

## ***PAMI ED-ALT Order Panels***

### **Renal Colic**

#### **Adults:**

##### **First line**

- Ibuprofen Tablet – 400 mg Oral
- Naproxen tablet – 500 mg, Oral
- Ketorolac injection – 15mg intravenous
- Acetaminophen tablet – 1,000mg Oral
- Acetaminophen injection – 1,000mg intravenous
- 0.9% sodium chloride bolus – 1,000mL once, intravenous
- Lidocaine Infusion [lidocaine (PF) 1% a. mg/kg] + cardiac monitoring
  - for use in patients without known structural heart disease or rhythm disturbances)
- Ondansetron tablet – 4mg, Oral
- Ondansetron injection – 4mg, intravenous

#### **Nonpharmacologic options [Information on nonpharmacologic options:](#)**

- Page Pain Coach Educator
- Virtual Reality Distraction
- Passive Distraction
- Deep Breathing

#### **Second Line options:**

- Desmopressin nasal solution – 40 mcg nasal (refractory cases)
- Ketamine ([Information about atomizer for IN administration](#))
  - Ketamine in 0.9% NaCl 100mL IVBP – intravenous, 0.15mg/kg
  - Ketamine in 0.9% NaCl 100 mL IVBP – intravenous, 0.3 mg/kg
  - Ketamine in 0.9% NaCl 500 mL infusion – 1 mcg/kg/min IV
  - Ketamine injection – 1 mg/kg Nasal
- Opioids (refer to PAMI [Pain Management Dosing Guide](#) for opioid selection guidance. Consider patient's opioid tolerance level based on their outpatient regimen.)
  - Oral opioids
    - Morphine tablet – 15mg, oral
    - Hydrocodone-acetaminophen 5-325mg tablet
    - Hydrocodone-acetaminophen 10-325mg tablet
    - Oxycodone IR tablet – 5mg
    - Oxycodone IR tablet – 10 mg
    - Oxycodone-acetaminophen 5-325 mg tablet
    - Oxycodone-acetaminophen 10-325mg tablet
    - Tramadol tablet – 50mg

- IV/IM/IN opioids ([information about atomizer for IN administration](#))
  - Fentanyl injection – 25mcg/kg, nasal
  - Fentanyl injection – 50 mcg/kg, nasal
  - Fentanyl injection – 100 mcg/kg nasal
  - Fentanyl injection – 25 mcg intravenous
  - Fentanyl injection – 50 mcg intravenous
  - Fentanyl injection – 100 mcg intravenous
  - Morphine injection, 4 mg intravenous
  - Morphine injection 4mg intramuscular
  - Morphine injection – 6mg intramuscular
  - Hydromorphone injection – 0.5 mg intravenous
  - Hydromorphone injection – 1mg intravenous

## **Musculoskeletal Pain (sprains, strains, fractures, opiate naïve lower back pain, etc)**

### **Adults:**

#### **Mild to Moderate**

- Acetaminophen 1000 mg PO
- Ibuprofen 400 mg PO
- Naproxen 500 mg PO
- Ketorolac 15 mg IV
- Ketorolac 15 mg IV
- Muscle Relaxant (choose **one** of the following if applicable)
  - Cyclobenzaprine 5 mg PO
  - Cyclobenzaprine 10 mg PO
  - Methocarbamol 1.5 g PO
  - Methocarbamol 1 g IV
  - Diazepam 5 mg PO **OR** 5 mg IV
  - Tizanidine 4 mg PO
- Diclofenac 1% gel topical
- Menthol 4% gel topical
- Gabapentin 100 mg PO once (if neuropathic component)
- Gabapentin 200 mg PO once (if neuropathic component)
- Gabapentin 300 mg PO once (if neuropathic component)
- Lidocaine patch 5%
- Local anesthetics for Procedures ([videos for procedures](#))
  - Lidocaine 1% injection – 2 mL
  - Lidocaine 2% injection – 2 mL
  - Bupivacaine 0.25% injection – 2 mL
  - Bupivacaine 0.5% injection – 2 mL
- Non-pharmacologic options:
  - Page Pain Coach Educator

