You develop a fever over 38°C (100.4°F) along with shortness of breath, coughing, and/or chest pain.

This side effect must be managed by your healthcare professional.



Skin Problems (bumpy, red rash, scaling rash, itching, blisters, or ulcers)



How to manage at home:

- Take short showers in warm or cool water, pat skin dry, and moisturize afterward.
- Apply a cool washcloth or ice to itchy skin.
- Ask your oncology team about using an over-the-counter, anti-itch medication (e.g., diphenhydramine [Benadryl[®]], cetirizine [Reactine[®]], loratadine [Claritin[®]], etc.).*



Contact your healthcare professional if:

- Your skin problems do not get better, become progressively worse, or any new skin symptoms appear after 48 to 72 hours of treating the rash;
- You notice the rash is covering more than 30% of your body;
- You notice the rash has blisters, is painful, or you notice any unusual skin peeling; and
- You feel that you need to stop your oral TKI (e.g., axitinib, lenvatinib, or cabozantinib) due to rash or itching.†

Your oncology team may prescribe steroid creams, anti-itch medications, and/or steroid medications taken by mouth to treat the rash and/or itching.

Hand-Foot Skin Reaction (redness, swelling, thickened skin [“calluses”], and blistering on the palms of hands and soles of feet)



How to manage at home:

- Continuously apply over-the-counter creams containing urea (10-22%) 2-3 times per day as prevention. Ask your pharmacist for help if you're not sure where to find it.*
- Ensure footwear fits properly. Use gel inserts, insoles, or special orthotics to provide additional support and padding.
- Avoid hot water, soaps with strong scents, or alcohol-containing hand sanitizers.
- Avoid or reduce friction and pressure on hands and feet as much as possible.
- Wear cotton gloves and socks to protect hands and feet.
- Protect skin from the sun by using a sunscreen with an SPF of 30 or higher.
- Your oncology team may prescribe other creams or oral medications depending on your symptoms.



Contact your healthcare professional if:

- You can no longer do your self-care activities due to pain in your hands or feet (e.g., using the bathroom, dressing, bathing, walking around your home, etc.);
- You are unable to walk on your feet due to pain; and
- You feel that you need to stop your oral TKI (e.g., axitinib, lenvatinib, or cabozantinib) due to painful hands or feet.†

*Always talk to your healthcare professional before you take any over-the-counter medication.

† Do not stop taking your medication without talking to your oncology team first.

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Full Body

Side Effects: IO



TKI



Overlapping



Fatigue (extreme tiredness)

This can be a general side effect from the oral TKI or IO, or inflammation involving one of your hormone glands (e.g., thyroid, adrenal, or pituitary gland) as a result of the IO medication. **Often, the cancer itself also causes fatigue.**



How to manage at home:

- Take breaks and/or naps as needed throughout the day, especially if feeling weak.
- Schedule your most physically demanding activities during the part of your day when you have the most energy.
- Make sure to add physical activity into your day (outside if possible), even if it is just for 15-30 minutes.
- Practice relaxation or mindfulness techniques (e.g., yoga, massage, meditation, etc.).
- Keep eating and drinking as tolerated, as dehydration or malnutrition can make fatigue worse. Limit caffeine, alcohol, and tobacco intake.
- Your oncology team may provide a prescription medication to help with fatigue, if it is not related to inflammation involving one of your hormone glands.



Contact your healthcare professional if:

- Your fatigue does not get better or becomes progressively worse to the extent that you can no longer do your self-care activities due to extreme tiredness (e.g., using the bathroom, dressing, bathing, walking around your home, etc.);
- You have new and ongoing headaches, visual changes, weakness, and/or dizziness along with extreme tiredness;
- You have abnormally low blood pressure, new confusion, or forgetfulness along with extreme tiredness; and
- You feel unusually cold.

If the extreme tiredness is from a problem with your hormone gland(s), you may need hormone supplementation on an ongoing basis (i.e., thyroid hormone and/or cortisone).



Throat

Voice Changes (hoarseness or scratchy voice)



How to manage at home:

- Keep well hydrated by drinking sips of water frequently to get 8-10 cups (or 2-3 litres) of water intake per day.
- Limit intake of alcohol, coffee, tea, and tobacco, as this may make voice changes worse.
- Avoid whispering, as whispering can strain the muscles in the voice box.
- Avoid shouting and straining your voice to be heard over background noise.



Contact your healthcare professional if:

- You can no longer talk due to voice changes; and
- You have soreness, pain, or tightness in the throat.



Joint and Muscles

Side Effects: IO  TKI  Overlapping 

Joint and Muscle Pain

(painful joints with or without swelling or inflammation; muscle pain, or weakness)



How to manage at home:

- Ask your oncology team about suitable over-the-counter or prescription pain medication(s).*
- Talk to your oncology team about other ways you can manage pain without medication (e.g., massage therapy, physiotherapy, stretching exercises, meditation, acupuncture, etc.).
- Apply alternating hot/cold packs to help increase blood flow and reduce inflammation.



Contact your healthcare professional if:

- Your joint and muscle pain does not get better or becomes progressively worse to the extent that you can no longer do your self-care activities due to pain or muscle weakness (e.g., using the bathroom, dressing, bathing, walking around your home, etc.);
- You have a fall as a result of new or worsening joint pain, muscle pain, or muscle weakness;
- You have new or worsening joint swelling along with joint pain;
- You have new or worsening stiffness in the morning, which improves after 1 hour of movement;
- You have new or worsening muscle weakness in the arms and/or legs; and
- You have dark-coloured pee with new or worsening muscle pain or weakness.



