

### **NIVL+IPIL** Treatment

This handout gives general information about this cancer treatment.

You will learn:

- · who to contact for help
- · what the treatment is
- how it is given
- what to expect while on treatment



This handout was created by Ontario Health (Cancer Care Ontario) together with patients and their caregivers who have also gone through cancer treatment. It is meant to help support you through your cancer treatment and answer some of your questions.

This information does not replace the advice of your health care team. Always talk to your health care team about your treatment.

Who do I contact if I have questions or need help?		
My cancer health care provider is:		
During the day I should contact:		
Evenings, weekends and holidays:		

### What is this treatment?

**NIVL+IPIL** is the code name of your lung cancer treatment regimen.

A regimen is a combination of medications to treat cancer.

This regimen name is made up of one or more letters from the names of the 2 medications in your treatment.

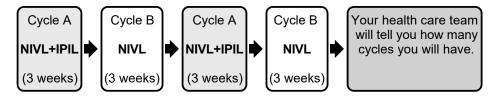
Here are the name(s) of the medication(s) in this regimen:

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NIVL = NIVoLumab
IPIL = IPILimumab
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These medications are called immunotherapy. For more information on immunotherapy, click <a href="here">here</a>.

Treatment will follow a pattern of cycle A and cycle B that alternates every 3 weeks. For most people, treatment will continue for up to 2 years, as long as it is helping you and you are not having bothersome side effects.

Here is a picture of the schedule for NIVL+IPIL treatment:



Every 3 weeks, you will go to the hospital. For cycle A, you will receive both medications (NIVL+IPIL). For cycle B, you will only receive NIVL. Cycles A and B will alternate until your health care team tells you that you no longer need treatment.

### Each round of cycles looks like this:

Day 1	2	3	4	5	6	7
Cycle A Treatment Day: Go to the hospital for NIVL+IPIL	No Treatment					
8	9	10	11	12	13	14
15	16	17	18	19	20	21
1 Cycle B	No	3	4	5	6	7
Treatment Day: Go to the hospital for NIVL	Treatment					
8	9	10	11	12	13	14
15	16	17	18	19	20	21



#### Remember To:

- ✓ Tell your health care team about all of the other medications you are taking.
- ✓ Keep taking other medications that have been prescribed for you, unless you
  have been told not to by your health care team.

You will have a blood test to check for hepatitis B before starting treatment. See the <u>Hepatitis B and Cancer Medications</u> pamphlet for more information.

### How is this treatment given?

The medications in your treatment are given through an IV (injected into a vein) at the hospital.

You will have a blood test before each treatment cycle to make sure it is safe for you to get treatment.

### DO this while on treatment

- ✓ DO tell your health care team about any other medical conditions that you have such as:
  - · heart, liver, kidney or lung problems
  - immune conditions (such as Crohn's disease)
  - problems with hormone producing glands (such as thyroid, pituitary or adrenal glands)
  - o diabetes, or
  - o any allergies.
- ✓ DO tell your health care team if you are taking corticosteroids (such as prednisone), or if you are on a low salt diet.
- ✓ DO check with your health care team before getting any vaccinations, surgery, dental work or other medical procedures.
- DO tell your health care team about any serious infections that you have now or have had in the past
- ✓ DO tell your health care team about ANY new symptom you develop. You may need urgent medical treatment.

## DO NOT do this while on treatment



- X DO NOT take any other medications, such as vitamins, over-the-counter (nonprescription) drugs, or natural health products without checking with your health care team.
- X DO NOT start any complementary or alternative therapies, such as acupuncture or homeopathic medications, without checking with your health care team.
- X DO NOT use tobacco products (such as smoking cigarettes or vaping) or drink alcohol while on treatment without talking to your health care team first. Smoking and drinking can make side effects worse and make your treatment not work as well.

# Will this treatment interact with other medications or natural health products?

- Although the medications in this regimen are unlikely to interact with other medications, vitamins, foods and natural health products, tell your health care team about all of your:
  - prescription and over-the-counter (non-prescription) medications and all other drugs, such as cannabis/marijuana (medical or recreational)
  - natural health products such as vitamins, herbal teas, homeopathic medicines, and other supplements
- Check with your health care team before starting or stopping any of them.
- If you are taking a blood thinner (such as warfarin), your health care team may need to do extra blood tests and may watch you more closely.



#### Talk to your health care team BEFORE taking or using these :

- Anti-inflammatory medications such as ibuprofen (Advil<sup>®</sup> or Motrin<sup>®</sup>), naproxen (Aleve<sup>®</sup>) or Aspirin<sup>®</sup>.
- Over-the-counter products such as dimenhydrinate (Gravol<sup>®</sup>)
- Natural health products such as St. John's Wort
- Supplements such as vitamin C
- Grapefruit juice
- Alcoholic drinks
- Tobacco
- All other drugs, such as marijuana or cannabis (medical or recreational)

## What should I do if I feel unwell, have pain, a headache or a fever?

- ✓ **Always** check your temperature to see if you have a fever **before** taking any medications for fever or pain (such as acetaminophen (Tylenol®) or ibuprofen (Advil®)).
  - Fever can be a sign of infection that may need treatment right away.
  - If you take these medications before you check for fever, they may lower your temperature and you may not know you have an infection.

#### How to check for fever:

Keep a digital (electronic) thermometer at home and take your temperature if you feel hot or unwell (for example, chills, headache, mild pain).

- You have a fever if your temperature taken in your mouth (oral temperature) is:
  - 38.3°C (100.9°F) or higher at any time

OR

• 38.0°C (100.4°F) or higher for at least one hour.



### If you do have a fever:

- ✓ Try to contact your health care team. If you are not able to talk to them for advice, you MUST get emergency medical help right away.
- ✓ Ask your health care team for the <u>Fever</u> pamphlet for more information.

If you do not have a fever but have mild symptoms such as headache or mild pain:

✓ Ask your health care team about the right medication for you. **Acetaminophen (Tylenol®)** is a safe choice for most people.



Talk to your health care team before you start taking ibuprofen (Advil<sup>®</sup>, Motrin<sup>®</sup>), naproxen (Aleve<sup>®</sup>) or ASA (Aspirin<sup>®</sup>), as they may increase your chance of bleeding or interact with your cancer treatment.



Talk to your health care team if you already take **low dose aspirin** for a medical condition (such as a heart problem). It may still be safe to take.

# How will this treatment affect sex, pregnancy and breast feeding?

#### Talk to your health care team about:

- How this treatment may affect your sexual health
- How this treatment may affect your ability to have a baby, if this applies to you

This treatment may harm an unborn baby. Tell your health care team if you or your partner are pregnant, become pregnant during treatment, or are breastfeeding.

- If there is **any** chance of pregnancy happening, you and your partner together must use **2 effective forms of birth control** at the same time while you are on treatment. Talk to your health care team about which birth control options are best for you, and how long you should use them after your last treatment dose.
- Do not breastfeed while on this treatment. Talk to your health care team about how long to wait before you start breastfeeding after your last treatment dose, if this applies to you.

### What are the side effects of this treatment?

NIVL+IPIL treatment makes your immune system work harder. Your immune system is what fights infections and your cancer.

When your immune system is working harder, you may have side effects in your bowels, liver, lungs, skin, kidneys, and other organs. You may also have changes in hormone levels in your body.

These side effects may be mild or may become serious or life-threatening in rare cases.

They may happen during your treatment or weeks to months after your treatment ends.

Some things to watch for are:

- diarrhea
- a new cough
- problems with breathing
- rash
- any other new symptom

### If you have side effects, you must talk to your health care team right away. You may need urgent treatment.

The following table lists side effects that you may have when getting NIVL+IPIL treatment. The table is set up to list the most common side effects first and the least common last. It is unlikely that you will have all of the side effects listed and you may have some that are not listed.

Read over the side effect table so that you know what to look for and when to get help. Refer to this table if you experience any side effects while on NIVL+IPIL treatment.

