



NEONATAL Medication Monograph

HYALURONIDASE





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

Unrestricted: Any prescriber may initiate treatment

Presentation	Ampoule: 1500 units (powder for reconstitution)
Description	<p>Hyaluronidase is an enzyme that promotes the reabsorption of extravasated fluid by temporarily breaking down the hyaluronic acid of tissue cement.</p> <ul style="list-style-type: none"> • After administering hyaluronidase this tissue cement is broken down for 24 to 48 hours. • The extravasated fluid is spread over a large absorptive area, but irritation is said to be minimised by dilution in tissue fluids.
Indications	Prevention of tissue injury caused by IV extravasation
Contraindications	<p>Not recommended for IV use</p> <p>Do not use for extravasation of vasoconstrictive agents (e.g dopamine, adrenaline, noradrenaline) see Extravasation Injuries for use of Phentolamine</p>
Precautions	Do not inject near area of infection or acutely inflamed area due to an increased risk of spreading a localised infection
Dosage	<p><u>Subcutaneous or Intradermal routes ONLY</u></p> <p><u>Infiltration of Hyaluronidase without Normal Saline Irrigation</u></p> <p>Administer 1mL hyaluronidase (concentration 15 units/mL) through the existing IV cannula</p> <p>and/or</p> <p>Administer a total dose of 1mL hyaluronidase in 5 aliquots of 0.2mL (concentration 300 units/mL) into the periphery of the extravasation injury</p> <p><u>Infiltration of Hyaluronidase Followed by Normal Saline Irrigation</u></p> <p>Inject around and through the extravasation injury a total of 5 aliquots of 0.2 mL hyaluronidase (concentration 1000 units/mL)</p> <p>Irrigate using normal saline as per Extravasation Injuries Guideline</p>

Adverse Reactions	Common: injection site reactions
Interactions	Incompatible with adrenaline, heparin and furosemide
Compatible Fluids	Water for Injections, Sodium Chloride 0.9%, Glucose 5%, Glucose 10%
Preparation	<p>Preparation will differ according to concentration required as discussed in <i>Dosage</i> section.</p> <p><u>Concentration: 15units/mL</u></p> <ul style="list-style-type: none"> • Reconstitute hyaluronidase ampoule with 1mL Water for Injections • Withdraw the entire contents $\approx 1\text{mL}$ (1500units) and make to a final volume of 10mL with a compatible fluid • Concentration = $1500\text{units}/10\text{mL} = 150 \text{ units/mL}$ • Take 1mL of the above solution and further dilute to 10mL • Concentration is $150 \text{ units}/10\text{mL} = \underline{\underline{15 \text{ units /mL}}}$ <p><u>Concentration: 300 units/mL</u></p> <ul style="list-style-type: none"> • Reconstitute hyaluronidase ampoule with 1mL Water for Injections • Withdraw the entire contents $\approx 1\text{mL}$ (1500units) and make to a final volume of 1.5mL with a compatible fluid • Concentration = $1500\text{units}/1.5\text{mL} = 1000 \text{ units/mL}$ • Take 0.3mL (300units) of the above solution and further dilute to 1mL • Concentration = <u>300 units/ mL</u> <p><u>Concentration 1000 units/mL</u></p> <ul style="list-style-type: none"> • Reconstitute hyaluronidase ampoule with 1mL Water for Injections • Withdraw the entire contents $\approx 1\text{mL}$ (1500units) and make to a final volume of 1.5mL with a compatible fluid • Concentration = $1500\text{units}/1.5\text{mL} = \underline{\underline{1000 \text{ units/mL}}}$
Administration	Administer via Subcutaneous or intradermal injection
Monitoring	Monitor IV site for healing and further signs of extravasation

Storage	Store at room temperature, below 25°C Discard excess unused dilutions
Notes	Hyaluronidase works best if used early, preferably within one hour but up to 24 hours has been reported.
Related clinical guidelines	Extravasation Injuries
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; 2019</p> <p>Truven Health Analytics. Hyaluronidase. In: NeoFax [Internet]. Greenwood Village (CO): Truven Health Analytics; 2020 [cited 2020 Feb 23]. Available from: https://neofax.micromedexsolutions.com/</p> <p>MIMS Australia. Hyalase. In: MIMS Online [Internet]. St Leonards (New South Wales): MIMS Australia; 2020 [cited 2020 Feb 21]. Available from: https://www-mimsonline-com-au.kelibresources.health.wa.gov.au</p>

Keywords:	Extravasation, hyalase, hyaluronidase		
Publishing:	<input checked="" type="checkbox"/> Intranet	<input checked="" type="checkbox"/> Internet	
Document owner:	Head of Department - Neonatology		
Author / Reviewer:	KEMH & PCH Pharmacy / Neonatology Directorate		
Date first issued:	March 2001	Version:	3.1
Last reviewed:	February 2020, updated March 2020	Next review date:	February 2023
Endorsed by:	Neonatal Directorate Management Group	Date:	February 2020
Standards Applicable:	NSQHS Standards: 1  Governance, 3  Infection Control, 4  Medication Safety, 8  Acute Deterioration		
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