- Passive distraction
- Deep breathing(<https://youtu.be/Wemm-i6XHr8?t=87>)
- Heat therapy
- Cold therapy
- Inpatient consult to Physical Therapy
- Immobilization

### **Moderate to severe**

- Ketamine ([Information about atomizer for IN administration](#))
  - Ketamine in 0.9% NaCl 100mL IVBP – intravenous, 0.15mg/kg
  - Ketamine in 0.9% NaCl 100 mL IVBP – intravenous, 0.3 mg/kg
  - Ketamine in 0.9% NaCl 500 mL infusion – 1 mcg/kg/min IV
  - Ketamine injection – 1 mg/kg Nasal
- Opioids (refer to PAMI [Pain Management Dosing Guide](#) for opioid selection guidance. Consider patient’s opioid tolerance level based on their outpatient regimen.
  - Oral opioids
    - Morphine tablet – 15mg, oral
    - Hydrocodone-acetaminophen 5-325mg tablet
    - Hydrocodone-acetaminophen 10-325mg tablet
    - Oxycodone IR tablet – 5mg
    - Oxycodone IR tablet – 10 mg
    - Oxycodone-acetaminophen 5-325 mg tablet
    - Oxycodone-acetaminophen 10-325mg tablet
    - Tramadol tablet – 50mg
  - IV/IM/IN opioids ([information about atomizer for IN administration](#))
    - Fentanyl injection – 25mcg/kg, nasal
    - Fentanyl injection – 50 mcg/kg, nasal
    - Fentanyl injection – 100 mcg/kg nasal
    - Fentanyl injection – 25 mcg intravenous
    - Fentanyl injection – 50 mcg intravenous
    - Fentanyl injection – 100 mcg intravenous
    - Morphine injection - 4 mg intravenous
    - Morphine injection - 4mg intramuscular
    - Morphine injection – 6mg intramuscular
    - Hydromorphone injection – 0.5 mg intravenous
    - Hydromorphone injection – 1mg intravenous

### **Pediatric:**

#### **Mild to Moderate**

- Ibuprofen 10 mg/kg PO
- Acetaminophen liquid 15 mg/kg PO
- Acetaminophen 10 mg/kg IV

- Non-pharmacologic options ([information on non-pharmacologic options](#))
  - Page pain coach educator
  - Virtual Reality (<https://www.youtube.com/watch?v=hDEJb79ZwKc>)
  - Passive Distraction
  - Deep breathing (<https://youtu.be/Wemm-i6Xhr8?t=87>)
  - Heat therapy
  - Cold therapy
  - Child Life consult
  - Physical therapy consult

### **Moderate to Severe**

- Ketamine ([Information about atomizer for IN administration](#))
  - Ketamine in 0.9% NaCl 100mL IVBP – intravenous, 0.15mg/kg
  - Ketamine in 0.9% NaCl 100 mL IVBP – intravenous, 0.3 mg/kg
  - Ketamine in 0.9% NaCl 500 mL infusion – 1 mcg/kg/min IV
  - Ketamine injection – 1 mg/kg Nasal
- Opioids (refer to PAMI [Pain Management Dosing Guide](#) for opioid selection guidance. Consider patient's opioid tolerance level based on their outpatient regimen)
  - Oral opioids
    - Morphine solution – 0.3 mg/kg PO
    - Morphine solution – 10mg PO
  - IV/IN opioids ([information about atomizer for IN administration](#))
    - Morphine injection
    - Fentanyl injection – 1.5 mcg/kg IN
    - Fentanyl injection – 1.5 mcg/kg IV

