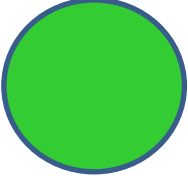
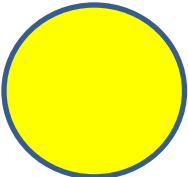
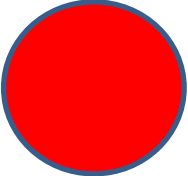


**NWOH Zone Tool**

**If you are having symptoms, don't wait until the office is closed. Call us before 4 p.m. We can help!**

 <p><b>All Clear Zone</b></p>	<p>I have:</p> <ul style="list-style-type: none"> <li>• No fever</li> <li>• No pain</li> <li>• No nausea</li> <li>• The ability to eat and drink with no difficulty</li> <li>• No other distressing symptoms</li> </ul>	<p>What to do:</p> <ul style="list-style-type: none"> <li>• Take your medications as prescribed</li> <li>• Avoid sick people</li> <li>• Wash your hands</li> <li>• Practice good oral hygiene</li> <li>• Balance activity and rest</li> <li>• Eat a well balanced diet</li> <li>• Drink plenty of fluids</li> </ul>
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 <p><b>Warning Zone</b></p>	<p>I have:</p> <ul style="list-style-type: none"> <li>• A fever</li> <li>• New or worsening pain</li> <li>• Diarrhea, constipation, or urinary problems</li> <li>• New or worsening cough or congestion</li> <li>• A Rash</li> <li>• Bleeding or excessive bruising</li> <li>• New or worsening swelling in the hands or feet</li> <li>• Fatigue that limits normal activities</li> </ul>	<p><b>Call the office NOW for new or worsening symptoms!</b></p>
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 <p><b>Medical Emergency Zone</b></p>	<p>I have:</p> <ul style="list-style-type: none"> <li>• Sudden chest pain or shortness of breath</li> <li>• Fallen and have related injuries</li> <li>• Confusion or lethargy</li> </ul>	<p><b>Go to the Emergency Room or Call 911</b></p>
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**Clinic Hours 8:00am - 5:00pm**

**Clinic Phone Numbers**

***Elk Grove (847) 437-3312***

***Rolling Meadows (847) 870-4100***

***Hoffman Estates (847) 885-4100***

***Barrington (847) 842-0180***

***Elgin (847) 577-1023***

***Business Office (847) 577-0620***

***All numbers go to answering service after hours.***

## **Your Healthcare Team**

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***Doctor:***

***PA/NP:***

***Nurse:***

***Patient Advocate:***

### **Triage nurses**

Northwest Oncology & Hematology (NWOH) wants to ensure you receive the best possible care during treatment. Triage nurses are there to support you before your symptoms become a crisis which may result in hospitalization.

The triage nurses are there to support you at the first sign of any symptoms or side effects from treatment. They are also able to help with medications refills, answer general questions about your treatment, and help schedule appointment. You can reach the triage nurses by calling any of our offices.

## **From Consult Day to Treatment**

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### **Meet with Oncologist**

On your first appointment you will meet with the physician and review your diagnosis. Any additional tests that are needed will be ordered and scheduled for you by our office. Once the physician has all needed information, a treatment plan will be created and reviewed with you. At times there are more than one treatment option available. All treatment options will be reviewed with you and questions will be answered so an informed decision can be made.

### **Meet with Nurse Navigator**

The nurse navigator will meet with you to review the medications that were ordered and any side effects that you may experience. Any questions you may have can be answered during this time.

The nurse will coordinate port or PICC placement prior to start of treatment if needed and schedule all pre-treatment testing that may be needed.

Treatment date and time will be tentatively scheduled but this may be modified based on insurance approvals.

### **Insurance approval**

The patient advocates will submit authorization to your insurance. Depending on your insurance approval can take up to 14 business days. If the approval takes any longer, a nurse will call to reschedule your appointment.

Your insurance may also require referrals from your primary care doctor and have deductibles, coinsurance, or copays which are due at time of service. The patient advocates will be able to answer any questions you may have regarding the cost of treatment. Financial support is available when needed.

Any questions you may have during the process in regard to insurance approvals or financial responsibility should be directed to your assigned patient advocate.

**If at any time you have a change in insurance, call the office as soon as possible to provide the new insurance information. If new insurance information is not provided, this may cause a delay in treatment.**

## Phone Calls

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**URGENT PHONE CALLS:** Will be answered immediately. If this is an emergency and cannot wait, please hang up and call 911.

Make an urgent call if:

- Temperature of 100.5 or above
- Shaking chills with or without fever
- Difficulty breathing
- Uncontrolled bleeding, severe pain, allergic reaction, or swollen neck, arm or leg
- Neurological changes: changes in responsiveness, increased weakness, and severe headache with vomiting
- Any condition for which you think it is unsafe to wait an hour

**HIGH PRIORITY CALL BACK:** This is for issues/concerns that include but are not limited to:

- Persistent low-grade fevers or nose bleeds
- Vomiting, diarrhea, constipation
- Pain in extremities
- Difficulty eating and drinking

**24 HOUR CALL BACK:** We will return calls between patient treatments in the office. Many of these calls will be returned by your nurse or doctor following clinic hours which end at 5:00pm. After 5:00, the physician on-call will answer new calls through our answering service.

