St. Agnes Cancer Institute
New Patient Orientation

Chemotherapy & Immunotherapy: Information for Patients and Families
No One Fights Alone!
Your team may include...

- Oncologist
- Radiation Oncologist
- Primary Nurse
- Infusion Room Nurse
- Nurse Practitioner
- Social Worker
- Nurse Navigator
- Dietitian
- Rehab Services (PT/OT/SLP)
We make every effort to see you on time. We recognize there are circumstances that both the clinic and you cannot control.

- Arriving more than 15 min early for your appointment does not guarantee you will be seen early.
- If you arrive late, you will have to wait to be seen until your provider/nurse is available, or you can reschedule.
- If you arrived on time, are checked in, and have been waiting more than 15 minutes, please speak with someone at our front desk.
Ways to treat cancer include...

- Chemotherapy
- Targeted Therapy
- Immunotherapy
- Hormonal Therapy
- Radiation
- Surgery
- Bone Marrow Transplant
Systemic Treatment

What is Systemic Treatment?
Medication that travels in the bloodstream throughout the body.

Goals could be to...

• Cure the cancer
• Control the cancer, keep it from growing or spreading
• Manage symptoms so you feel better

Types:
• Chemotherapy
• Targeted Therapy
• Immunotherapy
• Hormonal Therapy
Is the treatment painful?

NO!

- If you feel anything uncomfortable or see redness or swelling at the IV site, tell your nurse immediately. This could be an allergic reaction.

- Some medications can irritate the vein but this can be managed easily if you let your nurse know.

- If you feel pain, or notice redness or swelling after you are at home, call the Cancer Institute immediately.
Systemic Treatment

We Will Talk About...

- Chemotherapy/Targeted Therapy
- Side Effects of Chemotherapy
- Other Important Things to Know
- Things to Remember
- Immunotherapy (if applicable)
- Side Effects of Immunotherapy (if applicable)
Chemotherapy & Targeted Therapy
Chemotherapy & Targeted Therapy

You will get these treatments by...

- Intravenous infusion through an IV in your arm or through a Port-A-Cath
- Injection into the fatty tissue of your arm or abdomen, or into muscle
- Oral
The Garden Analogy

Chemotherapy & Targeted Therapy
Chemotherapy & Targeted Therapy

Why do Side Effects Happen with Chemotherapy?

• Blood cells
• Gastrointestinal tract
• Hair
• Skin
• Nails
• Reproductive cells
Targeted therapy attacks specific targets, or locks, in cancer cells. But those targets, or locks, can also be in healthy cells, like the skin and gastrointestinal tract.
Let’s Talk About Side Effects

Possible Side Effects include:

- Fatigue
- Nausea/Vomiting
- Diarrhea/Constipation
- Mouth sores
- Hair loss
- Skin and nail changes
- Peripheral neuropathy
- Low blood counts
- Brain fog ("chemo brain")
- Sexuality/Intimacy changes
Chemotherapy & Targeted Therapy

Side Effects

What do you think is the most common side effect from chemotherapy?
Fatigue

- Plan regular bedtime and wake up times
- Pace yourself
- Delegate responsibilities
- Plan a regular exercise program
- Take short rest periods

Listen to your body!
Nausea & Vomiting

- Take anti-nausea pills as directed by your healthcare team
- Notify your doctor if the pills are not helping
- Ginger may help with nausea (tea, ale, lozenges)
- Eat frequent, small meals throughout the day
- Try eating bland food
- Drink 8-10 glasses of non-caffeinated/non-alcoholic fluids
Chemotherapy & Targeted Therapy

When should I take my anti-nausea medications?

