

Getting Started

What to expect while going through treatments



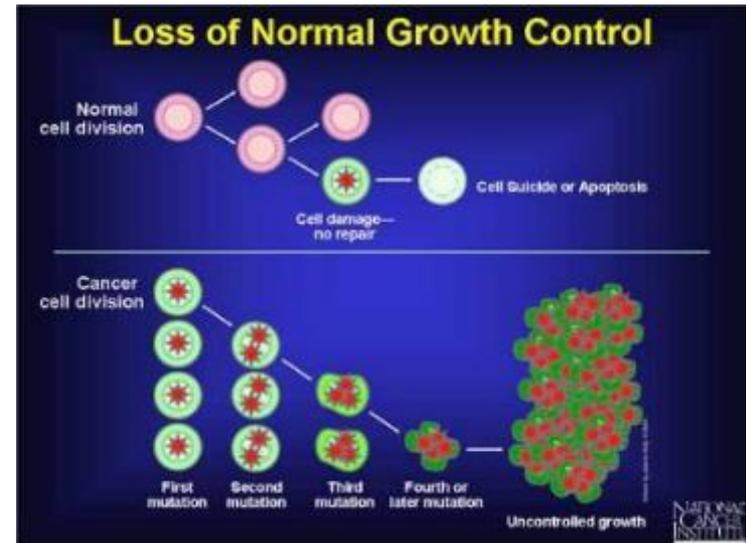
WHO DO I CALL?

PLEASE CALL US FIRST!

- If you can be treated early, we may be able to prevent complications
- Call main office number & provide:
 1. Name
 2. DOB
 3. Physician's name
 4. Reason for your call
 5. Your call back number
- Calls may be transferred to voicemail
 - Please leave the above information
- Messages left after 4:30 pm may not be returned until the next business day.
- *After hours:*
 - answering service available
 - Provide 5 items listed
 - You will be connected to the provider on call if appropriate.
- *Non-urgent questions* can be emailed to team via MyCarePlus portal
- **Call 911 or go directly to the emergency department for signs/symptoms of heart attack or stroke**

WHAT IS CANCER?

- An overgrowth of abnormal cells
 - Your immune system usually recognizes abnormalities in cells and repairs them or forces them to die (apoptosis)
 - If abnormal cell growth goes undetected, cell overgrowth can occur
 - Benign
 - Confined growth
 - Malignant
 - Have the ability to invade neighboring tissue



HOW DO WE TREAT CANCER?

Local Therapy

- Treats local cancer cells by either removing them or treating with high-energy x-rays or other particles
 - Surgery
 - Radiation

If appropriate, patients are treated in multiple ways to improve their outcomes.

Systemic Therapy

- Treats not only local cancer cells but also cells that may have escaped to distant sites in the body
 - Chemotherapy
 - Immunotherapy
 - Targeted therapies
 - Anti-hormonal therapies

HOW IS TREATMENT GIVEN?

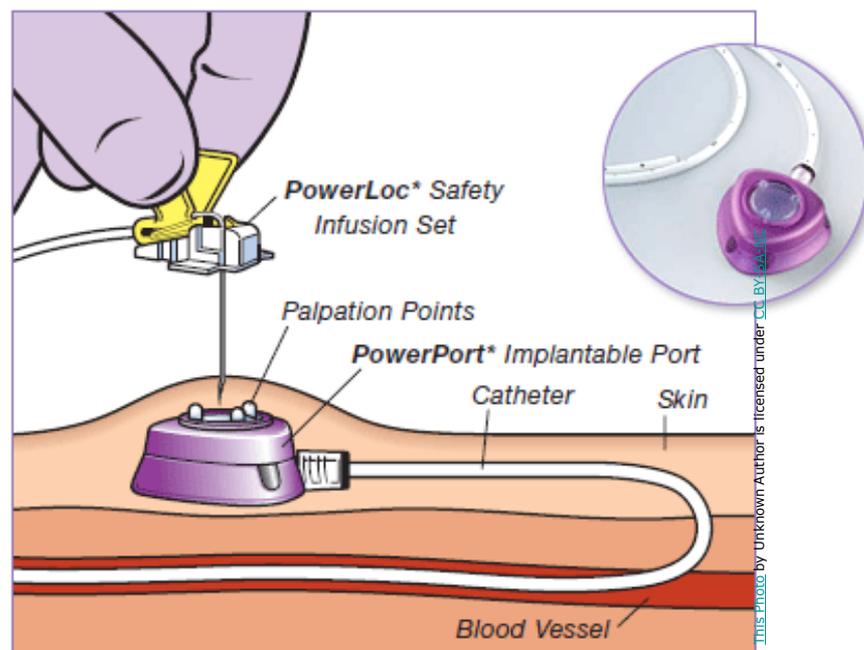
- Most treatments are given IV
 - Medication enters the blood stream and is distributed throughout body
- Some chemotherapies and targeted therapies are given as pills (oral therapy)
- IV will be started in the treatment room by nurses
- Your IV will be connected to tubing
 - Often the medication will be run through a pump
 - Occasionally the nurse will administer medications directly into the IV