- Insurance issues, disability papers, or prescription refills - only Monday through Friday.
- General treatment questions/concerns or changing appointments.
- Lab/x-ray reports and results.

We take your phone calls very seriously and attempt to return them as quickly as we can. Providing the below information will help us answer your call in a more timely and efficient manner.

### MESSAGES

You will be asked for:

- Name/relationship to patient
- Phone number with area code
- Problem that prompted the call
- Your birth date
- Diagnosis
- Last chemotherapy treatment
- Doctor or nurse navigator's name

***There is a nurse in the office on Saturdays from 9:15am to 1:00pm, who is available for triaging acute problems***

***If you do speak with a doctor on-call after hours and they instruct you to call for any appointment, please call first thing on the next business day to schedule prior to coming to the office.***

## Understanding Your Treatment

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Your treatment plan will be unique to your disease, stage, your present state of health, and goal of treatment. This may include chemotherapy medications (oral or IV), monoclonal antibodies, hormonal therapies, aromatase inhibitors, anti-angiogenic therapies, and radiation

**Chemotherapy** is used to help stop or slow the growth of cancer cells which grow and divide quickly. As a result, chemotherapy may also affect the healthy cells in the body that are fast growing which may include cells in your hair, mouth, and bowel. This may lead to side effects following chemotherapy treatments.

**Monoclonal Antibodies** these medications are made up of antibodies that attack specific antigens/markers on the cancer cells. This in turn activates your immune system to destroy the cancer cells.

**Hormonal Therapies** work by suppressing specific hormone secretions that help cancer cells divide and grow.

**Anti-angiogenic Therapies** prevent the growth of new blood vessels that feed cancer tumors. Thus, they are often referred to as tumor-starving therapies.

**Radiation** uses high-energy particles or waves to destroy or damage cancer cells.

**Targeted Therapies** can deliver cell killing substances to specific cancer cells

**Signal Transduction Inhibitors** block signals in the hope of precluding cancer cells from rapidly multiplying and invading other tissues.

**Immunotherapy** stimulates one's own immune system to fight cancer cells or provides man-made immune system protein.

**Checkpoint Inhibitors** seek to overcome one of cancer's main defenses against an immune system attack by blocking normal proteins on cancer cells \*EX: PD-L1.

## Understanding Your CBC Results

Three basic types of cells in your blood:

**White Blood Cells** - These cells help prevent and fight off infections. They are broken down further into different types of cells, but the most important ones are the neutrophils which your body uses for first line defense. You may often hear us refer to these cells as your ANC number.

**Red Blood Cells** - These cells are responsible for carrying oxygen throughout your body.

**Platelets** – These are used to help stop and prevent bleeding.

A common side effect of chemotherapy is a decrease in the above CBC counts. During your treatment, we will closely monitor them and, when needed, additional interventions may be needed to help treat low counts.

## Infections

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Chemotherapy affects your white blood cells that help fight off infections. You usually see your WBC's drop 7- 10 days after your chemotherapy treatment. This is when you are at greatest risk for infections. Below are some tips to help lower your risk of infection:

- Wash your hands with soap and water
  - Before eating
  - After using the restroom
  - After blowing your nose or coughing into hands
  - After touching animals
  - After being outside
- If you are unable to wash your hands with soap, use alcohol-based sanitizer
- Monitor your temperature daily
- Avoid touching your face
- Brush your teeth twice a day
- Avoid close contact with sick people
- Be careful around animals
- Do not clean litter boxes, bird cages, or fish tanks
- Avoid changing diapers. If you do, wash your hands immediately with soap and warm water
- Keep skin clean and dry
- Wear shoes to prevent injury
- Avoid salons or spas for manicures &/or pedicures. There is increased risk of infection
- Avoid standing water. Do not use hot tubs in times of increased risk of infection
- Do not share towels or drinking glasses (family member can be sick prior to showing signs)
- Wash fruits and vegetables well prior to eating.
- All meat, fish, poultry should be prepared "well done."
- Caregivers should also be mindful of their hand hygiene.
- Influenza vaccine is recommended to be given during flu season (starting in September/October) but discuss timing of injection with your physician or advance practitioner.

Call the office with any signs or symptoms of infection

- Temperature equal or greater than 100.5 (during or after hours)
- Chills
- Sore throat
- Difficulty urinating
- Shortness of breath
- Redness or swelling at a catheter, injury, or wound site(s)

***Call the office with temperature > than 100.5 or any other signs or symptoms of infection. Call at time of fever even if this occurs at night or on the weekend.***

## Fatigue

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Fatigue is a common side-effect from chemotherapy, immunotherapy, and radiation. 80 to 100 percent of people have the complaint of fatigue, feeling tired or run down during their treatment. Though it seems impossible, the best practice for your body and mind when you are fatigued is exercise. The amount of fatigue you experience can differ from person to person. As you receive more treatments the amount of fatigue you experience may increase. Listed below are things you can do to help decrease the amount and/or length of fatigue you experience.

### **Some Hints to Help with Fatigue:**

- Stay Hydrated- 8-10 glasses of fluid a day
- Stay Active with regular moderate-exercise (i.e., walking, riding a bike, light strength training, etc.)
- Do not push yourself
- If you are not an active person, start with light walking
- Runners may need to slow down to a jog
- Aerobics/Zumba participants may need to choose Yoga while the fatigue is at its peak
- Acknowledge that breaks may be needed during activity
- Conserve Energy-space out plans/activities and plan rest breaks/naps if needed during day that you have more fatigue. Let others help
- Maintain a regular sleep schedule and aim for 7-8 hours of sleep a night.
- Focus on getting a balanced diet that includes good sources of protein (meat, milk, eggs, and beans)
- Practice Stress relieving techniques



## Hair Loss

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Due to the fast growing/dividing nature of hair cells, some chemotherapy may cause hair loss.

