

# ICLIO National Conference

## Developing Your I-O Dream Team: Coordination of Care and Collaboration among Specialists

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# Developing Your I-O Dream Team: Coordination of Care and Collaboration among Specialists

Adverse Event prevention, recognition, mitigation and treatment through Nursing education and patient interaction and management

Ongoing monitoring of treatment effect with imaging, biomarkers, patient input



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# Adverse Event prevention, recognition, mitigation and treatment through Nursing education and patient interaction and management

- Event prevention
  - Specific education tools for I-O therapy
  - 24/7 access to MD, prophylactic prescription for steroids in reliable patients
  - Adherence to guidelines (taper, re-treatment)
- Recognition
  - 24/7 access to team with years of experience
  - Routine and frequent testing
- Mitigation and treatment
  - Standardized approach to known irAE with starting dose and taper schedule, follow-up assessments
  - Extensive net of experienced subspecialists familiar with irAE (GI, endocrine, pulmo, dermatology)

## Immune Therapy

A treatment designed to produce immunity to a disease or enhance the resistance of the immune system to an active disease process, such as cancer.

What is the difference between Immune Therapy and Chemotherapy?  
Chemotherapy works directly on the cancer cells in your body

Immune Therapy – works within your body's immune system to activate it to fight the cancer.

Your body has natural "check point" in place to hold the immune system in check so it does not over work. In the same way that you over work a muscle and it hurts if you over work your immune system it can actually do damage to your body.

So imagine if you turn on a light in your home and you cannot turn it off :

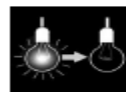


Activating the immune system

Immune therapy medications turn the switch on



However it also stops your body's natural ability to turn the switch off .



Eventually without someone fixing the switch

The light will burn out.

This is a very simple explanation of how immune therapy works in your body. It is very important that you communicate with your nurse and physician when any side effects occurs

## Possible Side Effects from Immunotherapy



### **Brain**

Headache  
Fever  
Tiredness & weakness  
Confusion  
Memory problems  
Sleepiness  
Seizures  
Stiff neck



### **Liver**

Yellowing of your skin or the whites of your eyes  
Severe nausea or vomiting  
Right abdomen pain  
Sleepiness  
Dark urine  
Increased bleeding or bruising  
Feeling less hungry

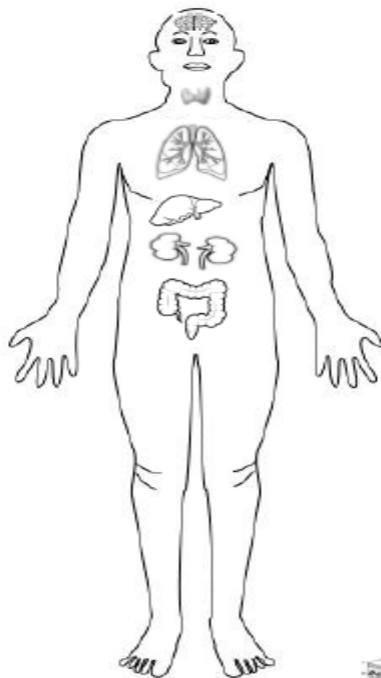


### **Intestines**

Diarrhea  
Blood in your stool  
Mucus in your stool  
Abdominal pain

### **Other Organs**

Changes in eye sight  
Severe muscle or joint pain  
Muscle weakness



### **Hormone Glands**

*Thyroid, parathyroid, adrenal & pancreas*  
Severe headache  
Extreme tiredness  
Weight gain or loss  
Changes in mood or behavior  
Dizziness or fainting  
Hair loss  
Feeling cold  
Constipation  
Voice getting deeper  
Excessive thirst or lots of urine



### **Lungs**

New or worse cough  
Chest pain  
Shortness of breath



### **Kidneys**

Decrease urine output  
Blood in your urine  
Ankle swelling  
Loss of appetite



### **Skin**

Rash  
Itching  
Skin blistering  
Mouth ulcers

NURSING IMMUNE-MEDIATED ADVERSE REACTION CHECKLIST

Patient Name: \_\_\_\_\_

Date: \_\_\_\_\_

Please complete prior to every dose.

Gastrointestinal (Digestive)	Response		Notes
	Yes	No	
Has your appetite changed?			
Do you have nausea or vomiting?			
How many bowel movements are you having a day?	Number:		
Is this different from normal?			
Are your stools loose or watery or foul smelling?			
Do you have pain or cramping in your abdomen?			
Have you seen blood or mucus in your stools?			

Skin	Response		Notes
	Yes	No	
Does your skin itch?			
If yes, does it keep you up at night?			
Do you have a rash? If yes, where?			

Respiratory	Response		Notes
	Yes	No	
Do you have difficulty breathing or shortness of breath?			
Are you coughing?			
Do you have chest pain?			

Neurologic	Response		Notes
	Yes	No	
Are you having difficulty getting up from a chair?			
Do you have weakness in your hands, legs, or muscles?			
Are you having trouble with gripping, dropping, or picking things up?			
Are you having difficulty walking or are you unsteady?			
Are you having numbness or tingling in your hands or feet?			
Are you having problems with your memory or confusion?			
Are you having seizures or stiff neck?			

General	Response		Notes
	Yes	No	
Have you started taking new medications? (Prescriptions, herbal, over the counter)			
Are you able to perform your normal activities?			
Are you having difficulty sleeping?			
Do you have headaches that do not go away?			
Have you felt dizzy or lightheaded?			
Are you bleeding or bruising more than usual?			
Are you having any flu-like symptoms? Fever?			
Do you have aching or weakness in your muscles or joints?			
Have you noticed problems with your eyes or vision?			
Are you having changes in your libido (sex drive)?			

# Ongoing monitoring of treatment effect with imaging, biomarkers, patient input

- Unique response and toxicity profile
  - Immune related adverse events
  - Concept of pseudoprogression
- Lack of true biomarker
  - No objective assessment tools
  - Highly dependent on expertise of care team
- Surrogate markers of “response”
  - improved PS, less sweats/fatigue/pain
- Sanctuary sites (brain)
- Influence of next line treatment choices on patience with delayed response, toxicity





# Example: Ipilimumab Pattern of Response

**Screening**



**Week 12:** swelling & progression



**Week 14:** improved



**Week 16:** continued improvement



**Week 72:** complete remission



**Week 108:** complete remission