### **Acute on Chronic Radicular LBP (opiate tolerant)**

#### **Adults:**

##### **Mild to Moderate**

- Acetaminophen 1000 mg PO
- Ibuprofen 400 mg PO once
- Naproxen 500 mg PO
- Ketorolac 15 mg IV
- Ketorolac 30 mg IM
- Muscle Relaxant (choose one of the following if applicable)
  - Cyclobenzaprine 5 mg PO
  - Cyclobenzaprine 10 mg PO
  - Methocarbamol 1.5 g PO
  - Methocarbamol 1 g IV
  - Diazepam 5 mg PO
  - Diazepam 5 mg IV
  - Tizanidine 4 mg PO

- Diclofenac 1% gel topical
- Menthol 4% gel topical
- Gabapentin 100 mg PO once (if neuropathic component)
- Gabapentin 200 mg PO once (if neuropathic component)
- Gabapentin 300 mg PO once (if neuropathic component)
- Lidocaine patch 5%
- Local anesthetics for Procedures ([videos for procedures](#))
  - Lidocaine 1% injection – 2 mL
  - Lidocaine 2% injection – 2 mL
  - Bupivacaine 0.25% injection – 2 mL
  - Bupivacaine 0.5% injection – 2 mL
- Non-pharmacologic options ([information on non-pharmacologic options](#))
  - Page pain coach educator
  - Virtual Reality (<https://www.youtube.com/watch?v=hDEJb79ZwKc>)
  - Passive Distraction
  - Deep breathing (<https://youtu.be/Wemm-i6Xhr8?t=87>)

**Moderate to Severe (in addition to mild to moderate options above)**

- Lidocaine infusion + cardiac monitoring
- Ketamine ([Information about atomizer for IN administration](#))
  - Ketamine in 0.9% NaCl 100mL IVBP – intravenous, 0.15mg/kg
  - Ketamine in 0.9% NaCl 100 mL IVBP – intravenous, 0.3 mg/kg
  - Ketamine in 0.9% NaCl 500 mL infusion – 1 mcg/kg/min IV
  - Ketamine injection – 1 mg/kg Nasal
- Opioids (refer to PAMI [Pain Management Dosing Guide](#) for opioid selection guidance. Consider patient's opioid tolerance level based on their outpatient regimen.
  - Oral opioids
    - Morphine tablet – 15mg, oral
    - Hydrocodone-acetaminophen 5-325mg tablet
    - Hydrocodone-acetaminophen 10-325mg tablet
    - Oxycodone IR tablet – 5mg
    - Oxycodone IR tablet – 10 mg
    - Oxycodone-acetaminophen 5-325 mg tablet
    - Oxycodone-acetaminophen 10-325mg tablet
    - Tramadol tablet – 50mg
  - IV/IM/IN opioids ([information about atomizer for IN administration](#))
    - Fentanyl injection – 25mcg/kg, nasal
    - Fentanyl injection – 50 mcg/kg, nasal
    - Fentanyl injection – 100 mcg/kg nasal
    - Fentanyl injection – 25 mcg intravenous
    - Fentanyl injection – 50 mcg intravenous
    - Fentanyl injection – 100 mcg intravenous
    - Morphine injection - 4 mg intravenous
    - Morphine injection - 4mg intramuscular

- Morphine injection – 6mg intramuscular
- Hydromorphone injection – 0.5 mg intravenous
- Hydromorphone injection – 1mg intravenous

**Pediatric:**

**Mild to Moderate**

- Ibuprofen 10 mg/kg PO
- Acetaminophen liquid 15 mg/kg PO
- Acetaminophen IV – 15 mg/kg IV
- Nonpharmacologic options ([information on non-pharmacologic options](#))
  - Page Pain Coach Educator
  - Virtual Reality (<https://www.youtube.com/watch?v=hDEJb79ZwKc>)
  - Passive Distraction
  - Deep breathing (<https://youtu.be/Wemm-i6Xhr8?t=87>)
  - Heat therapy (caution in patients with peripheral neuropathy, spinal cord injury)
  - Cold therapy (ideal first 24-48 hours after acute injury; caution in patients with peripheral neuropathy, spinal cord injury)
  - Child Life consult
  - Physical therapy consult