Hair loss may occur anywhere on your body and begins typically in 2 - 3 weeks after your chemotherapy begins.

### ***Some things to help with this process:***

- Consider cutting your hair short in the beginning.
- If you plan to buy a wig, do so while you still have hair (we have a list of several places you can go) and insurance may cover some of the cost. You will need a script from our office and the bill from purchasing your wig to turn in to your insurance.
- Losing your hair may cause some itching and discomfort to your scalp. If this occurs, you can use Benadryl for itching or Tylenol for pain.
- Small raised bumps may also appear.
- Washing your scalp gently with baby shampoo can also be helpful.
- Hair often grows back 2 - 3 months after chemotherapy is over.
- Please avoid dyes or perms during chemotherapy.

### **Cold Cap Guidelines**

Cold caps can be used along with your chemotherapy to try to reduce hair loss, here are some guidelines and suggestions that will help ensure a positive experience for you and your family or significant others. Speak to your nurse if you are interested in more information regarding cold caps.

- Plan to add extra time onto your planned treatment time to allow for getting set up with the cold caps.
- You will be wearing the cold cap for several hours-one hour prior to treatment and approximately four hours following treatment (you will receive special instructions from the manufacturer specifically about your cold cap).
- You may experience some discomfort when the cold cap is first placed.
- You can purchase moleskin to place on your forehead, temples and top of the ears to protect them while you a
- The cold cap will cause you some fatigue due to its weight (approximately 2 lbs. but varies depending on brand).
- You should not color/perm your hair while receiving and for 2-3 months after completion of treatment.

## Mouth and Throat Side Effects

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Due to the chemotherapy's ability to attack fast growing cells, the ones in your mouth, throat, and lips can be affected. This may lead to dry mouth, mouth sores, infections, increased sensitivity to hot or cold foods, and difficulty eating.

### Hints to Help Prevent and Treat Mouth/Throat Side Effects:

- Following a strict oral hygiene schedule is imperative to preventing and minimizing mucositis.
- Visit your dentist for a check-up prior to starting chemotherapy. Routine dental work should be avoided during treatment. If you develop dental problems/pain, please check with the office prior to having major dental work done.
- Brush your teeth with a soft toothbrush, be gentle. If a regular flosser, continue cautiously; hold if advised that there is a risk of bleeding.
- Rinse Mouth frequently. Use of Sodium Bicarbonate (baking soda and bicarbonate of soda) a mild alkaline agent is a recommended practice.
- Use mouthwash daily to help prevent mouth sores (redness, tenderness, white patches, or canker type of sores in mouth) that are alcohol free (i.e., Biotene, Crest Pro-Health etc.) or mix:
  - 1 cup of warm water, ¼ tsp. baking soda, and 1/8 tsp of salt and rinse mouth. (Mix well until salt dissolves. Rinse mouth gently but do not swallow the mixture. Follow this with plain water rinse to clean out any remaining salt or soda).
- Use of ice chips or ice water right before or during treatment may be helpful for some chemotherapies (check with your nurse/doctor first). This is also known as Cryotherapy.
- Things to help if you do develop mouth sores and/or mouth sensitivity:
  - Avoid Acidic drinks or foods (tomatoes, oranges, lemons) and spicy, salty, or coarse foods.
  - Avoid Hot or cold beverages. Room temperature foods and drinks may be best.
  - Maintain good nutrition. Soft and semi/liquid foods (i.e. scrambled eggs, puddings, blended or pureed foods), as well as liquid supplements (i.e. Ensure, Boost, etc.) may be recommended.
- Call office if symptoms interfere with eating, drinking, and sleeping. Signs of infection (i.e., tongue heavily coated) or symptoms that do not improve.

## Nausea and Vomiting

---

**Some types of chemotherapy can cause nausea or vomiting or both. Nausea or vomiting may include:**

- Acute: within 24 hours of receiving chemotherapy
- Delayed: any nausea or vomiting after 24 hours of receiving chemotherapy and peaks at 48-72hours, may last as long as 7 days.
- Anticipatory: based on prior nausea or vomiting experience that may be increased with triggers or anticipation of chemotherapy causing nausea or vomiting.
- Breakthrough: can occur even after the use of home medications and may require the use of other medications.
- Refractory: can occur after many cycles of chemotherapy and after use of home medications, when breakthrough medications have not worked.

### Medications/Prescriptions

- If the chemotherapy drug you are receiving could possibly cause nausea, the doctor will prescribe an anti-nausea medication for you to get IV or SQ (injection in your abdomen) prior to your treatment.
- Your doctor may provide you with a prescription that you can take at home as needed or scheduled for nausea/vomiting.
- You may require additional medications and or adjustments to your nausea medications.
  - Medical Cannabis may be an option but will need to be discussed with your doctor.

### Tips to prevent Nausea/Vomiting

- Please refer to the Nutritional Tips on page 13 to help with some nausea side effects.
- Stay well hydrated (60 oz. of fluid a day if able and not on fluid restriction).
- Avoid caffeinated drinks.
- Drink clear liquids like ginger ale, apple juice, broth, tea, popsicles, ice chips or gelatin.
- Take anti-nausea medication at the first sign of nausea but allow 20-30 minutes for the medication to take effect prior to eating /drinking.
- Eat small frequent meals.
- Do not lie down right after eating.
- Avoid fatty, fried, spicy, or very greasy foods. Eat bland foods instead the day of treatment and a few days after to minimize nausea/vomiting.

## GI Side Effects

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**Constipation** can occur as a result of chemotherapy drugs, anti-nausea medication, pain medication, decreased fluid intake, and decreased activity. If constipation is a problem, we often recommend over-the-counter stool softeners, if symptoms persist for more than 2 days.

### Examples of Constipation are:

- Hard Stools
- Sensation of abdominal bloating or cramping
- Straining with bowel movements
- Feeling incomplete evacuation

### Examples of over-the-counter medications and tips for constipation:

- Senokot-S, Dulcolax, and Miralax are examples of what you can try at home.
- Drink more fluids such as water, fruit juices or warm or hot fluids (at least 64 oz a day)
- Eat high fiber foods every day such as whole grain breads and cereals, dried fruits or fresh fruits, fresh raw vegetables, and bran. When increasing fiber intake, you must also increase your fluid intake.
- Avoid foods and drinks that cause gas until constipation is gone such as cabbage, broccoli and carbonated drinks
- Avoid foods that cause constipation such as cheese or eggs
- Stay Active as much as you can
- Go to the bathroom as soon as you have the urge
- Keep track of your bowel movements and report any changes or ongoing discomfort

**Call your provider if you have not had a bowel movement in 3 days after taking over the counter medication, if you have belly cramps or vomiting that won't stop, or if you have blood in or around the anal area or blood in your stool.**

**Diarrhea** can occur as a result of chemotherapy drugs, radiation, or diet changes. Diarrhea is an abnormal increase in bowel movements of three or more loose or watery stools a day accompanied by abdominal cramping. Patients undergoing chemotherapy, receiving radiation therapy to abdominal and pelvic areas may have more incidence of diarrhea.

### Examples of over the counter medications and tips for diarrhea:

- Imodium AD, take this medication after the first loose stool. Follow package insert 2 tablets by mouth followed by 1 tablet every 3 hours as needed for loose stool (Do not exceed 8 tablets daily).

## GI Side Effect cont.

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- Drink plenty of clear fluids, non-carbonated liquids that are room temperature throughout the day (at least 64 oz a day)
- Eat small meals and snacks throughout the day
- Avoid greasy, spicy, fried, or very sweet foods
- Limit milk or milk products to 2 cups per day
- Drink and eat foods like broths, soups, sports drinks, fruit juices
- Eat foods like applesauce, bananas, canned peaches, pears, oats or oatmeal or a BRAT diet (Bananas, rice, applesauce, and/or toast).
- When to call:
  - If diarrhea continues or increases after taking over the counter medication
  - Unusual odor or color

## Nutritional Tips

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During Chemotherapy treatment you could experience changes in taste and/or a decrease in appetite. These changes can include foods tasting bitter, sweet, and/or salty. Foods may taste bland and/or all taste the same or you may experience a metallic or chemical taste

It is important to eat a healthy diet, everything in moderation. Staying hydrated is extremely important to keep your kidneys flushed out, decrease nausea and help with fatigue. Try for at least 8-10 (8oz) glasses of fluid a day.

### Tips for Staying Hydrated:

- Drink water (add flavor if needed), milk, low-sugar juice, broth and caffeine-free tea. Caffeine beverages do not have to be eliminated but should be kept to a minimum.
- Soups, popsicles, yogurt, jello, and watermelon are also high in water content and can help keep you hydrated.
- Have fluid readily available to sip on throughout the day.

### Tips to Help with Taste/Appetite changes:

- Eating small but frequent meals may help keep nausea under control.
- Smoothies/shakes and soups are good ways to get calories and protein.
- Try to avoid foods that may upset your stomach such as greasy, fried, or spicy foods.
- It is important to eat normal meals on the day of your treatment.
- Use plastic forks and spoons because some types of chemo give you a metal taste in your mouth.
- If you have diarrhea, try to stick with a BRAT diet: Bananas, Rice, Applesauce, Toast.

### Neutropenic Diet:

- Avoid fresh fruits and vegetables unless you can peel the outside and make sure you wash them well.
- Make sure meats are cooked well done
- Additionally avoid:
  - Raw nuts
  - Soft cheese from unpasteurized milk.
  - Salad bars and buffets
  - Yogurt products with live or active cultures.

