# Low-Dose Ketamine for Pain

<table>
<thead>
<tr>
<th><strong>Purpose</strong></th>
<th>• Expand multi-modal pain control in specific ED patients through the utilization of Low-Dose Ketamine</th>
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<tbody>
<tr>
<td><strong>Location</strong></td>
<td>• All areas of the ED including I-Pod. CDU will not participate at this time</td>
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</table>
| **Included Patient Population** | • Musculoskeletal or soft tissue trauma/pain  
• Chronic pain (current, history of, or chart documentation of)  
• Opioid tolerance or dependence (current, history of, or chart documentation of)  
• Sickle cell vaso-occlusive pain crisis  
• Burns  
• Neuropathic pain  
• Physician discretion |
| **Excluded Patient** | • Pregnant or breastfeeding women  
• Known or suspected allergy to ketamine  
• Active chest pain, respiratory distress, or acute heart failure  
• Advanced liver disease or cirrhosis  
• Patients <18yo  
• Active psychosis or mental health disturbance, hallucinogenic state or toxic exposure  
• Patients enrolled in research study that precludes participation (e.g. Sickle Cell) |
| **Possible Patient Population (Ketamine should be used with caution in the following situations)** | • Severe systemic hypertension (>180/110) or uncontrolled tachycardia  
• Known or suspected traumatic brain injury  
• Known or suspected elevation in intracranial/intraocular pressure  
• Cardiac arrhythmia  
• Ischemic heart disease or heart failure  
• Elderly patients >75yo |
| **Dosage** | 0.1 mg/Kg –0.3 mg/Kg  
***Maximum dose 0.3 mg per kg |
| **Administration of Medication** | • IV: 0.1 mg/Kg –0.3 mg/Kg every 30 minutes for total dose 0.3 mg/Kg  
• May repeat dose every 2 hours  
• Slow IV push over one minute |
| **Patient Assessment** | • Continuous:  
  o HR, SpO2 and, Cardiac monitoring  
  • Monitor every 15 minutes x 1 hour, then every 30 minutes x 1 hour (from the last administration)  
  o B/P  
  o Pain scale  
  o Level of Consciousness (LOC) e.g. drowsiness, dysphoria, and hallucinations  
  • Monitor for 1 hour after last dose prior to disposition  
  ***Must document full set of vital signs and assessment of LOC within 30 minutes of departure |
| **Documentation** | • Reason for administration  
• VS  
• LOC  
• Pain Score  
• Cardiac Rhythm  

***REMEMBER to waste upon removal with witness