For the Patient: HNNAVGEM
Treatment of Recurrent or Metastatic Nasopharyngeal Cancer with Gemcitabine
HN = Head and Neck
N = Nasopharyngeal
AV = Advanced
GEM = Gemcitabine

ABOUT THIS MEDICATION
What is this drug used for?
• Gemcitabine is an intravenous anticancer medication used for some types of cancer.

How does this drug work?
• Gemcitabine interferes with the genetic material (DNA and RNA) of cancer cells to prevent their growth. The result is the cancer cell dies.

INTENDED BENEFITS
• This treatment is being given to destroy and/or prevent the growth of cancer cells in your body.
• This treatment may improve your current symptoms, and delay or prevent the onset of new symptoms.
• This treatment is meant to control the disease and allow you to live longer after receiving chemotherapy treatment.

HNNAVGEM TREATMENT SUMMARY
How are these drugs given?
• Gemcitabine is given intravenously on day 1 and day 8 every 3 weeks. Each cycle is 21 days and may be repeated as long as there is benefit.

What will happen when I get my drugs?
• A blood test is done within one month prior to starting your first treatment.
• A blood test is done before day 1 and day 8 of each cycle. You will be given lab requisitions for these tests.
• The dose and timing of your chemotherapy may be changed based on your blood counts and/or other side effects.
• You may be given a prescription for anti-nausea medication (filled at your regular pharmacy) that you bring in each time for your treatment. Your nurse will tell you when to take the anti-nausea medication. It is easier to prevent nausea than to treat it once it has occurred, so follow directions closely.
Treatment Protocol

Cycle 1:

<table>
<thead>
<tr>
<th>Day 1</th>
<th>Day 2</th>
<th>Day 3</th>
<th>Day 4</th>
<th>Day 5</th>
<th>Day 6</th>
<th>Day 7</th>
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<tbody>
<tr>
<td>Gemcitabine</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Day 8</th>
<th>Day 9</th>
<th>Day 10</th>
<th>Day 11</th>
<th>Day 12</th>
<th>Day 13</th>
<th>Day 14</th>
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<tbody>
<tr>
<td>Gemcitabine</td>
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<table>
<thead>
<tr>
<th>Day 15</th>
<th>Day 16</th>
<th>Day 17</th>
<th>Day 18</th>
<th>Day 19</th>
<th>Day 20</th>
<th>Day 21</th>
</tr>
</thead>
<tbody>
<tr>
<td>No chemo</td>
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This 21-day cycle will repeat 4 to 6 more times.

What are the side effects of Gemcitabine, how often do they occur and how do I manage them?

Unexpected and unlikely side effects can occur with any drug treatment. The ones listed below are particularly important for you to be aware of as they are directly related to the common actions of the drugs in your treatment plan.