## Nutritional Tips – Potassium

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### High Potassium Foods

**If your potassium level is high, avoid these foods. If your potassium level is low, choose these foods more often.**

**Fruits:** Avocado, Banana, Cactus, Cherimoya, Coconut, Dates, Dried fruit, Figs, Guava, Jackfruit, Kiwi, Mango, Melons, Nectarine, Orange, Papaya, Passion fruit, Peach, fresh Pear, fresh Persimmons, Plantain, Pomegranate, Prunes, Pumpkin, Pummelo, Raisins, Soursop, Tamarind, \*Any juices made from these fruits

**Vegetables:** Artichoke, Bamboo shoots, Beets (raw), Beet greens, Bok choy, Broccoli, Brussel sprouts, Burdock root, Carrots, Cassava (yucca root), Chard, Chili peppers(raw), Chinese cabbage, Chipotle peppers in adobo sauce, Collard greens, Kohlrabi Lima beans, Mushrooms, Mung beans, Parsnips, Peas (split, black-eyed), Potato, Rutabaga, Salsify (oyster plant), Spinach, Squash (acorn, butternut, hubbard, zucchini), Sweet potato, Taro root, Tomato, Yam

**Other:** Beans (pinto, black, etc), Chocolate, Cocoa, Custard, Flan, Granola, Lentils, Milk, Milk shakes, Molasses, Mole sauce (Poblano), Nuts, Nut butters Pudding, Salt substitute (e.g. Nu-Salt Morton's Salt Substitute ), Soy milk, Tempeh, Tofu, Wheat bran, Yogurt

### Low Potassium Foods

**If your potassium level is high, choose more of these foods**

**Fruits:** Apple, apple juice, applesauce, Apricot, Blackberries, Blueberries, Boysenberries, Cactus (nopales), Cherries, Clementine, Coconut, shredded Cranberries (raw or dried), cranberry juice, cranberry sauce, Fruit cocktail, canned Grapes, grape juice, Kumquat, Lemon, Lime, Loquat, Lychee, Mandarin oranges, canned Peaches, canned Pears, canned Persimmon, Pineapple, pineapple juice, Plum, Quince, Raspberries, Rhubarb, Strawberries, Tangerine, Watermelon

**Vegetables:** Arugula, Asparagus, Beans (green, wax), Bell peppers, Cabbage, Calabash (gourd), Cauliflower, Celery, Chayote Chili peppers, canned Corn, Cucumber, Daikon, Dandelion greens, Eggplant, Endive/escarole, Green onions (scallions), Hominy, Jalapeno peppers, Jicama, Kale, Leeks, Lettuce (iceburg, romaine), Mustard greens (frozen or cooked), Okra, Onions, Peas (green, pod), Radishes, Serrano peppers, Squash (crookneck, straight neck, scallop, spaghetti), Tomatillos, Turnip, turnip greens, Water chestnuts(canned), Zucchini

**Other:** Almond milk, Bread, Cereal: cornflakes, Cheerios, puffed rice, Cheese, Cottage cheese, Coffee, Hummus, Nondairy creamer, Oatmeal, Pasta/noodles, Rice, Rice milk, Salt-free seasoning (e.g., Mrs. Dash), Sunflower seeds, Sunflower seed butter, Tapioca, Tea, Tofu, Tortillas

## Nutritional Tips – Magnesium

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### Magnesium Rich Foods

Food	MG per serving	Percent Daily Value
Cashews, dry roasted, 1 ounce	74	18
Peanuts, oil roasted, ¼ cup	63	15
Cereal, shredded wheat, 2 large biscuits	61	15
Soy milk, plain or vanilla, 1 cup	61	15
Black beans, cooked, ½ cup	60	14
Edamame, shelled, cooked, ½ cup	50	12
Peanut butter, smooth, 2 tablespoons	49	12
Potato, baked with skin, 3.5 ounces	43	10
Rice, brown, cooked, ½ cup	42	10
Yogurt, plain, low fat, 8 ounces	42	10
Breakfast cereals, fortified with 10% of the DV for magnesium, 1 serving	42	10
Oatmeal, instant, 1 packet	36	9
Kidney beans, canned, ½ cup	35	8
Banana, 1 medium	32	8
Salmon, Atlantic, farmed, cooked, 3 ounces	26	6
Milk, 1 cup	24–27	6
Halibut, cooked, 3 ounces	24	6
Raisins, ½ cup	23	5
Bread, whole wheat, 1 slice	23	5
Avocado, cubed, ½ cup	22	5
Chicken breast, roasted, 3 ounces	22	5
Beef, ground, 90% lean, pan broiled, 3 ounces	20	5
Broccoli, chopped and cooked, ½ cup	12	3
Rice, white, cooked, ½ cup	10	2
Apple, 1 medium	9	2
Carrot, raw, 1 medium	7	2



## Sexual Changes and Fertility

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Some types of chemotherapy can cause infertility. Before treatment starts, tell your doctor if you want to have children in the future. There are ways to help preserve fertility before and after treatments. This may include freezing of sperm/eggs prior to starting treatments.

- Do not get pregnant while on chemotherapy because chemotherapy can cause birth defects. Please use appropriate birth control.
- Some chemotherapy can cause early menopause in women which may cause hot flashes, vaginal dryness, and irregular or no menstrual periods.
- Cancer treatment does not make sexual activity dangerous. Some chemotherapy can be present in small amounts in semen and vaginal fluids. To be safe, use a condom for at least 72 hours after you or your partner have received treatment.

### **Possible Sexual Side Effects:**

- Less energy for sexual activity
- Loss of desire for sex
- Pain
- Vaginal dryness
- Changes in orgasms/erections
- Changes in body image
- It is important to keep open communication with your partner about this subject. You both may have anxiety and fears that need to be addressed.
- If these do occur, there are ways to help manage or lessen the side effects. Please do not hesitate to speak with your doctor, nurse, or other healthcare professional about your concerns.