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DO I NEED A PORT?

- Not necessarily; discuss with your provider
- Some treatment drugs are harder on vessels or can be damaging to tissue
 - require administration into larger vessels
- Port placement is a procedure
- Port placed under surface of skin
- Accessed in the clinic for blood draws and treatment administration



MY TREATMENT REGIMEN

- Treatment is repeated on a regular schedule with periods of rest in between
- This pattern makes your treatment **cycle**
 - **You have a _____ day cycle with treatment on days _____**
- Cycle starts on Day 1 although treatment may be received on multiple days

DRUGS	DAYS GIVEN	TYPE OF DRUG

HOW DOES CHEMO WORK?

- Abnormal cells go through the life cycle more rapidly than normal cells
- Chemotherapy interrupts the life cycle of rapidly dividing cells
 - Stops the cancer's ability to grow and spread → kills the cancer
 - Can also affect rapidly dividing healthy cells:
 - Hair (scalp, beard, underarms, etc.)
 - GI system (mouth, stomach and bowel)
 - Bone marrow (red blood cells, platelets, white blood cells)

HOW DOES TARGETED THERAPY WORK?

- Some cancer cells express specific molecules (markers)
 - signal growth, function or cell death
- “Targeted therapies” bind to these specific molecules and impact the cell signaling process
 - Flag cell for death or stop growth cycle
 - More direct impact on cancer cells
 - Side effects based on target impacted
 - Diarrhea, elevated liver labs, skin changes, wound healing issues

HOW DOES IMMUNOTHERAPY WORK?

- Immunotherapy helps your immune system fight the cancer
- Includes cancer vaccines, t-cell therapy, and checkpoint inhibitors
 - Some cancers “turn off our immune system”
 - Checkpoint inhibitors allow the immune system to stay on
 - immune system can recognize and attack cancer cells
 - Can attack healthy cells as well
 - Immune related adverse effects
 - Rare but serious
 - Communication!

WILL I LOSE MY HAIR?

- Not common with targeted therapies or immunotherapy
- Some chemotherapies cause hair loss
 - Complete hair loss on your scalp or only thinning
 - Facial hair, eyebrows, eyelashes may be affected
- Usually starts 1-3 weeks after first treatment
 - Most gone by 4-6 weeks after first treatment
- Scalp may be tender or itchy
- Headwear resources available → see handout
- Recovery starts about 4-8 weeks after last treatment
 - Hair may grow back a different tint or texture
 - May use light, non-toxic coloring rinse for first few months

WHAT ABOUT MY SKIN?

