

**London Ambulance Service NHS Trust Medication Formulary for Emergency Services**

Medication Name	Indication	Formulation(s)	Strength	NETS	ER	AAP	TEAC 1	TEAC 2	EAC	EMT	Nurse	Midwife	Paramedic	APP-CC	APP-UC	Doctor
Oxygen	<ul style="list-style-type: none"> <li>Significant illness/injury in children</li> <li>Critical illness</li> <li>Hypoxaemia</li> <li>COPD and other conditions requiring controlled/low dose oxygen therapy</li> <li>Cardiac arrest</li> <li>Major trauma</li> <li>Sepsis</li> <li>Shock</li> <li>Carbon monoxide poisoning</li> <li>Seizures</li> <li>Hypothermia</li> </ul>	Gas	N/A	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Adenosine	Conversion of paroxysmal regular supraventricular tachycardias	Ampoule-Solution for Injection	3mg/1ml	X	X	X	X	X	X	X	X	X	X	✓	X	✓
Adrenaline 1 in 1,000	Life Threatening Asthma	Ampoule-Solution for Injection	1mg/1ml	X	X	X	X	X	✓	✓	✓	✓	✓	✓	✓	✓
Adrenaline 1 in 1,000	Anaphylaxis	Ampoule-Solution for Injection	1mg/1ml	X	X	X	X	✓	✓	✓	✓	✓	✓	✓	✓	✓
Adrenaline 1 in 10,000	Cardiac Arrest	Pre-filled syringe	1mg/10ml	X	X	X	X	X	X	X	X	X	✓	✓	✓	✓
Alteplase	Suspected massive Pulmonary Embolism	Vial- Powder for Reconstitution	50mg	X	X	X	X	X	X	X	X	X	X	✓	X	✓
Amiodarone	Cardiac arrest (single dose only) in pulseless VT or VF	Pre-filled syringe	300mg/10ml	X	X	X	X	X	X	X	X	X	✓	✓	✓	✓
Amoxicillin	As per PGD	Tablet	500mg	X	X	X	X	X	X	X	X	X	X	X	✓	✓
Aspirin	Clinical or ECG evidence of myocardial infarction or ischaemia	Tablet	300mg	X	✓	X	X	X	✓	✓	X	X	✓	✓	✓	✓
Atropine	Symptomatic bradycardia in the presence of any of the following: <ul style="list-style-type: none"> <li>Pulse &lt;40 beats per min</li> <li>Systolic blood pressure below expected for age</li> <li>Paroxysmal ventricular arrhythmias requiring suppression</li> <li>Inadequate perfusion causing confusion</li> </ul>	Ampoule-Solution for Injection	600micrograms/1ml	X	X	X	X	X	X	X	X	X	✓	✓	✓	✓
BenzylPenicillin	Suspected meningococcal disease in the presence of a non-blanching rash and signs/symptoms suggestive of meningococcal septicaemia	Vial- Powder for Reconstitution	600mg	X	X	X	X	X	X	X	X	X	✓	✓	✓	✓
Calcium Chloride	Hyperkalaemia or Calcium Channel Blocker Toxicity	Pre-filled syringe	100mg/1ml	X	X	X	X	X	X	X	X	X	X	✓	X	✓
Chlorphenamine	Symptomatic allergic reaction falling short of anaphylaxis but causing the patient distress and/or alleviating distressing cutaneous symptoms <b>only</b> after emergency treatment with adrenaline and the patient is stable	Ampoule-Solution for Injection	10mg/1ml	X	X	X	X	X	X	X	X	X	✓	✓	✓	✓

V1.4 August 2022

Page 1

Medication Name	Indication	Formulation(s)	Strength	NETS	ER	AAP	TEAC 1	TEAC 2	EAC	EMT	Nurse	Midwife	Paramedic	APP-CC	APP-UC	Doctor
Clindamycin	Antibacterial prophylaxis for patients who have sustained an open fracture/s of either long bones, hind foot and/or midfoot AND who have a penicillin allergy	Solution for Infusion	150mg/1ml	X	X	X	X	X	X	X	X	X	X	✓	X	✓
Coamoxiclav	Antibacterial prophylaxis for patients who have sustained an open fracture/s of either long bones, hind foot and/or midfoot	Vial- Powder for Reconstitution	1200mg	X	X	X	X	X	X	X	X	X	X	✓	X	✓
Codeine	Mild to severe to acute pain	Tablet	15mg and 30mg	X	X	X	X	X	X	X	X	X	X	X	✓	✓
Cocodamol	Mild to severe to acute pain	Tablet	30/500mg	X	X	X	X	X	X	X	X	X	X	X	✓	✓
Dexamethasone	Mild to Severe Croup	Ampoule-Solution for Injection	3.3mg/1ml	X	X	X	X	X	X	X	X	X	✓	✓	✓	✓

Diazepam	Seizures lasting longer than 5 minutes that are still fitting. Repeated seizures not secondary to hypoxia or hypoglycaemia. Status epilepticus Eclamptic seizures if initial seizure lasts 2-3 minutes, or if recurrent and cocaine toxicity with cardiac presentation	Ampoule-Solution for Injection	5mg/1ml	X	X	X	X	X	X	X	X	X	X	✓	✓	✓	✓
Diazepam Emulsion	Seizures lasting longer than 5 minutes that are still fitting. Repeated seizures not secondary to hypoxia or hypoglycaemia. Status epilepticus Eclamptic seizures if initial seizure lasts 2-3 minutes, or if recurrent and cocaine toxicity with cardiac presentation	Ampoule-Solution for Injection	5mg/1ml	X	X	X	X	X	X	X	X	X	X	✓	✓	✓	✓
Diazepam Stesolid	Seizures lasting longer than 5 minutes that are still fitting Repeated seizures not secondary to hypoxia or hypoglycaemia Status epilepticus Eclamptic seizures if initial seizure lasts 2-3 minutes, or if recurrent	Enema	2.5mg/1.25ml	X	X	X	X	X	X	X	X	X	X	✓	✓	✓	✓
Diazepam Stesolid	Seizures lasting longer than 5 minutes that are still fitting Repeated seizures not secondary to hypoxia or hypoglycaemia Status epilepticus Eclamptic seizures if initial seizure lasts 2-3 minutes, or if recurrent	Enema	5mg/2.5ml	X	X	X	X	X	X	X	X	X	X	✓	✓	✓	✓
Diazepam	Adults only - Acute or chronic pain para-spinal muscle spasm where the symptoms are not considered to be relieved by other analgesics	Tablet	2mg	X	X	X	X	X	X	X	X	X	X	X	X	✓	✓
Diclofenac Sodium	Adults with acute or chronic musculoskeletal disorders and adults with suspected unilateral renal cacluli	Suppository	50mg	X	X	X	X	X	X	X	X	X	X	X	X	✓	✓
Doxycycline	Low severity Community Acquired Pneumonia OR Infective Acute Exacerbation of Chronic Obstructive Pulmonary Disease (COPD)	Capsule	100mg	X	X	X	X	X	X	X	X	X	X	X	X	✓	✓

V1.4 August 2022

Page 2

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Duodote (Atropine + Pralidoxime)	Reversal of Muscarinic agonism due to toxicity from nerve agents	Solution for Infusion	2.1mg Atropine & 600mg Pralidoxime /3ml	X	X	X	X	X	X	X	X	X	X	✓	X	✓
Fentanyl	Analgesia. