ADVERSE REACTION GUIDELINES

Palmetto Infusion Services AR Guidelines are reviewed annually by a multidisciplinary Clinical Review Committee and approved by our Medical Director(s).

GENERAL PRINCIPLES

Treatment for any specific patient must be individualized and is the responsibility of the Clinic MD or NP or nurse.
Pharmacologic management of severe hypertension should not be attempted in the infusion clinic setting due to unpredictable response.
Patients felt to have symptomatic hypertension (confusion, headache, chest pain, dyspnea) should be referred to ER.
Any patient requiring **epinephrine**, patients with suspected CHF, and patients with prolonged suspected ischemic chest pain should be referred to ER REGARDLESS of response to therapy in the clinic.
Patients receiving injectable medications: Access central venous catheter or start peripheral intravenous access and flush per facility standard flushing procedure to manage adverse reactions.

Note: Adverse reactions management dosing for patients less than 2 years of age should be ordered by referring prescriber upon start of care.

Mild Reaction:

Pruritus or rash, dizziness without significant BP changes, Headache, Flushing, Myalgia, Arthralgia:

- Stop Infusion
- Notify MD/NP
- Connect 5-10 ml syringe (depending on line type) and draw back to a blood return to remove existing drug in the line. Flush line with 5 ml NS
- Consider additional **Diphenhydramine orally** as follows:
  2 to 12 years old (22 to 66 lb.): 12.5 mg - 25 mg
  Over 12 years old (66+ lb.): 25 mg - 50 mg
  ***If oral route is not feasible**, administer slow IV push, **not to exceed 25 mg/minute**, and flush with 5 ml NS **or** administer by deep intramuscular injection **if IV route is not available,** using dosages above.
- Consider **Ondansetron** 4 mg IV over 1-2 minutes for nausea and vomiting. May repeat X1 in 15 minutes. Ondansetron Weight of 40 kg or greater. **Body weight less than 40 kg** dose at **0.1 mg/kg.**
- **Consider Famotidine 20 mg PO -** 40 kg or greater. **Pediatric and adolescents** 0.25 -0.5 mg/kg/dose **max dose 20 mg**.
- **Consider Promethazine** 25 mg orally as needed for N/V **if allergic** to Ondansetron. Dose for weight **of 25 kg or greater.**
- **Acetaminophen Adult Dose-** 650 mg PO PRN headache/myalgia/arthralgia
  For Pediatric dose see chart below:

Weight	Age	Dose
24-35 lbs.	2-3 years	160 mg
36-47 lbs.	4-5 years	240 mg
48-59 lbs.	6-8 years	320 mg
60-71 lbs.	9-10 years	400 mg
72-95 lbs.	11 years	480 mg

- **Consider Fexofenadine 60 mg orally (12 years and older), Cetirizine 10 mg orally (6 years and older), Loratadine 10 mg orally (6 years and older)**
- **Ibuprofen Adult Dose** 400 mg PO PRN Headache/myalgia/arthralgia
  Ibuprofen Pediatric Dosing:

Weight	Age	Dose
24-35 lbs.	2-3 years	100 mg
36-47 lbs.	4-5 years	150 mg
48-59 lbs.	6-8 years	200 mg
60-71 lbs.	9-10 years	250 mg
72-95 lbs.	11 years	300 mg

- Monitor vital signs at 15 minutes intervals. At the first 15 minute vital check, if patient is back to baseline, then may restart infusion. If the patient is not at baseline, then continue to monitor and reassess at 15 minute intervals with vitals.
- When patient is stabilized, may resume infusion and consider ½ rate.
- Increase rate as tolerated.

ADVERSE REACTION GUIDELINES

Severe Reaction:

Urticaria or other cutaneous signs or symptoms, Hypotension, Chest pain/tightness/dyspnea/wheezing/stridor, Significant N/V, Abdominal/back pain, Hypoxemia:

- Stop Infusion
- Notify MD/NP for emergent assessment and management orders.
- Connect 5-10 ml syringe (depending on line type) and draw back to a blood return to remove existing drug in the line. Flush line with
  5 ml NS
- Check oxygen saturation with pulse oximeter and move oxygen tank/supplies to patient location

ANAPHYLAXIS:

- **Epinephrine** 1 mg/mL **IM** (preferably thigh), See chart for dosing. **Do Not Delay Epinephrine** in favor of other drugs or adjunctive therapies.

Weight	**Epinephrine Dose**
10 to 25 kg (infants and children)(22lbs- <55lbs)	Draw up 0.15 mg (**0.15 mL** of epinephrine 1 mg/mL)
>25 to 50 kg (55lbs- <121lbs)	Draw up 0.3 mg (**0.3 mL** of epinephrine 1 mg/mL)
>50 kg (greater than 121lbs)	Draw up 0.5 mg (**0.5 mL** of epinephrine 1 mg/mL)

- Confirm 1 mg/ml Epinephrine solution
- Draw up in 1 ml syringe
- Max single dose **(0.5 mL/0.5mg)**
- **Intramuscular** injection is given into the mid-outer thigh
- Most patients respond to single dose. If there is no response or an inadequate response, then IM epinephrine may be repeated at 5- to 15-minute intervals or sooner, if clinically indicated.

Data adapted from:
Sicherer SH, Simons FER. Epinephrine for first-aid management of anaphylaxis. Pediatrics 2017; 139:e20164006.

- Call EMS
- Start large bore IV (if possible) with **NS**. Give 250-500cc bolus if hypotensive
- Start oxygen at 2L/min NC or 5L/min mask. Titrate to o2 sat ≥ 93%
- Consider **Diphenhydramine** IV as follows:
  2-12 years old (22-66 lbs.): 0.5 ml (25 mg) IV
  Over 12 years old (> 66 lbs.): 0.5 ml (25 mg) IV to 1 ml (50 mg) IV
  May repeat in 30 minutes
- Consider **Methylprednisolone** (Solumedrol) 1-2 mg/kg with a maximum single dose of 125 mg IV (slow push over 1-2 min).
- Consider **Ondansetron** 4 mg IV over 1-2 minutes for nausea and vomiting. May repeat X 1 in 15 minutes. **Body weight less than 40 kg dose at 0.1 mg/kg.**
- Consider **Promethazine** 25 mg orally as needed for N/V **if allergic to Ondansetron. Weight of 25 kg or greater.**
- Consider 1 ampule of 0.083% **Albuterol** via nebulizer for wheezing
- VS every 15 minutes until stable
- Notify referring physician

SEVERE REACTIONS NOT FELT TO BE ANAPHYLAXIS

- Consider all measures listed above except **epinephrine**

CHF (wheezing, shortness of breath, crackles or other signs):

- **Furosemide** 40 mg (40 mg/ml) IV push over 2 minutes and flush line with 5 ml NS IV
- **If systolic BP >90**, give **Nitroglycerin** 0.4 mg SL. May repeat every 5 minutes up to 3 doses

CHEST PAIN felt to be due to acute myocardial ischemia and systolic BP> 90:

- Administer **Nitroglycerin** 0.4 mg SL. May repeat every 5 minutes up to 3 doses
- Administer four (4) 81 mg **Aspirin** to be chewed and swallowed PRN for suspected symptoms due to myocardial ischemia. Patient must NOT have a history of **aspirin** allergy.