- Skin is more sensitive to the sun
 - Wear sunscreen or long clothing
- Skin changes possible with all treatments
- Rashes: targeted therapies and immunotherapy
 - Good facial hygiene to avoid complications
 - Daily cleansing with gentle products
 - Avoid skin care products that contain alcohol
 - Don't use normal acne products



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OTHER SKIN CHANGES

- Hand and foot syndrome
 - Can occur with 5FU/Capecitabine or Gemzar
 - Palms of hands and soles of feet become reddened/tender, swollen
 - Keep skin moisturized and away from exposure to heat
- Nail changes: bumps, ridges, discoloration
 - Possible with paclitaxel or docetaxel
 - Keep your nails short,
 - Do not bite fingernails or push back cuticles
 - Avoid tight-fitting shoes

WHEN DO I CALL MY ONCOLOGIST?

- ❑ Any rashes
- ❑ Swelling, redness, tenderness of hands and feet

WILL I GET NEUROPATHY?

- Depends on your specific chemotherapy
 - Taxol, docetaxel, cisplatin, carboplatin, oxaliplatin can cause dysfunction of the nerves
 - Numbness/tingling and difficulty with dexterity or fine motor skills
 - Cold sensitivity (mouth and hands)
 - Throat symptoms can include soreness, tightness, and/or spasms
- Neuropathy can be cumulative
- Usually improves once chemotherapy is complete
 - Small percentage of patients will experience worsen or persistent neuropathy

WHEN DO I CALL MY ONCOLOGIST?

- Neuropathy is worsening or affecting quality of life

WHY IS MY MOUTH AFFECTED?

- The lining of the mouth is faster growing cells
- Common with chemo; possible with immunotherapies
- Sores will present as blisters or ulcerations
 - May be tender; usually quick to heal
 - Risk of infection
 - Good oral hygiene to avoid complications
 - Gently brush and floss twice a day
 - Avoid whiteners, tartar control
 - Use alcohol free mouthwash twice daily
 - Salt water and baking soda rinse
 - ¼ tsp baking soda, 1/8 tsp salt, 1 cup warm water
 - Swish and spit 3-4 times a day
 - Avoid spicy or acidic foods



WILL FOOD TASTE DIFFERENT?

- Some chemotherapies impact taste cells
 - Food may taste bitter, earthy, metallic
 - Rinsing your mouth before eating may help
 - *Don't hesitate to talk to your provider about changes*
- Dry mouth also common and impacts taste
 - Hydration
 - Dry mouth rinses available at stores

WHEN DO I CALL MY ONCOLOGIST?

- ❑ Mouth changes impact your ability or desire to eat or drink
- ❑ If on **immunotherapy** call with any mouth sores
- ❑ Emergent dental work is needed

See NCI Eating Hints book for additional suggestions

WILL I GET HEARTBURN?

- Some medications (such as Dexamethasone) may cause heartburn
 - increase stomach acid and/or relax esophageal muscles.
- Symptoms may include
 - “Burning” or pressure in the chest
 - Difficulty swallowing or sore throat
 - Increased burping
 - Nausea
- Medications are available to assist
- Other ways to assist:
 - Limit caffeine intake (soda, coffee, chocolate)
 - Avoid smoking or alcohol
 - Avoid fatty foods and lying down right after eating

WHEN DO I CALL MY ONCOLOGIST?

- ▣ Notify your oncologist if you have uncontrolled heartburn

AM I GOING TO BE NAUSEATED?

- Not as common with immunotherapy or target therapy
- Chemotherapy stimulates nausea receptors in the brain and GI tract
 - Block these pathways with medications
 - IV anti-nausea medications are given the day of chemo
 - May get 1-3 depending on treatment
 - Your provider may prescribe at home anti-nausea medications to use as needed.
 - **Please take as directed by your provider**
 - Nausea is better controlled when it starts vs. later on



HOW ELSE CAN I TREAT NAUSEA?

- Ginger has been shown to help
 - Ginger ale, ginger tabs, chews, etc.
 - Add to teas, water, drinks
- An empty stomach makes nausea worse
 - 5-6 small meals/snacks
- Avoid fatty or greasy foods
- Avoid strong food and drink smells
- Avoid constipation

WHEN DO I CALL MY ONCOLOGIST?

- Uncontrolled nausea (medications haven't helped)
- Inability to keep food/fluids down

See NCI Eating Hints for additional suggestions

HOW DO I AVOID CONSTIPATION?

