

## Paeds/NICU: Enoxaparin

Presentation:	<ul style="list-style-type: none"> <li>Pre-filled syringes 20mg/ml prepared in pharmacy</li> <li>Pre-filled syringes (100mg/ml) 60mg, 80mg, 100mg</li> </ul>																					
Indication:	<ul style="list-style-type: none"> <li>Prophylaxis of thrombotic episodes</li> <li>Treatment of thrombotic episodes</li> </ul>																					
Dose:	<p><u>Prophylaxis of thrombotic episodes</u> dose as per BNFC</p> <p><u>Treatment of thrombotic episodes</u> dose as per BNFC</p> <p>Routine monitoring of anti-Factor Xa activity is not usually required during treatment with enoxaparin, except in neonates; monitoring may also be necessary in severely ill children and those with renal or hepatic impairment. If levels are being monitored check anti-Xa level 4 hours after 3<sup>rd</sup> dose and adjust according to table below:</p> <table border="1"> <thead> <tr> <th>Anti-Xa level</th> <th>Dose adjustment</th> <th>Next anti-Xa level</th> </tr> </thead> <tbody> <tr> <td>&lt;0.35</td> <td>Change Insuflon<sup>®</sup> site Increase dose by 25%</td> <td>4 hours post dose</td> </tr> <tr> <td>0.35 – 0.49</td> <td>Increase dose by 10%</td> <td>Next day</td> </tr> <tr> <td>0.5 – 1.0</td> <td>-</td> <td>Twice weekly</td> </tr> <tr> <td>1.01 – 1.5</td> <td>Decrease dose by 10%</td> <td>Next day</td> </tr> <tr> <td>1.51 – 2.0</td> <td>Delay dose by 12 hrs &amp; decrease by 25%</td> <td></td> </tr> <tr> <td>&gt;2</td> <td>Delay dose until anti-Xa level &lt;1.0 Decrease dose by 40%</td> <td>Check anti-Xa every 12 hrs until &lt;1.0 Check anti-Xa 3.5 hours post dose</td> </tr> </tbody> </table> <p>Target level is 0.5 – 1.0 U/ml for therapeutic dosing</p> <p><b>**Please ensure lab is aware you are sending a sample for analysis. If results are not requested for the same day sample may be frozen for weekly 'batch' analysis**</b></p>	Anti-Xa level	Dose adjustment	Next anti-Xa level	<0.35	Change Insuflon <sup>®</sup> site Increase dose by 25%	4 hours post dose	0.35 – 0.49	Increase dose by 10%	Next day	0.5 – 1.0	-	Twice weekly	1.01 – 1.5	Decrease dose by 10%	Next day	1.51 – 2.0	Delay dose by 12 hrs & decrease by 25%		>2	Delay dose until anti-Xa level <1.0 Decrease dose by 40%	Check anti-Xa every 12 hrs until <1.0 Check anti-Xa 3.5 hours post dose
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Route of administration:	<p>Subcutaneous injection</p> <p>Insuflon<sup>®</sup> device can be used if necessary – this should be changed every 4-5 days and flushed with 0.5ml sodium chloride 0.9% after each dose to ensure dose delivery. Insuflon information sheet available: <a href="http://intrapump.com/wp-content/uploads/docs/insuflon_Informational_Sheet.pdf">http://intrapump.com/wp-content/uploads/docs/insuflon_Informational_Sheet.pdf</a></p> <p>Doses prepared by pharmacy: entire contents of syringe to be injected.</p> <p>Doses from manufacturer's syringes: Expel the excess enoxaparin from the syringe to the correct graduation for the prescribed dose to be administered.</p>																					
Instructions for preparation and administration:	<p>Doses &lt; 20mg to be manufactured by pharmacy at a concentration of 20mg/ml (these doses cannot be reliably administered from the manufacturers syringe)</p> <p>Doses ≥20mg to be administered using licensed prefilled syringes (100mg/ml) <b>20mg and 40mg syringes are not graduated and cannot be used to administer part doses.</b></p> <p>Please round to a measurable dose as per table below.</p>																					

<b><u>Table of measurable doses:</u></b>			
<b>Enoxaparin dose (mg)</b>	<b>Volume of 100mg/ml syringe to be administered (mls)</b>	<b>Enoxaparin dose (mg)</b>	<b>Volume of 100mg/ml syringe to be administered (mls)</b>
20	0.2	52.5	0.525
22.5	0.225	55	0.55
25	0.25	57.5	0.575
27.5	0.275	60	0.6
30	0.3	62.5	0.625
32.5	0.325	65	0.65
35	0.35	67.5	0.675
37.5	0.375	70	0.7
40	0.4	72.5	0.725
42.5	0.425	75	0.75
45	0.45	77.5	0.775
47.5	0.475	80	0.8
50	0.5		

  

<b><u>Prescribing</u></b>	<b>Paediatrics:</b> prescribe all doses on Lorenzo <b>NICU:</b> prescribe on regular side of white prescription chart
<b>Additional Comments:</b>	Anti-Xa levels will be affected by use of unfractionated heparin, renal failure (delayed excretion), hepatic failure and coexisting coagulopathy (e.g. in sepsis). Increased anti-Xa assay may be required if there are bleeding concerns. If patients are being discharged on enoxaparin for administration by parents/carers, the parent/carer must be counselled by nursing or pharmacy staff to ensure they are using the correct technique

Note: The contents of this monograph should be read in conjunction with information available in the BNFC and Medusa

**References:**

1. BNF for Children, accessed online 01.04.2020
2. NICU & PICU Guideline on the use of Enoxaparin in Neonatal and Paediatric Critical Care, Version 3, Greater Glasgow and Clyde NHS Trust, 19 November 2019

## Document control sheet

<b>GUIDELINE NUMBER</b>	
<b>AREA IN WHICH THIS MONOGRAPH APPLIES</b>	Paeds/NICU

<b>DIVISIONAL AUTHORISATION</b>	
<b>GROUP</b>	<b>DATE</b>
Paediatric monograph review group	15/05/20
Clinical Director – Paediatric BU	27/08/2020
Divisional Clinical Governance Committee – Women & Children's	27/08/2020

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If review:

	<b>Position</b>	<b>Date</b>
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Change history:

<b>Changes Reference</b>	<b>Change details</b>	<b>Date</b>
	Timings of Anti-Xa levels and target level	April 2020
	Type of charts/EPMA	April 2020
	References	April 2020
	Insuflon information	April 2020