Liver

Liver Inflammation

(increase in liver enzymes [“AST”/“ALT”] as measured by a blood test)



How to manage at home:

- Limit alcohol intake.
- Advise your oncology team about any new medications or changes to existing medications, as some medications can cause liver inflammation.
- Go for your regular blood tests as scheduled by your oncology team, as this side effect can be seen in these tests.



Contact your healthcare professional if:

- You have new or worsening yellowing of the skin or whites of the eyes;
- You have pain on the right side of your tummy;
- You have new or unusual severe nausea or vomiting;
- You have dark-coloured pee despite adequate fluid intake; and
- You feel you need to stop your oral TKI (e.g., axitinib, lenvatinib, or cabozantinib) due to the above symptoms.†

This side effect must be managed by your healthcare professional.

*Always talk to your healthcare professional before you take any over-the-counter medication.
 † Do not stop taking your medication without talking to your oncology team first.
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 AST = aspartate aminotransferase; ALT = alanine aminotransferase



Nervous System

Side Effects: IO  TKI  Overlapping 

Nerve or Brain Inflammation

(numbness or tingling in hands or feet, unusual weakness in legs, arms, or face); (confusion, changes in mood or behaviour, neck stiffness, seizures, extreme sensitivity to light)



How to manage at home:

- Ask your oncology team about suitable medication(s) to help manage nerve pain prior to starting IO and oral TKI therapy (some chemotherapy given before IO and oral TKI therapy can cause nerve damage).
- Talk to your oncology team about other ways you can manage pain without medication (e.g., massage therapy, physical therapy, biofeedback, hypnosis, meditation, acupuncture, etc.).



Contact your healthcare professional if:

- Your symptoms do not get better or become progressively worse to the extent that you can no longer do your self-care activities due to tingling, numbness, or nerve pain (e.g., using the bathroom, dressing, bathing, walking around your home, etc.);
- You experience new or worsening confusion, changes in behaviour, unusual neck stiffness, or seizures;
- You experience new or worsening muscle weakness in the arms, legs, or face; and
- You experience worsening tingling, numbness, or nerve pain despite using medications prescribed by your oncology team.



Eyes

Eye Inflammation (blurry or double vision; eye pain, eye redness)



How to manage at home:

- To help reduce eye strain, be sure to limit screen time.
- It may be soothing to hold a warm compress gently against a closed red eye.
- Avoid wearing contact lenses if you are experiencing visual changes.



Contact your healthcare professional if:

- Your eye symptoms do not get better or become progressively worse to the extent that you can no longer do your self-care activities due to changes in vision (e.g., using the bathroom, dressing, bathing, walking around your home, etc.); and
- You develop new or worsening eye changes, including:
 - Blurry or double vision
 - Eye pain
 - Eye redness
 - Sensitivity to light



Heart and Blood Vessels

Side Effects: IO  TKI  Overlapping 

High Blood Pressure ["hypertension"]



How to manage at home:

- Check your blood pressure with a personal blood pressure monitor twice daily (morning and evening) and keep a log of these numbers.
 - Your local pharmacy may also have blood pressure machines you can use.
- Communicate changes to your oncology team or other healthcare professionals.
- It is important to check your blood pressure frequently during the first month of taking oral TKI medication.
- Your oncology team may change your current blood pressure medication(s), or add new ones, to lower your blood pressure.



Contact your healthcare professional if:

- You experience blood pressure values consistently above 150 mmHg as the top number (systolic), or consistently above 100 mmHg as the bottom number (diastolic), despite using blood pressure medication(s); and
- You experience new or worsening headaches, chest pain, dizziness, or confusion along with high blood pressure.

Heart Muscle Inflammation ["myocarditis"]



Contact your healthcare professional if:

- You experience new or worsening swelling in the ankles, chest pain, and/or difficulty breathing.

This side effect must be managed by your healthcare professional.

*Always talk to your healthcare professional before you take any over-the-counter medication.

† Do not stop taking your medication without talking to your oncology team first.

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Kidney

Kidney Inflammation



How to manage at home:

- Go for your regular blood tests as scheduled by your oncology team, as this side effect can be seen in these tests.



Contact your healthcare professional if:

- You experience new or worsening swelling in the ankles, a noticeable decrease in the amount you are peeing, blood in your pee, and/or pain in the middle of the back (i.e., “flank pain”).

This side effect must be managed by your healthcare professional.

Proteinuria (higher than normal levels of protein in the urine)



How to manage at home:

- Take blood pressure medications as prescribed by your oncology team.
- Stay well hydrated with at least 2-3 litres of water per day.
- Go for your regular urine tests as scheduled by your oncology team, as this side effect can be seen in this test.



Contact your healthcare professional if:

- You experience new or unusual frothy pee;
- You experience swelling of the eyes and/or ankles along with frothy pee; and
- You stop your oral TKI (e.g., axitinib, lenvatinib, or cabozantinib) due to protein in your urine.[†]

The above are not all of the possible symptoms or side effects you may experience with IO + oral TKI therapy. If you have a troublesome symptom or side effect that is not listed here, or becomes bad enough to interfere with your daily activities, tell your oncology team immediately. Don't wait until your next appointment.

*Always talk to your healthcare professional before you take any over-the-counter medication.

[†] Do not stop taking your medication without talking to your oncology team first.

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