<table>
<thead>
<tr>
<th>SERIOUS SIDE EFFECTS</th>
<th>How common is it?</th>
<th>MANAGEMENT</th>
</tr>
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</table>
| Your **white blood cells** will decrease 1-2 weeks after your treatment. They usually return to normal within 1 week. White blood cells protect your body by fighting bacteria (germs) that cause infection. When they are low, you are at greater risk of having an infection. | common | To help prevent infection:
• Wash your hands often and always after using the bathroom.
• Take care of your skin and mouth.
• Avoid crowds and people who are sick.
• Call your doctor **immediately** at the first sign of an infection such as fever (over 100°F or 38°C by oral thermometer), chills, cough, or burning when you pass urine. |
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</table>
| Your platelets may decrease 1-2 weeks after your treatment. They usually return to normal within 1 week. Platelets help to make your blood clot when you hurt yourself. **You may bruise or bleed more easily than usual.** | common | To help prevent bleeding problems:  
- Try not to bruise, cut, or burn yourself.  
- Clean your nose by blowing gently. Do not pick your nose.  
- Avoid constipation.  
- Brush your teeth gently with a soft toothbrush as your gums may bleed more easily. Maintain good oral hygiene.  
Some medications such as ASA (e.g., ASPIRIN®) or ibuprofen (e.g., ADVIL®) may increase your risk of bleeding.  
- Do not stop taking any medication that has been prescribed by your doctor (e.g., ASA for your heart).  
- For minor pain, try acetaminophen (e.g., TYLENOL®) first, but occasional use of ibuprofen may be acceptable. |
<p>| <strong>Shortness of breath,</strong> or difficulty breathing, that is sudden in onset, may sometimes occur with gemcitabine. | rare | Call your doctor <strong>immediately</strong> if you suddenly develop difficulty in breathing. Get Emergency help. |</p>
<table>
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<th>OTHER SIDE EFFECTS</th>
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| A flu-like illness may occur shortly after your treatment. You may have fever, chills, headache, muscle and joint aches. Flu-like symptoms usually disappear on their own. | uncommon | • Take acetaminophen (e.g., TYLEONOL®) every 3-4 hours if needed.  
• Fever and chills, which occur more than 48 hours after treatment, may be signs of an infection. They should be reported to the doctor immediately. See details above. |
| Nausea and vomiting may occur after your treatment and may last for 24 hours. It is usually mild to moderate. | very common | 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.  
• Try the ideas in Food Choices to Control Nausea. |
| Skin rash may occur after treatment with gemcitabine. It is usually mild and is found on the arms, legs, chest, back or stomach. It may or may not be itchy. | common | • Apply hydrocortisone cream 0.5% sparingly 3-4 times daily. |
| Tiredness and lack of energy may occur. | very common | • Do not drive a car or operate machinery if you are feeling tired.  
• Try the ideas in Your bank of energy savings: How people with cancer can handle fatigue. |
OTHER SIDE EFFECTS | How common is it? | MANAGEMENT
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Diarrhea may occur. | uncommon | To help diarrhea:  
• Drink plenty of fluids.  
• Eat and drink often in small amounts.  
Avoid high fibre foods as outlined in *Coping with Diarrhea.*

Hair loss sometimes occurs with gemcitabine. Your hair will grow back once you stop treatment. Colour and texture may change. | uncommon | • Use a gentle shampoo and soft brush.  
• Care should be taken with use of hair spray, bleaches, dyes andperms.

Pain or tenderness may occur where the needle was placed. | rare | • Apply cool compresses or soak in cool water for 15-20 minutes several times a day.

**INSTRUCTIONS FOR THE PATIENT**

**What other drugs can interact with gemcitabine?**

Gemcitabine may increase the blood-thinning effect of warfarin (COUMADIN®). Inform your Family Doctor to check your INR during your treatment, and for 1 to 2 months after your treatment is finished. Adjust your warfarin dose as directed by your Doctor. Check with your doctor or pharmacist before you start taking any new prescription or non-prescription products.

**THE FOLLOWING INFORMATION IS VERY IMPORTANT**

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

- Sign of an **infection** such as fever (over 100°F or 38°C by an oral thermometer); chills; cough; pain or burning when you pass urine.
- Signs of **bleeding problems** such as black, tarry stools; blood in urine; pinpoint red spots on skin.
- Signs of an **allergic reaction** soon after a treatment including dizziness, fast heart beat, face swelling or breathing problems.
- Signs of **lung problems** such as shortness of breath or difficulty breathing.
- Signs of **heart problems** such as fast or uneven heart beat.
SEE YOUR DOCTOR AS SOON AS POSSIBLE (DURING OFFICE HOURS) IF YOU HAVE:

- Signs of anemia such as unusual tiredness or weakness.
- Signs of liver problems such as yellow eyes, or skin, white or clay-coloured stools.
- Signs of kidney problems such as lower back or side pain, swelling of feet or lower legs, numbness or tingling in feet or hands, blood in urine or cloudy urine.

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

- Uncontrolled nausea, vomiting, constipation or diarrhea.
- Easy bruising or bleeding.
- Redness, swelling, pain or sores where the needle was placed.
- Skin rash with or without itching.
- Excessive drowsiness.
- Aches and pains.

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:_____________________