**Moderate to Severe**

- **Ketamine** ([Information about atomizer for IN administration](#))
  - Ketamine in 0.9% NaCl 100mL IVBP – intravenous, 0.15mg/kg
  - Ketamine in 0.9% NaCl 100 mL IVBP – intravenous, 0.3 mg/kg
  - Ketamine in 0.9% NaCl 500 mL infusion – 1 mcg/kg/min IV
  - Ketamine injection – 1 mg/kg Nasal
- Opioids (refer to PAMI [Pain Management Dosing Guide](#) for opioid selection guidance. Consider patient’s opioid tolerance level based on their outpatient regimen)
  - Oral opioids
    - Morphine solution – 0.3 mg/kg PO
    - Morphine solution – 10mg PO
  - IV/IN opioids ([information about atomizer for IN administration](#))
    - Morphine injection
    - Fentanyl injection – 1.5 mcg/kg IN
    - Fentanyl injection – 1.5 mcg/kg IV

**Headache/Migraine**

**Adults:**

**Mild to Moderate**

- Acetaminophen 1000 mg PO

- Acetaminophen 1000mg IV
- Ibuprofen 400 mg PO
- Ketorolac 15 mg IV
- Ketorolac 30 mg IM
- Ondansetron disintegrating tablet – 4mg PO
- Ondansetron injection – 4mg IV

### **Moderate to Severe**

- Metoclopramide 10 mg IV
- Promethazine 25 mg IM
- Prochlorperazine 10 mg IV
- Haloperidol 5 mg IV + Cardiac monitoring
- Droperidol 2.5 mg IV
- Droperidol 2.5mg IM

### **Adjuncts**

- 0.9% NaCl – 1 L IV Bolus
- Diphenhydramine 25 mg IV
- Local anesthetics for Procedures ([videos for procedures](#))
  - Lidocaine 1% injection – 2 mL
  - Lidocaine 2% injection – 2 mL
  - Bupivacaine 0.25% injection – 2 mL
  - Bupivacaine 0.5% injection – 2 mL
- Dexamethasone injection – 4mg IV
- Magnesium sulfate IVPB – 1g IV
- Non pharmacologic options: ([information on non-pharmacologic options](#))
  - Page Pain Coach Educator
  - Virtual Reality (<https://www.youtube.com/watch?v=hDEJb79ZwKc>)
  - Passive Distraction
  - Deep breathing (<https://youtu.be/Wemm-i6Xhr8?t=87>)
- **If tension HA, also consider:**
  - Butalbital/acetaminophen/caffeine – 2 tablet PO
  - Cyclobenzaprine tablet – 5 mg PO
  - Cyclobenzaprine tablet - 10 mg PO
  - Diazepam tablet - 5 mg PO
  - Diazepam injection – 5mg IV

### **Additional options**

- Sumatriptan injection - 6 mg subcutaneous
- Valproate 500 mg IV in D5W 50 mL IVPB
- Lidocaine topical injection 4% - for nebulization

- Propofol IV + cardiac monitoring + RN communication (severe refractory migraine)

**Pediatric:**

- Ibuprofen 10 mg/kg PO (max 2400 mg/d)
- Acetaminophen liquid - 15 mg/kg PO
- Acetaminophen IV – 15 mg/kg IV
- Diphenhydramine liquid - 1 mg/kg PO
- Droperidol injection - 2.5 mg IV
- Droperidol injection – 2.5 mg IM
- Nonpharmacologic options ([information on non-pharmacologic options](#))
  - Page Pain Coach Educator
  - Virtual Reality (<https://www.youtube.com/watch?v=hDEJb79ZwKc>)
  - Passive Distraction ([https://www.youtube.com/watch?v=4oC\\_tvs\\_kXQ](https://www.youtube.com/watch?v=4oC_tvs_kXQ) )
  - Deep breathing (<https://youtu.be/Wemm-i6XHr8?t=87>)