Common Side Effects (25 to 49 out of 100 people)			
Side effects and what to do	When to contact health care team		
Diarrhea			
(May be severe)			
<ul> <li>What to look for?</li> <li>Loose, watery, unformed stool (poo) that may happen days to weeks after you get your treatment.</li> </ul>	Talk to your health care team for advice.		

When to contact health care team
Talk to your health care team. If you are unable to talk to the team for advice, you must get emergency medical help right away.
Talk to your health
care team for advice.
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Common Side Effects (25 to 49 out of 100 people)			
Side effects and what to do	When to contact health care team		
What to do?			
To prevent and treat dry skin:			
<ul> <li>Use fragrance-free skin moisturizer.</li> <li>Protect your skin from the sun and the cold.</li> <li>Use sunscreen with UVA and UVB protection and a SPF of at least 30.</li> <li>Avoid perfumed products and lotions that contain alcohol.</li> <li>Drink 6 to 8 cups of non-alcoholic, non-caffeinated liquids each day, unless your health care team has told you to drink more or less.</li> </ul> In rare cases, rash may be severe if:	Talk to your health care team. If you are unable to talk to the team for advice, you must get emergency medical help right away.		
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<ul> <li>The rash covers more than a third of your skin (for example your whole trunk, or an arm AND a leg) or</li> <li>The rash causes your skin to blister or peel.</li> </ul>			
If this happens, talk to your health care team or go to the emergency room right away.			
Fatigue	Talk to your health care team if it		
What to look for?	does not improve		
<ul> <li>Feeling of tiredness or low energy that lasts a long time and does not go away with rest or sleep.</li> </ul>	or if it is severe		
What to do?			
<ul> <li>Be active. Aim to get 30 minutes of moderate exercise (you are able to talk comfortably while exercising) on most days.</li> <li>Check with your health care team before starting any new exercise.</li> <li>Pace yourself, do not rush. Put off less important activities. Rest when you need to.</li> <li>Ask family or friends to help you with things like housework, shopping, and child or pet care.</li> <li>Eat well and drink at least 6 to 8 glasses of water or other liquids every day (unless your health care team has told you to drink more or less).</li> </ul>			
<ul> <li>Avoid driving or using machinery if you are feeling tired.</li> <li>Ask your health care team for the <u>Fatigue</u> pamphlet for more information.</li> </ul>			

Common Side Effects (25 to 49 out of 100 people)			
Side effects and what to do	When to contact health care team		
Nausea and vomiting  (Generally mild)  What to look for?  • Nausea is feeling like you need to throw up. You may also feel light-	Contact your healthcare team if nausea lasts more than 48 hours or vomiting lasts more than 24 hours		
<ul><li>headed.</li><li>You may feel nausea within hours to days after your treatment.</li></ul>			
<ul> <li>What to do?</li> <li>To help prevent nausea:</li> <li>It is easier to prevent nausea than to treat it once it happens.</li> <li>If you were given anti-nausea medication(s), take them as prescribed, even if you do not feel like throwing up.</li> <li>Drink clear liquids and have small meals. Get fresh air and rest.</li> <li>Do not eat spicy, fried foods or foods with a strong smell.</li> <li>Limit caffeine (like coffee, tea) and avoid alcohol.</li> </ul>			
<ul> <li>If you have nausea or vomiting:</li> <li>Take your rescue (as-needed) anti-nausea medication(s) as prescribed.</li> <li>Ask your health care team for the Nausea &amp; Vomiting pamphlet for more information.</li> <li>Talk to your health care team if:</li> <li>nausea lasts more than 48 hours</li> <li>vomiting lasts more than 24 hours or if it is severe</li> </ul>			