**Please ask a member of your care team if you would like additional information on this topic**

## IV Access and Ports

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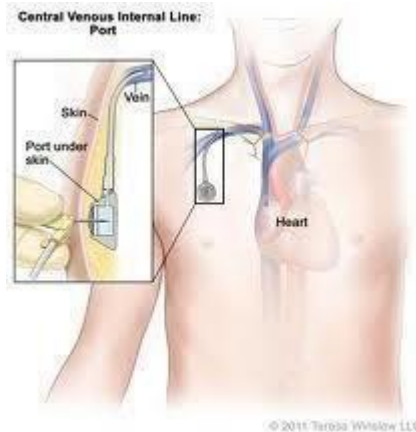
### PORT: An Implantable Vascular Access Device

#### What is a Port?

A port is a small device placed completely beneath your skin. The port device connects to a small, flexible tube called a catheter that is inserted inside one of the large central veins.

#### How is the port placed?

The port is placed during a brief procedure that is performed under local anesthesia by a surgeon either referred by your physician or surgeon of your choice. The surgeon will place the port just beneath the skin in a position most suitable for your treatment. Frequently, the port is placed on the upper chest just below the collarbone. The port is usually visible merely as a small “raised area” under the skin.

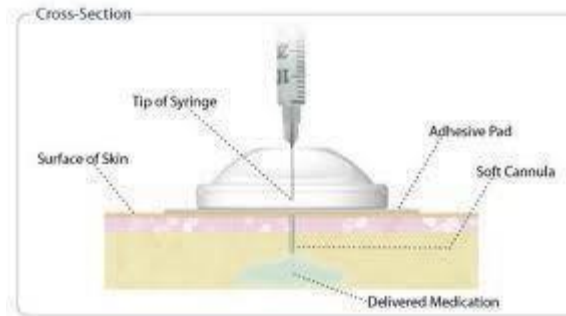


#### What can the port be used for?

The port can be used to draw blood for tests and infuse medications – such as chemotherapy – into the bloodstream. It can also be used for blood transfusions and IV nutrition.

#### How is your port accessed?

Your port will be accessed by inserting a special needle into the soft top of the device (see below). For most patients, there is only a mild pricking sensation felt. Frequently, the sensation decreases over time.



### Care for your port

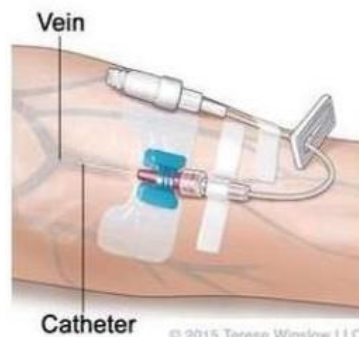
During the first couple of days after receiving your port, it will be important to avoid heavy exertion and to follow special instructions given to you by the surgeon for care regarding the small incisions. Once the incisions have healed, you will not have to take any special care of the port and you can resume normal daily activities.

### Additional Information

When your port is not in use for long periods, it is important to have your port “flushed.” Normal saline every eight weeks is usually recommended when the port is not being used.

### Intravenous Catheter

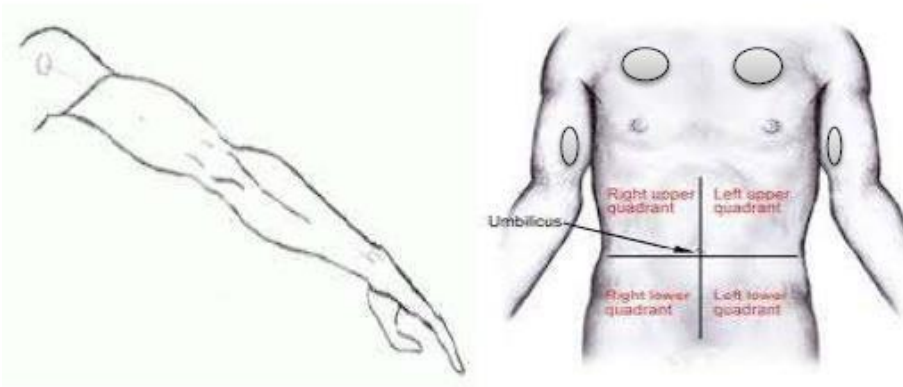
A peripheral intravenous (IV) catheter is the most common type of venous access device. At the chairside, a nurse uses a needle to insert a small, flexible tube into a vein in the arm or hand. The needle is then removed, leaving only the catheter. After placing the catheter, it must be secured to avoid dislodgement and cannot be used for more than 2-3 days. Like ports, peripheral IVs allow healthcare workers to administer medications, IV fluids, or blood products directly into the bloodstream.



## Instructions for applying EMLA cream

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- EMLA Cream must be applied at least 30 minutes prior to Sustol injection &/or a Mediport access
- Before applying EMLA Cream, choose the site directed by the nurse during teaching. Back of upper arm or abdomen. The site should be free of irritation, cuts or sores
- The cream should be applied THICK on top of skin. Place the cream at site where Sustol (anti-nausea medication) will be administered &/or where the mediport is located (may be several inches below the incision line). Cover area the size of two quarters. DO NOT RUB CREAM INTO SKIN.