# ***PAMI ED-ALT Discharge Panels***

## **Musculoskeletal:**

- Acetaminophen 400 mg tablet– 500-1000mg PO q4-6h PRN pain
- Ibuprofen 200mg tablet – 400-600 mg PO q6-8h PRN pain
- Celecoxib 100mg tablet - 100mg PO BID
- Celecoxib 200mg tablet - 200mg PO daily
- Naproxen 250mg tablet – 250-500mg PO BID
- Cyclobenzaprine 5mg tablet – 5mg PO TID PRN muscle spasms (patients > 75 yr OR < 70 kg OR concerns for somnolence)
- Cyclobenzaprine 10 mg tablet – 10mg PO TID PRN muscle spasms (patients > 70 kg)
- Methocarbamol 500 mg tablet – 1500 mg PO TID x3D, then 500 mg PO TID
- Methocarbamol 750 mg tablet – 1500 mg PO TID x3D, then 750 mg PO TID
- Diazepam 2mg tablet – 2mg PO q6-8h PRN muscle spasm (avoid use with opioids)
- Diazepam 5mg tablet – 5mg PO q6-8h PRN muscle spasm (avoid use with opioids)
- Lidocaine 4% patch – apply ## patches topically to most painful area daily (max 3)
- Lidocaine 4% cream – apply topically BID
- Capsaicin 0.1% cream – apply topically to affected joints 3-4 times daily
- Diclofenac 1% gel – apply ##g topically QID
- Diclofenac epolamine 1.3% patch – apply 1 batch BID to most painful areas
- Menthol 4% gel – apply topically

## Non-pharmacologic:

- Immobilization
- Heat therapy (caution in patients with peripheral neuropathy, spinal cord injury)
- Cold therapy (ideal first 24-48 hours after acute injury; caution in patients with peripheral neuropathy, spinal cord injury)
- Passive distraction
- Virtual Reality distraction (<https://www.youtube.com/watch?v=hDEJb79ZwKc>)
- Deep breathing (<https://youtu.be/Wemm-i6Xhr8?t=87>)
- Physical therapy referral
- Massage therapy
- TENS unit
- Acupuncture
- Yoga

## **Acute on Chronic Radicular LBP (opiate tolerant):**

- Acetaminophen 500 mg tablet– 500-1000mg PO q4-6h PRN pain
- Ibuprofen 400mg tablet – 400-600 mg PO q6-8h PRN pain
- Celecoxib 100mg capsule - 100mg PO BID
- Celecoxib 200mg capsule - 200mg PO daily
- Naproxen 250mg tablet – 250-500mg PO BID
- Cyclobenzaprine 5mg tablet – 5mg PO TID PRN muscle spasms (patients > 75 yr OR < 70 kg OR concerns for somnolence)
- Cyclobenzaprine 10 mg tablet – 10mg PO TID PRN muscle spasms (patients > 70 kg)
- Methocarbamol 500 mg tablet – 1500 mg PO TID x3D, then 500 mg PO TID
- Methocarbamol 750 mg tablet – 1500 mg PO TID x3D, then 750 mg PO TID
- Diazepam 2mg tablet – 2mg PO q6-8h PRN muscle spasm (avoid use with opioids)
- Diazepam 5mg tablet – 5mg PO q6-8h PRN muscle spasm (avoid use with opioids)
- Lidocaine 4% patch – apply ## patches topically to most painful area daily (max 3)
- Lidocaine 4% cream – apply topically BID
- Capsaicin 0.1% cream – apply topically to affected joints 3-4 times daily
- Diclofenac 1% gel – apply ##g topically QID
- Diclofenac epolamine 1.3% patch – apply 1 batch BID to most painful area
- Menthol 4% gel – apply topically

