For the Patient: HNLACETRT
Other Names: Treatment for Locally Advanced Squamous Cell Carcinoma of the Head and Neck using Combined Cetuximab and Radiation
HN = Head and Neck (tumour group)
LA = Locally Advanced
CET = Cetuximab
RT = Radiation Therapy

ABOUT THIS MEDICATION

What is this drug used for?
Cetuximab is an intravenous drug given with radiation to treat some types of advanced squamous cell cancers.

How does this drug work?
Cetuximab works by targeting cancer cells and interfering with their growth. When it is combined with radiation therapy, cetuximab enhances the effectiveness of radiation in squamous cell cancers.

INTENDED BENEFITS

• This therapy is being given to destroy and/or limit the growth of cancer cells in your body.
• This treatment may improve your current symptoms, and delay or prevent the onset of new symptoms.
• It may take several treatments before your doctor can discern whether or not this treatment is helping.
• The combination of cetuximab with radiation clearly showed a survival benefit.

HNLACETRT TREATMENT SUMMARY

How is this drug given?
• Cetuximab is given intravenously (via the vein) once every week for 6 – 7 weeks. The first dose is given 7 days before radiation therapy begins.
• Cetuximab and radiation are given on the same day.
• Radiation therapy is given daily Monday to Friday with weekends and holidays off.
• If radiation therapy is cancelled on the day that cetuximab is to be given, cetuximab will be postponed until radiation therapy resumes.
What will happen when I get my drug?

- A blood test is done on or within one month prior to starting treatment.

- The nurse will take your temperature, pulse, respiration and blood pressure prior to the cetuximab being given, halfway through the infusion and 1 hour after the infusion is complete.

- You may be given a dose of diphenhydramine 50mg orally 30-60 minutes prior to each cetuximab dose. This is to prevent the small chance of an infusion reaction.

- Most people have little to no nausea. You may take an antinauseant medication 30 minutes prior to each cetuximab dose.

- It is recommended that patients wear sunscreen and a hat and limit sun exposure as sunlight can exacerbate any skin reactions during treatment and for 2 months following the last dose of cetuximab.

- Activities and skin care products that dry the skin should be avoided such as long, hot showers, alcohol-based or perfumed skin care products. Greasy ointments should be avoided. Frequent moisturizing with alcohol-free emollient creams is recommended.

### TREATMENT PROTOCOL

<table>
<thead>
<tr>
<th>DATE (dd/mm/yr)</th>
<th>TREATMENT</th>
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<tbody>
<tr>
<td>Day -7</td>
<td>Cetuximab infusion</td>
</tr>
<tr>
<td>Day 1</td>
<td>Cetuximab infusion + Radiation therapy</td>
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<tr>
<td>Day 2-5</td>
<td>Radiation therapy</td>
</tr>
<tr>
<td>Day 8</td>
<td>Cetuximab infusion + Radiation therapy</td>
</tr>
<tr>
<td>Day 9-12</td>
<td>Radiation therapy</td>
</tr>
<tr>
<td>Day 15</td>
<td>Cetuximab infusion + Radiation therapy</td>
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<tr>
<td>Day 16-19</td>
<td>Radiation therapy</td>
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<tr>
<td>Day 22</td>
<td>Cetuximab infusion + Radiation therapy</td>
</tr>
<tr>
<td>Day 23-26</td>
<td>Radiation therapy</td>
</tr>
<tr>
<td>Day 29</td>
<td>Cetuximab infusion + Radiation therapy</td>
</tr>
<tr>
<td>Day 30-33</td>
<td>Radiation therapy</td>
</tr>
<tr>
<td>If scheduled</td>
<td>Day 36 Cetuximab infusion + Radiation therapy</td>
</tr>
<tr>
<td>if scheduled</td>
<td>Day 37-40 Radiation therapy</td>
</tr>
<tr>
<td>If scheduled</td>
<td>Day 43 Cetuximab infusion + Radiation therapy</td>
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<tr>
<td>If scheduled</td>
<td>Day 44-47 Radiation therapy</td>
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CHEMOTHERAPY SIDE EFFECTS AND MANAGEMENT:

Are there any risks?
- Unexpected and unlikely side effects can occur with any drug treatment. The ones listed in the following tables are particularly important for you to be aware of.
- Refer to the individual drug information sheet for specific side effects