A. When I start to feel nauseated.
B. When I remember.
C. Take as directed by my healthcare team.
Chemotherapy & Targeted Therapy

Diarrhea

- Loose or watery stools that happen 4 or more above your normal
- Can be serious and lead to dehydration
- Call your doctor if it is persistent or if you have taken diarrhea medicine and it is not helping (3 or 4 doses)

Try to DO these things:

- Drink 8 cups of water or other noncaffinated drinks every day
- Eat mild foods, such as bananas, white rice, applesauce, dry toast, crackers, plain pasta, eggs, poultry, or baked potatoes
- Eat frequent small meals and snacks

Try to LIMIT these things:

- Drinks that have caffeine, such as colas, coffee, or tea
- Foods that are high in fiber, fatty, or spicy, such as broccoli, nuts, or hot peppers
- Milk or dairy products
Chemotherapy & Targeted Therapy

Constipation

Can be caused by:

- Certain pain medications
- Some anti-nausea medications
- Some systemic treatments
- Other factors

Call your doctor if no bowel movement in 3 days
Hair Loss

- Not every treatment causes hair loss
- Usually temporary
- Sensitive scalp
- Can be anywhere on the body
- Usually starts 14-21 days after 1st treatment

Wigs available through the cancer center or your insurance
Chemotherapy & Targeted Therapy

Skin and Nail Changes

Skin:
- Common with targeted therapies
- Rash
- Dry, itchy, redness, and/or cracked skin
- More sensitive to sunlight
- Palms and soles of feet may become darker

Nails:
- May become more brittle
- Nail beds become darker
- Could come off
Nerve Changes (Peripheral Neuropathy)

- Tingling in your fingers and toes
- Numbness or less sensation (feeling)
- Weak or achy muscles
Mouth Sores

- Occur within a few days of treatment
- On the tongue, gums, sides of the mouth, lips and throat

**Signs and symptoms:**

- Pain
- Bleeding gums
- Difficulty chewing and swallowing
- Can lead to an infection

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**DIY Mouthwash**

Do not use store-bought mouthwash. Instead, rinse with this simple solution.

- 1 teaspoon salt
- 1 teaspoon baking soda
- 1 quart water
Chemotherapy & Targeted Therapy

Blood Cells
Blood Counts After Chemotherapy

- **CHEMO DAY**
- **RECOVERY PERIOD**
- **HIGHEST RISK OF INFECTION**
  - Lasts 5-7 days (Nadir Period)
- **What Is Nadir?**
- **BLOOD COUNTS DECREASE**
  - 7-12 days after chemo
Chemotherapy & Targeted Therapy

Low Red Cells (Anemia) may cause:

- Fatigue or tiredness
- Pale skin
- Feeling cold
- Dizziness or lightheadedness
- Rapid heart rate
- Trouble breathing
Chemotherapy & Targeted Therapy

Low Platelets may cause:

- Bruises on your body or small purple spots called petechiae (p-tea-key-eye)
- Your nose and gums to bleed more easily
- Blood in your urine or stool

To prevent bleeding:

- Use a soft bristled toothbrush
- Blow your nose gently
- Avoid blood thinning medications like NSAIDS
Chemotherapy & Targeted Therapy

White Blood Cells

• Help your body fight off infections
• There are different types of white blood cells
• We monitor the neutrophils
• The lower the white blood cells, the higher risk for infection
• You may receive a medication to help prevent your white blood cells from becoming too low
Chemotherapy & Targeted Therapy

How Can You Reduce Your Chance of an Infection?
Fever

- May be the only sign of an infection
- Check your temperature once a day, around the same time each day
- If temperature is 100.5 or higher, call your doctor immediately
- If it is lower than 100.5 but you are feeling hot, cold, achy or have chills call your doctor immediately
- DO NOT take any fever medications (Tylenol, Advil) until you speak with your doctor
You wake up at 12am and feel hot. You take your temperature - it reads 100.6. What do you do next?

