



NEONATAL

CLONIDINE




This document should be read in conjunction with this [DISCLAIMER](#)

Restricted: Requires Neonatologist review within 24 hours of initiation

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| Presentation | IV: 150microgam/mL Oral Suspension: 10 microgram/mL (KEMH) |
| Classification | Centrally acting Alpha ₂ adreno-receptor agonist |
| Indication | Neonatal Abstinence Syndrome (NAS) Analgesia Adjuvant sedative, analgesic, anxiolytic (opioid and benzodiazepine- sparing effect) |
| Dose | <u>Neonatal Abstinence Syndrome (opioid withdrawal)</u> Oral: <u>Infants > 35 weeks CGA</u> 0.5 to 1 microgram/kg/dose every 6 hours Increase dose according to response by increments of 25-50% Maximum of 12 micrograms/kg/day <u>Analgesia:</u> IV: <u>Infants ≥37 weeks CGA</u> 0.5 to 2 microgram/kg/hour Start with 0.5 microgram/kg/hour in self-ventilating babies. Adjust with caution based on clinical effect Do not discontinue clonidine abruptly, monitor heart rate and blood pressure – discontinue gradually |
| Monitoring | Heart rate and blood pressure every 4 hours the first 2 days of therapy and every 12 hours thereafter. Blood pressure closely for 48 hours after discontinuing clonidine to assess for rebound hypertension. Monitor NAS scores every 3 to 4 hours during treatment using Neonatal Abstinence Scoring |

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| Dose Adjustment | Adjust dose according to NAS scoring and clinical response | |
| Guidelines & Resources | Neonatal Abstinence Syndrome (NAS) | |
| Compatible Fluids | Sodium Chloride 0.9% | |
| Preparation | <p>Intravenous Infusion: Dilute 50 microgram per kilogram of baby's weight ($\approx 0.33\text{mL/kg}$) to 50mL with Sodium Chloride 0.9%.</p> <p>Infuse at $0.5\text{mL/hour} = 0.5 \text{ microgram/kg/hour}$</p> <p>Oral: Use solution Prepared in Pharmacy if available If solution not available – prepare the following solution using 100microgram tablets</p> <ul style="list-style-type: none"> • Dispense ONE clonidine tablet (100microgam) in 10mL of water. Tablet will disperse within 2 minutes • Concentration is $100\text{microgam}/10\text{mL} = 10\text{microgram/mL}$ • Discard any unused solution | |
| Administration | <p>IV Infusion: Infuse over 10-15 minutes</p> <p>Oral: Shake bottle before use. May be administered anytime with regards to feeds.</p> | |
| Adverse Reactions | Common | Increased mucus secretions, oedema, flushing, hypotension |
| | Serious | Bradycardia, AV block, arrhythmias |
| Storage | <p>Ampoules: Store below 25°C</p> <p>Suspension: Refrigerate – do not freeze</p> | |
| References | <p>Takemoto CK, Hodding JH, Kraus DM. Pediatric & neonatal dosage handbook with international trade names index : a universal resource for clinicians treating pediatric and neonatal patients. 24th ed. Hudson (Ohio): Lexicomp; 2018.</p> <p>Truven Health Analytics. Clonidine. In: NeoFax [Internet]. Greenwood Village (CO): Truven Health Analytics; 2019 [cited 2019 Apr 2]. Available from: https://neofax.micromedexsolutions.com/</p> | |

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| References | <p>Society of Hospital Pharmacists of Australia. Clonidine. In: Australian Injectable Drugs Handbook [Internet]. [St Leonards, New South Wales]: Health Communication Network; 2019 [cited 2019 Apr 2]. Available from: http://aidh.hcn.com.au</p> <p>Hunseler C, Balling G, Rohlig C, Blickheuser R, Trieschmann U, Lieser U, et al. Continuous Infusion of Clonidine in Ventilated Newborns and Infants: A randomized Controlled Trial. <i>Pediatric Critical Care Medicine</i> 2014;15 (6): 511-522.</p> |
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