- Take plastic wrap and cover the site. Be careful not to press on the cream, in order for it to remain thick
- Secure the edges of the plastic with medical tape or bandage to avoid leakage or movement of plastic
- Plastic wrap and cream will be removed at time of treatment
- If you are having difficulty, bring EMLA cream to appointment and assistance will be provided. Please note that it may delay treatment

## Chemotherapy Infusions/Treatments Guidelines

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The priority for Northwest Oncology & Hematology is to provide safe, quality care in a timely manner. To maintain an orderly clinic, we often assign treatments to specific nurses and treatment rooms based on the needs of the patients. Please know we make all attempts to meet the needs of all our patients when scheduling appointments and assigning treatment rooms.

**Morning appointments** are usually reserved for patients who are receiving long treatments or need to see the doctor at that hour.

**Afternoon appointments** are used for shorter treatments or treatments added on the same day.

### Visitor Guidelines

Visitors should be of good health for the safety of our patients. This is defined as no fevers, cough, or other active illnesses for at least 24 hours prior to visiting the clinic. Masks must be worn by all patient and visitors.

Due to side effects of treatment, many patients become very sensitive to smells. Please refrain from wearing any scented products or bring food with strong odors into the clinics.

For the safety of our staff and patients, visitors who remain for treatments should stop at the nursing charge desk to sign for a visitor badge. If you leave the treatment area, upon returning show the visitor badge to the front desk. When leaving for the day, the visitor badge should be returned to the charge desk. There is a maximum of one visitor allowed in the treatment area per patient. On days where space is limited, visitors may be asked to wait in the waiting area.

### Additional Information

Pillows and blankets are available upon request. We have a small selection of beverages if needed. NWOH does not provide meals for patients for longer treatment days, however the hospitals and neighboring buildings do have cafeteria services available. We do suggest bringing snacks and a lunch if your treatment requires you to be in the office for an extended period of time

The Elk Grove Village location is open on Saturdays from 9:00am – 1:00pm for specific treatment needs and those with urgent issues. Your doctor or the doctor on call will determine if you need to be schedule for a Saturday appointment. Refill requests are not completed on Saturdays.

## SDS and Prescription Refills

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The Specialty Dispensing Service or “SDS” dispenses oral chemotherapy agents and supportive medications under the supervision of the physicians in our office.

Medication compliance and refills are monitored closely by the SDS staff with direct communication between the SDS and physicians in the office. Prescription assistance is available to find payment options with outside sources when the cost of the medication exceeds the patient’s affordability.

### **A. Types of Services Available Within our Organization**

- 1) Patient assistance
- 2) Dispensing of specialty medications
- 3) Counseling on new drugs

### **B. Client/patient responsibility for care/service and/or products**

- 1) Northwest Oncology & Hematology will bill every patient’s insurance if applicable
- 2) All necessary authorizations will be obtained in house as quickly as possible
- 3) If at any point the patient has claims related information, they can reach anyone in at Northwest Oncology & Hematology at 847-981-5578
- 4) If patient has commercial insurance:
  - i. Patient will be presented with copay and any possibilities of a copay card or patient assistance from all sources.
  - ii. Patient will be responsible for any remaining balance not covered at the time of delivery
- 5) If patient has Medicare Part D:
  - i. Northwest Oncology & Hematology will present the patient with the copay at time of adjudication
  - ii. If patient cannot afford copay, Northwest Oncology & Hematology will:
    - a. Investigate availability of non-profit foundation copay assistance for patient
    - b. Assist patient in application to non-profit foundation
    - c. Notify patient once approval/denial of copay foundation application is received with billing information included
    - d. Patient will be responsible for the balance unpaid by the insurance company and other sources at the time of delivery
- 6) If patient is uninsured/underinsured:  
Northwest Oncology & Hematology will:
  1. Investigate patient assistance programs
  2. Assist patient with application (if necessary)
  3. Help coordinate delivery of services with all available resources

If there are no resources for assistance available, patient has the option of paying the full balance due as defined by Northwest Oncology & Hematology. Prescribing physician will be notified of the situation so that they can reevaluate options

- 7) If patient’s insurance is not preferred by the organization, they will have the right to know the difference in cost of in and out of network

### **C. Hours of Operation**

Monday to Friday 8:00 AM to 5:00 PM

- 1) Closed on New Year’s Day, Memorial Day, Fourth of July, Labor Day, Thanksgiving Day, Christmas Day.
- 2) There is a physician call schedule in which physicians are available to patients 24 hours a day and 7 days a week. If not urgent, the after-hours call center will forward the message to proper staff for follow up the next business day

### **D. Contact Information**

Northwest Oncology & Hematology Dispensing Service  
800 Biesterfield Rd Ste 210 Elk Grove, IL 60007  
P: 847-981-5578 F: 847-220-9290

## Caregiver Tips

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Whatever role you play as caregiver, it will be an important aspect of the patient's treatment. Your love, support, encouragement, and presence can make a difference. These are just a few helpful tips (they are meant to serve only as a guide):

Coming with the patient to doctor appointments may help them remember important information, as well as answer many of your own concerns/questions about the process which can be helpful when caring for the patient at home.

Open communication is important

Often just listening is all the patient needs

Encourage the patient to do activities that makes them happy

Do not forget to take care of yourself and do activities that make you happy

### ***Additional Resources:***

**CancerCare** is a national nonprofit organization that provides free professional support services to anyone affected by cancer: people with cancer, caregivers, children, loved ones, and bereaved. Please contact them for additional information.