A. Take Tylenol and go back to bed.
B. Call my doctor immediately.
C. Check my temperature again in 1 hour and see if it goes down.
D. Go back to bed and call the cancer center in the morning.
Chemotherapy & Targeted Therapy

Chemo Brain

• Mental fog
• Memory deficits (new or worsening)
• Slower processing speed
• Inability to maintain focus, concentration
• Language difficulties (word retrieval, in particular)
• Motor difficulties (navigation, geographic memory)
Chemotherapy & Targeted Therapy

Sexuality/Intimacy

- **Women** - low sexual desire, fatigue, vaginal dryness, body image issues, or early menopause
- **Men** - low sexual desire, fatigue, erectile dysfunction, or body image issues

Talk about sexuality and intimacy with your partner and healthcare team
Other Important Things To Know

Nutrition

- Hydrate, hydrate, hydrate
- High protein, high calorie foods (make what you eat worth it)
- Have meals prepared so they are easy to grab from the freezer
- Small frequent meals instead of 3 larger meals
- Increase the seasoning if taste buds are affected
- If decreased appetite, set a timer and treat it like a job (you can’t drive a car without gas)
- Supplements like Ensure, Boost, Carnation Instant Breakfast
- A dietitian is available to help you with any questions/concerns
Other Important Things To Know

Being Safe with Body Fluids at Home

Using the toilet:
- Flush the toilet twice with the lid down
- Wash hands well with soap and water
- Clean any waste on the toilet with antibacterial or bleach wipes

Soiled laundry:
- Wear disposable gloves when handling
- Wash separately from other clothes and linens
- Wash for 2 cycles in hot water before drying

Cleaning up body fluids:
- Wear disposable gloves
- Wash hands well with soap and water after removing gloves
Vaccinations

Check with your doctor before you get any vaccinations including the flu shot.
Other Important Things To Know

Benefits of Quitting or Reducing Tobacco

• A better chance of successful treatment
• Fewer serious side effects
• Faster recovery from treatment
• Decreased risk of cancer coming back, or getting another cancer diagnosis
• Lower risk of infection
• Easier breathing
• More energy
• Better quality of life
Things to Remember

- Take your home medications as regularly scheduled
- Bring any home medications you may need to take while at your appointment
- Bring your current medication list
- Do not wear perfume or cologne please
- One guest at a time in the infusion room, and no children under 18 are allowed
- Bring entertainment w/ headphones, books, puzzles, etc
- Food (lunch provided for patients only while supplies last) however, drinks/snacks may still be available
- Carry your Emergency Room card and/or Immunotherapy Wallet Card with you at all times (port ID card if applicable)
- Bring your completed Side Effects log/Patient Checklist to your follow-up appointments with your doctor
One Last Thing...

Call your cancer center as soon as you notice that something is not normal or you feel different.
Questions?
Thank you for your contributions to this slideshow:
Bristol-Myers Squibb
Cross Cancer Institute
Gang-stock.adobe.com
Murtha Cancer Center
Immunotherapy
You will get these treatments by...

Intravenous infusion through an IV in your arm or through a Port-A-Cath
Immunotherapy

The Garden Analogy

1. Imagine your body as a garden, where the soil is your immune system. When you’re healthy, the soil is rich and well tended, and the garden is green. Normally, the soil is able to prevent weeds from growing out of control.

2. Cancer cells are like weeds in your garden. Sometimes, the soil can allow weeds to grow and spread, and soon, the entire garden suffers as your plants compete for space and nutrients.

3. I-O is like adding weed-control fertilizer to the soil. It enriches the garden’s existing soil. But too much fertilizer in the soil may harm your garden.

4. Now the soil can help keep the weeds under control and can maintain the garden’s health.
Goals of Immunotherapy

Could be to:

- Cure the cancer
- Control the cancer, keep it from growing or spreading
- Manage symptoms so you feel better
Immunotherapy

Why Do Side Effects Happen?

The immune system becomes overactive and starts to damage healthy cells.

- The side effects are similar to an allergic reaction, such as a rash or diarrhea.
- If your healthcare team is made aware of the side effects sooner, they can help manage them faster.

We will focus on 3 of the more common areas that experience side effects: the stomach and intestines, skin, and lungs.
Stomach and Intestines

- Diarrhea
- Change in bowel pattern
- Stomach pain
- Nausea and vomiting (rare)
Skin

- Rash
- Itching
- Blisters, peeling, or skin sores
- Painful sores or ulcers in your mouth, nose, throat, or genital area
Immunotherapy

Lungs

- Shortness of breath
- Cough (new or different)
- Pain in chest
Questions?