### Non-pharmacologic:

- Passive distraction
- Virtual Reality distraction (<https://www.youtube.com/watch?v=hDEJb79ZwKc>)
- Deep breathing (<https://youtu.be/Wemm-i6Xhr8?t=87>)
- Physical therapy referral
- Massage therapy
- TENS unit
- Acupuncture
- Yoga
- Pain Management Discharge planning resources  
<https://pami.emergency.med.jax.ufl.edu/resources/discharge-planning/>  
<https://nciph.org/public.html>
- Pain Clinic Referral
- Patient Educational Pain Management Videos  
(<https://pami.emergency.med.jax.ufl.edu/resources/pami-educational-pain-videos/> )

## **Headache/Migraine:**

- Acetaminophen 500mg tablet – 500-1000mg PO q4-6h PRN headache
- Ibuprofen 200mg tablet – 400-600mg PO q6-8h PRN headache
- Butalbital-acetaminophen-caffeine 50-325-40mg tablet – 2 tabs PO q4h PRN headache
- Ondansetron 4mg ODT – 4mg PO q6-8h PRN nausea/vomiting
- Metoclopramide 10mg tablet – 10mg PO q6h
- Passive distraction
- Virtual Reality distraction (<https://www.youtube.com/watch?v=hDEJb79ZwKc>)
- Deep breathing (<https://youtu.be/Wemm-i6Xhr8?t=87>)
- Pain Clinic Referral
- Pain Management Discharge planning resources  
(<https://pami.emergency.med.jax.ufl.edu/resources/discharge-planning/>)  
(<https://nciph.org/public.html>)
- Patient Educational Pain Management Videos  
(<https://pami.emergency.med.jax.ufl.edu/resources/pami-educational-pain-videos/>)

## Non-pharmacologic:

- Passive distraction
- Virtual Reality distraction (<https://www.youtube.com/watch?v=hDEJb79ZwKc>)
- Deep breathing (<https://youtu.be/Wemm-i6Xhr8?t=87>)
- Pain Clinic referral
- Pain Management Discharge planning resources  
<https://pami.emergency.med.jax.ufl.edu/resources/discharge-planning/>  
<https://nciph.org/public.html>
- Patient Educational Pain Management Videos  
(<https://pami.emergency.med.jax.ufl.edu/resources/pami-educational-pain-videos/>)

## **Renal Colic:**

- Acetaminophen 500mg tablet – 500-1000mg PO q4-6h PRN headache
- Ibuprofen 200mg tablet – 400-600mg PO q6-8h PRN headache
- Naproxen 250mg tablet – 250-500mg PO BID
- Ondansetron 4mg ODT – 4mg PO q6-8h PRN nausea/vomiting
- Tamsulosin 0.4mg capsule – 0.4mg capsule PO daily until stone passage (for distal ureteral stones)
- Virtual Reality Distraction (<https://www.youtube.com/watch?v=hDEJb79ZwKc>)
- Passive Distraction
- Deep breathing (<https://youtu.be/Wemm-i6Xhr8?t=87>)

- Pain Management Discharge planning resources  
<https://pami.emergency.med.jax.ufl.edu/resources/discharge-planning/>  
<https://nciph.org/public.html>
- Patient Educational Pain Management Videos  
<https://pami.emergency.med.jax.ufl.edu/resources/pami-educational-pain-videos/>
- Heat/cold therapy: <https://www.youtube.com/watch?v=j1erX1qflc4>

*Disclaimer: The PAMI order panels and all resources contained therein are for educational and informational purposes only and are not intended as a substitute for professional medical management by a qualified health care professional. PAMI is not responsible for any legal action taken by a person or organization as a result of information obtained from our order panels. Recommended treatment options and dosages are based on best available evidence at the time of posting and cannot account for individual differences in genetics and pharmacokinetics or comorbidities. Patient care must be individualized. As new research and clinical experience becomes available, these recommendations may change. Healthcare professionals should remain current on medical literature and national standards of care and structure their treatment accordingly. The use of information obtained or downloaded from or through this website, module, or product is at the user's sole discretion and risk.*