CancerCare  
1-800-813 HOPE (4673)  
[www.cancercare.org](http://www.cancercare.org)

National Family Caregivers Society 1-800-896-0879  
[www.caregiver.org](http://www.caregiver.org)

National Family Caregivers Association 1-800-838-3650  
[www.thefamilycaregiver.org](http://www.thefamilycaregiver.org)

Well Spouse Association 1-800-838-0879  
[www.wellspouse.org](http://www.wellspouse.org)

## Resources

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### Internet Websites:

[www.cancer.gov](http://www.cancer.gov)

[www.cancer.org](http://www.cancer.org)

[www.chemocare.com](http://www.chemocare.com)

[www.nccn.org](http://www.nccn.org)

### ***Alexian Brothers Hospital Cancer Institute:***

Botique-1-888-466-6011

Ambulatory Care Department (out-patient treatments) 847-437-5500 ext. 4271

Breast Care Program 847-952-7192

Cancer Institute 1-888-466-6011

*Look Good Feel...Better*

Radiation Oncology Center 847-981-5760

Social Work 847-437-5500 ext. 5904

### ***St. Alexius Hospital Cancer Institute:***

Procedure Clinic (out-patient treatments) 847-843-2000 ext. 6460

Radiation Oncology Center 847-755-8400

Cancer Institute 1-888-466-6011

*Look Good Feel...Better*

### ***Northwest Community Hospital:***

Cancer Support Information-847-618-4YOU

*Look Good Feel....Better*

*Guided Imagery for Cancer Survivors*

*Leukemia/Lymphoma and other Blood Related Disorders Networking Group*

*Make Today Count*

*MDS Networking Group*

*Pancreatic Cancer Support Group*

*Reach for Support*

### ***Good Shepard Hospital:***

Cancer Support Information - 847-842-Hugs (4847)

*Look Good Feel....Better*

**Fertile HOPE:** 1-866-965-7205

**CancerCare, Inc.**

1-800-813-HOPE

**National Cancer Institute:**

1-800-4-CANCER

**American Cancer Society:** 1-800-ACS-2345

**Cancer Support Community:**

1-888-793-9355



## **Mental Health Reference Sheet**

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It is common to become scared and/or depressed while going through chemotherapy. If these feelings of fear become overwhelming, let us know as there are resources out there that can help.

Regular mental health screening will be completed throughout your treatment.

## Immunotherapy

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### What is Immunotherapy?

Immunotherapy, also called biologic therapy, is a type of cancer treatment that boosts the body's natural defenses to fight cancer. It uses substances made by the body or in a laboratory to improve or restore immune system function. Immunotherapy may work by:

- Stopping or slowing the growth of cancer cells
- Stopping cancer from spreading to other parts of the body
- Helping the immune system work better at destroying cancer cells (cancer.net)

### Common side effects:

These side effects are common but may not occur in all people or with all types of immunotherapies.

- Feeling tired (fatigue)
- Diarrhea
- Fever
- Shortness of breath
- Rash and/or blisters, covering less than 10% of the body
- Nausea
- Vomiting
- Itching
- Headache
- Weight loss
- Difficulty falling or staying asleep
- Decreased appetite

### Contact your healthcare professional right away if these side effects occur:

- Fever, confusion, neck stiffness, sensitivity to light, changes in mood or behavior
- Persistent or unusual headaches, EXTREME tiredness, weight loss or gain (more than 7 pounds), increased sweating, hair loss, dizziness or fainting
- Decreased in the amount of urine, blood in the urine
- Rashes, itching, blistering, painful sores or ulcers (on skin or in mouth)
- Severe or persistent muscle or joint pain, severe muscle weakness
- Blurry or double vision, eye pain or redness, new vision problems
- New or worsening cough, worsening shortness of breath
- Yellowing of the skin, severe nausea/vomiting, pain on the right side of your stomach, dark urine, bleeding/bruising more easily
- Diarrhea or more bowel movements than usual, stools that have blood or are dark, tarry or sticky, severe stomach pain
- Numbness or tingling in hands or feet, unusual weakness in arms, legs or face

Mild side effects can occur in 30-50% of patients; serious side effects occur in less than 5% of patients. These side effects can present themselves anywhere from 1 week after treatment or years after treatment. Most side effects are treated with a course of steroids; it is important to follow the directions as prescribed.

**Things to Consider prior to starting Immunotherapy:**

- It is very important to keep appointments. If you need to reschedule, please call.
- Bring any questions you may have to your appointments
- Report any new or worsening symptoms right away
- Be sure to report any treatments you receive in our office to other medical providers: PCP, other specialists, dentist, surgeons, etc
- Immunotherapy can continue for long periods of time; be sure to discuss plan of care with your oncologist

**Maintain your General Well-Being:**

- Go for a walk and get fresh air
- Exercise-low impact
- Do an activity that you enjoy
- Rest
- Eat healthy meals and snacks

## Understanding Immunotherapy Side Effects

NCCN National Comprehensive Cancer Network®

# Understanding Immunotherapy Side Effects

Immune checkpoint inhibitors (a type of immunotherapy) offer a promising new way to treat cancer for some patients. But these medicines can cause your immune system to attack normal organs and tissues in your body, affecting the way they work. Serious side effects typically occur in less than 5% of patients, but certain mild side effects can occur in up to 30% – 50% of patients.

**Contact your health care professional right away if you think you may be experiencing ...**