- Medications can slow down the gut
 - Some chemo agents
 - Pain medications
 - Anti-nausea medications
- Over the counter stools softeners are ok
 - Colace
 - Senokot-S
- Activity and hydration are crucial
- Fiber rich foods
 - Eating Hints pg 46
- Smooth move tea



WHEN DO I CALL MY ONCOLOGIST?

- ❑ No stool for 2 days
- ❑ Only hard small stools for 2 days

See NCI Eating Hints page 13-14 for additional suggestions

WHAT ABOUT DIARRHEA?

- Can be caused by any cancer treatment
- Loose, watery bowel movements
 - Risk of dehydration and loss of electrolytes
 - Drink your fluids
- Over the counter medications are available
 - Discuss with your provider
 - **If on immunotherapy contact your oncologist before taking**
- Low fiber foods
 - Eating Hints pg 45

WHEN DO I CALL MY ONCOLOGIST?

- ❑ More than 3 diarrhea episodes in the same day
- ❑ Blood or mucus in diarrhea
- ❑ Last longer than 24 hours

See NCI Eating Hints page 15-16 for additional suggestions

HOW DO I AVOID DEHYDRATION?

- Fluids important during treatment
 - Prevent constipation and dehydration
 - Helps protect your kidneys
 - Helps body process treatment
- Recommendation is 8-10 (8oz) glasses of fluid/day
 - 1/2 should be water
 - Eat foods that contain fluids
 - Fruits, vegetables, soups, smoothies, gelatins
- Caffeinated beverages in moderation
 - About 2 cups/day

WHEN DO I CALL MY ONCOLOGIST?

- Lightheadedness
- Dizziness
- Urinary changes

See NCI Eating Hints for additional suggestions

WHAT CAN I EAT DURING CHEMOTHERAPY?

- No specific diet
- Strive for a well balanced diet
 - Choose myplate.gov
 - NCI Eating Hints
- Report all herbal or nutritional **supplements** and high dose **vitamins** to your oncologist
 - May interact with other medications
 - May interfere with the effectiveness of your chemotherapy



WHY IS MY BLOOD DRAWN ALL THE TIME?

- Drawn from port or arm
- Labs checked on specific intervals based on treatment
- Oncology team monitors 2 panels closely:
 - CMP: kidney and liver function, electrolyte levels
 - Watched closely with all treatments
 - CBC: red blood cells, platelets, and white blood cells
 - More impacted by chemotherapy



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RED BLOOD CELLS

- Carry oxygen throughout the body
- Usual gradual decline throughout treatment
- Based on symptoms and oncologist's discretion, provider may recommend transfusion

Normal Range	Men	Women
Hemoglobin (g/dL)	14-18	12-16
Hematocrit (%)	42-52	37-48

WHEN DO I CALL MY ONCOLOGIST?

- ❑ Increase in shortness of breath/difficulty breathing
- ❑ Dizziness
- ❑ Lightheadedness
- ❑ Very weak or tired
- ❑ Racing heartbeat

PLATELETS

- Help the clotting process
- Some targeted therapies increase the risk of bleeding (bevacizumab)
- Protect yourself:
 - use electric shaver
 - soft toothbrush
 - blow your nose gently

Normal Range	Men	Women
Platelets	150-350	150-350

WHEN DO I CALL MY ONCOLOGIST?

- ❑ Unusual bleeding or bruising
- ❑ Tiny, red pinpoint spots on your skin
- ❑ Frequent nosebleeds
- ❑ Blood in your urine or stools

WHITE BLOOD CELLS

- Infection fighting army
- Chemo can damage the bone marrow causing a decreased production of WBCs
 - 7-10 days after chemo count reaches low point and then starts to recover
- Multiple kinds of WBCs; watch neutrophils closely
- When WBC decreased, risk of infection increases

Normal Range	Men	Women
WBC (White Blood Cells)	4.5-11	4.3-11
ANC (Absolute Neutrophil Count)	1.5-8.0	

HOW DO I AVOID INFECTION?