<table>
<thead>
<tr>
<th>SERIOUS SIDE EFFECTS</th>
<th>HOW COMMON IS IT?</th>
<th>MANAGEMENT</th>
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</thead>
<tbody>
<tr>
<td>Signs of an <strong>allergic reaction</strong> must include flushing, rash, itching, dizziness, swelling or breathing problems. This can occur immediately or several hours after receiving cetuximab and occurs more commonly with the first dose.</td>
<td>Rare</td>
<td>Tell your nurse immediately if this happens while you are receiving cetuximab or contact your doctor immediately if this happens after you leave the clinic.</td>
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</table>
| Signs of **cardiopulmonary arrest** (heart and breathing stop) | Rare               | • Get emergency help immediately if you have signs of heart problems such as chest pain/pressure, fast or uneven heartbeat, or shortness of breath.  
• Regular blood tests will be done throughout your treatment to monitor your heart. |
<table>
<thead>
<tr>
<th>OTHER SIDE EFFECTS</th>
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</thead>
<tbody>
<tr>
<td>Pain or <strong>tenderness</strong> may occur where the needle was placed</td>
<td>Rare</td>
<td>Apply cool compresses or soak in cool water for 15-20 minutes several times a day. Report to your doctor immediately.</td>
</tr>
</tbody>
</table>
| **Fever and chills** may sometimes occur shortly after treatment with cetuximab. Fever should last no longer than 24 hours. | Uncommon          | • Take acetaminophen (e.g. Tylenol) every 4-6 hours, to a maximum of 4g (4000mg) per day.  
• Fever (over 100°F or 38°C by an oral thermometer) which occurs more than a few days after treatment may be a sign of infection. Report this to your doctor immediately. |
| **Skin rashes and acne**           | Common            | • Avoid direct sunlight and tanning salons  
• **This rash is different from acne, topical acne treatments should not be applied.**  
• If itching is very irritating or rash is painful or looks infected, call your doctor. Otherwise, be sure to mention rash or acne at your next visit. |
| **Nausea and vomiting** may occur after your treatment and may last for 24-48 hours. Most people have little or no nausea. | Rare              | You may be given a prescription for antinausea drug(s) to take before your chemotherapy treatment and/or at home. **It is easier to prevent nausea than treat it once it has occurred,** so follow directions closely.  
• Drink plenty of fluids  
• Eat and drink often in small amounts  
• **Food Choices to Help Control Nausea** |
| **Diarrhea** may sometimes occur.   | Rare              | If diarrhea is a problem:  
• Drink plenty of fluids  
• Eat and drink often in small amounts  
• Avoid high fibre foods as outlined in **Food ideas to help with diarrhea** |
| **Constipation** may sometimes occur. | Rare              | • Exercise if you can  
• Drink plenty of fluids  
• Try ideas in **Suggestions for dealing with constipation** |
<p>| <strong>Bone pain</strong> may sometimes occur.  | Rare              | This should improve as your body adjusts to cetuximab. You may take acetaminophen (e.g. TYLENOL®) every 4-6 hours if needed, to a maximum of 4 g (4000mg) per day or ibuprofen (e.g. Advil) for mild to moderate pain. Tell the doctor if your pain interferes with your activity. |
| <strong>Headache</strong> may sometimes occur.   | Rare              | Take acetaminophen (e.g. TYLENOL®) every 4-6 hours if needed, to a maximum of 4 g (4000mg) per day. |</p>
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<td><strong>Nail changes</strong> such as change in colour may sometimes occur. Rarely, nails will loosen or fall off, or the nailbeds will be painful.</td>
<td>Rare</td>
<td>If nails are painful, take acetaminophen (e.g. TYLENOL®) every 4-6 hours, to a maximum of 4 g (4000 mg) per day. Otherwise, be sure to mention it at your next visit.</td>
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</tbody>
</table>
| You may sometimes have **trouble sleeping**. | Uncommon | • Talk to your doctor if you continue to have trouble sleeping.  
• This will return to normal when you stop taking cetuximab. |
| **Loss of appetite** and **weight loss** may sometimes occur and may persist after discontinuation of cetuximab. | Uncommon | Try the food ideas in Food Ideas to Help with Poor Appetite. |
| **Tiredness** and lack of energy may commonly occur | Common | • Do not drive a car or operate machinery if you are feeling tired.  
• *Balancing rest, good nutrition and fluid intake can help you manage this best.* |
| **Hair loss** is rare with cetuximab. If you lose hair, it will grow back once you stop treatment with cetuximab. Colour and texture may change. | Rare | If hair loss is a problem:  
• Use a gentle shampoo and soft brush.  
• Care should be taken with use of bleaches, dyes and perms. |
RADIATION SIDE EFFECTS AND MANAGEMENT:

Are there any risks?
- Unexpected and unlikely side effects can occur with any radiation treatment. The ones listed in the following table are particularly important for you to be aware of.
- Smoking is not advisable because it can make your side effects worse and can make the treatment less effective. Ask your doctor, radiation therapist, or nurse for more information; or visit www.quitnow.ca
- Refer to the Patient Booklet at http://www.bccancer.bc.ca/health-professionals/clinical-resources/radiation-therapy#Resources

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| Skin irritation may occur while receiving radiation therapy, since all radiation must pass through your skin. The side effects will vary depending on amount of radiation given, the area of the body treated, the size of the treatment area, and whether chemotherapy has been previously administered. Skin may feel warm and sensitive and colour may change, sweating may decrease and hair loss may occur in treated area. | • Bathe using lukewarm water and mild, unscented soap. Pat skin dry with a soft towel.  
• Wear loose, comfortable clothing.  
• Protect skin from direct sunlight and wind. Avoid extremes of hot or cold (heating pads, icepacks, hot tubs, saunas, etc.).  
• You may swim if skin is intact.  
• Avoid perfume, alcohol, astringents and adhesives to the treated areas during treatment.  
• Gently apply non-scented, water-based cream or lotion with your hands. Be careful not to remove the skin markings placed by the Radiation Therapists.  
• Ask your nurse for more information.  
• If your skin begins to peel or blister, call the nursing line. |
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| **Decreased salivary flow** | • A decrease in salivary flow can lead to long term problem with dry mouth. A clean, well-hydrated mouth may prevent complications from cancer treatment.  
• To aid in swallowing, foods may be softened with liquids such as skim milk, broth or water. Foods with some bulk may be easier to swallow than liquids.  
• Avoid alcohol and caffeinated beverages which may cause dryness. Avoid carbonated beverages with sugar. Avoid diet drinks with phosphoric and citric acids.  
• To stimulate salivary flow, try the following suggestions: sugarless gum/candy with xylitol as a sweetener.  
• Water, alone or with ¼ teaspoon glycerin, is commonly used as a mouth-wetting agent.  
• Refer to Coping with Dry Mouth. |
| **Mouth Sores** | • Early detection and treatment of oral infections will diminish the severity of mouth sores and pain associated with it. Avoid commercial mouthwashes because they have a high alcohol content and can dry and irritate the oral tissues.  
• Refer to Help with Sore Mouth during Chemotherapy |
| **Loss of Taste** | • Tumours involving the 5th, 7th, 9th and 10th cranial nerves, radiation to the head and neck areas, and chemotherapy can all contribute to loss of taste sensation. Refer to Food Ideas to Cope with Taste and Smell Changes or Coping with taste changes |
THE FOLLOWING INFORMATION IS VERY IMPORTANT

SEE YOUR DOCTOR OR GET EMERGENCY HELP IMMEDIATELY IF YOU HAVE:

- Signs of an infection such as fever (over 100°F or 38°C by an oral thermometer), shaking chills; severe sore throat, productive cough (coughing up thick or green sputum); cloudy or foul smelling urine; painful, tender, or swollen red skin wounds or sores.
- Signs of an allergic reaction (rare) soon after a treatment including dizziness, fast heartbeat, face swelling, or breathing problems.
- Signs of a blood clot such as tenderness or hardness over a vein, calf swelling and tenderness, sudden onset of cough, chest pain, or shortness of breath.
- Signs of heart or lung problems such as fast or uneven heartbeat, chest pain, chest pressure, shortness of breath or difficulty in breathing, swelling of ankles, or fainting.

SEE YOUR DOCTOR AS SOON AS POSSIBLE (DURING OFFICE HOURS) IF YOU HAVE:

- Itching that is very irritating or if rash is painful or looks infected.
- Increased sore throat or mouth that makes it difficult to swallow comfortably.

CHECK WITH YOUR DOCTOR IF ANY OF THE FOLLOWING CONTINUE OR BOTHER YOU:

- Uncontrolled nausea, vomiting, diarrhea, constipation, stomach upset, or weight loss.
- Dry mouth or increased thirst.
- Pain or headache not controlled with acetaminophen (e.g., TYLENOL®).
- Redness, swelling, pain, or sores on your lips, tongue, mouth, or throat.
- Skin rash, itching, or nail changes.
- Red, irritated eyes, or eye pain.
- Depression or confusion.
- Trouble sleeping.

If you experience symptoms or changes in your body that have not been described above but worry you, or in any symptoms are severe, contact: __________________________ at telephone number:____________________