Less Common Side Effects (10 to 24 out of 100 people)	
Side effects and what to do	When to contact health care team
Low appetite	Talk to your health care team if it
What to look for?	does not improve or if it is severe
<ul><li>Loss of interest in food or not feeling hungry.</li><li>Weight loss.</li></ul>	
What to do?	
Try to eat your favourite foods.	
<ul> <li>Eat small meals throughout the day.</li> <li>You may need to take meal supplements to help keep your weight up.</li> </ul>	
<ul> <li>Talk to your health care team if you have no appetite.</li> </ul>	
Ask your health care team for the <u>Loss of Appetite</u> pamphlet for more information.	
Changes in thyroid activity	Contact your health care team
Thyroid changes may happen weeks to months after you receive your treatment. Your health care team may check your thyroid activity regularly with a blood test.	as soon as possible (office hours)
What to look for?	
Underactive thyroid (low thyroid activity):	
Unusual weight gain	
<ul><li>A lack of energy or feeling tired</li><li>Getting cold easily</li></ul>	
Dry skin, nails or hair that breaks easily	
Constipation (having bowel movements (poo) less often than normal)	
Overactive thyroid (high thyroid activity):	
Unusual weight loss	
<ul> <li>Feeling anxious, irritable or having trouble sleeping</li> <li>Sweating a lot and having trouble dealing with hot weather</li> </ul>	
Increased appetite	
Having bowel movements (poo) more than usual     Weekness (consolidly in the arms and thinks)	
<ul><li>Weakness (especially in the arms and thighs)</li><li>Fast or uneven heartbeats.</li></ul>	

Less Common Side Effects (10 to 24 out of 100 people)		
Side effects and what to do	When to contact health care team	
What to do?		
Your health care team may give you prescription medication to treat your underactive or overactive thyroid.		
If you have weight changes along with any of the other symptoms listed, talk to your health care team as soon as possible.		
Mild headache, joint, muscle pain or cramps	Talk to your health	
What to look for?	care team if it does not improve or if it is severe	
Mild headache		
New pain in your muscles or joints, muscle cramps, or feeling achy.		
What to do?		
<ul> <li>Take pain medication as needed (such as acetaminophen) or as prescribed (opioids such as codeine, morphine, hydromorphone, oxycodone).</li> <li>Read the above section: "What should I do if I feel unwell, have pain, a headache or a fever?" before taking acetaminophen (Tylenol®), ibuprofen (Advil®, Motrin®), naproxen (Aleve®) or Aspirin. These medications may hide an infection that needs treatment or they may increase your risk of bleeding.</li> <li>Rest often and try light exercise (such as walking) as it may help.</li> </ul>		
Ask your health care team for the Pain pamphlet for more information.		
If you have a sudden, severe headache get emergency medical help right away.		

### Other rare, but serious side effects are possible with this treatment.

If you have **any** of the following, talk to your cancer health care team or get emergency medical help right away:

- · New cough, chest pain, trouble breathing, shortness of breath or coughing up blood
- Peeing more than normal and feeling very thirsty
- Signs of an allergy such as severe rash, swollen lips, face or tongue, chest and throat tightness, during or shortly after the drug is given
- Bleeding from your gums, unusual nosebleeds, bruising easily or more than normal, or blood in urine or stools. If you have bleeding that doesn't stop, you must get emergency help.
- Rare immune problems after an organ or stem cell transplant (if this applies to you). Your health care team may discuss these with you.

For more information on how to manage your symptoms ask your health care provider, or visit: <a href="https://www.cancercareontario.ca/symptoms">https://www.cancercareontario.ca/symptoms</a>.

Notes	

March 2025 New Regimen Information Sheet

For more links on how to manage your symptoms go to www.cancercareontario.ca/symptoms.

The information set out in the medication information sheets, regimen information sheets, and symptom management information(for patients) contained in the Drug Formulary (the "Formulary") is intended to be used by health professionals and patients for informational purposes only. The information is not intended to cover all possible uses, directions, precautions, drug interactions or side effects of a certain drug, nor should it be used to indicate that use of a particular drug is safe, appropriate or effective for a given condition.

A patient should always consult a healthcare provider if he/she has any questions regarding the information set out in the

Formulary. The information in the Formulary is not intended to act as or replace medical advice and should not be relied upon in any such regard. All uses of the Formulary are subject to clinical judgment and actual prescribing patterns may not follow the information provided in the Formulary.