- Proper hand hygiene
- Avoid people who are ill
- Wash raw fruits and vegetables well
- May receive a medication to boost WBCs
 - Stimulates bone marrow to produce more WBCs
 - Can cause bone pain
 - Ok to take Tylenol
 - Usually lasts 1-2 days



WHEN DO I CALL MY ONCOLOGIST?

- ❑ Fever ≥ 100.5
- ❑ Chills or sweats
- ❑ Productive cough
- ❑ Cold or flu like symptoms
- ❑ White coating in your mouth
- ❑ Urinary changes
- ❑ Red or draining wound

WHAT AM I GOING TO FEEL LIKE AFTER CHEMO?

- Day 1: Generally you feel good
- Day 2: You may start winding down
- Day 3: This is often the “down day”
 - Body working hard
 - Flushing out treatment drugs and dead cancer cells, building healthy new cells
- “Get up and get moving”
- The more you move, eat, drink and rest, the quicker you will recover from your “down day”.

WILL I BE TIRED?

- Fatigue #1 side effect from treatment
 - Chemotherapy, immunotherapy and targeted therapy
 - Other factors:
 - anemia, nutritional deficiencies, depression, stress
- Cumulative effect
- Management:
 - Energy conservation
 - Balance so valued activities can be maintained
 - Exercise: Increasing activity will have positive impact on fatigue
 - Improves aerobic capacity, prevents muscle loss and deconditioning, manages fatigue
 - Intensity, frequency and type still being studied



WHEN DO I CALL MY ONCOLOGIST?

- Fatigue interferes with daily activities of life

WHAT ABOUT "CHEMO BRAIN"?

- Not every patient will experience this
- Not fully understood yet
- Related to stress, anxiety, sleep disturbances, possible chemo impact
- Patients report:
 - Difficulty concentrating and/or multi tasking
 - Difficulty word finding
- Last weeks to months after treatment completed
- Prevention/Minimization:
 - Adequate rest, well balanced diet, exercise may help
 - Keep lists, use smart phones, apps to track things
 - Keep the mind active by doing intellectual activities
 - Crosswords, puzzles, math, reading



IS IT NORMAL TO FEEL THIS WAY?

- Coping with cancer challenging for patient and family
- Increased distress is normal
 - Examples: sad, powerless, afraid, guilty, anxious, discouraged, depressed
 - Signs of depression or anxiety:
 - Consistently irritable or angry, significant sleep disturbances, changes in concentration or memory
- Do not hesitate to reach out for help
 - Resources are available; social work, support groups, etc.
- Coping mechanisms
 - Physical movement and exercise
 - Meditation and mindfulness, journaling
 - Activities that help you relax or bring you meaning

WHEN DO I CALL MY ONCOLOGIST?

- Depression
- Thoughts of death or harming yourself

WHEN DO I CALL MY PROVIDER?

- ❑ Chills or fever greater than 100.4
- ❑ Burning with urination, frequency, urgency, lower back pain (UTI)
- ❑ Productive cough with green, yellow, red, or brown sputum
- ❑ Unmanaged diarrhea, constipation, nausea, vomiting
- ❑ Unmanaged pain
- ❑ Swelling, redness and pain on extremities
- ❑ Shortness of breath/chest pain
- ❑ Dizziness with changing position or lightheadedness
- ❑ Dark urine, less urine than normal, thirst, dry mouth
- ❑ Mouth sore, difficulty swallowing, frequent or severe heartburn
- ❑ Severe fatigue
- ❑ Thoughts of harming yourself, severe depression

COMMON QUESTIONS

- Can I work?
 - Most likely, yes
 - FMLA, Americans with Disability Act
 - www.cancerandcareers.org
- Can I travel?
 - Depends; discuss with your provider
- Can I be with my family?
 - Of course! Use common sense to avoid infection
- What about intimacy?
 - DON'T BE AFRAID TO TALK TO YOUR PROVIDER!
 - Use barrier method for 48 hours after chemo
- Can I drink alcohol?
 - In moderation;
 - Max 1 serving and not every day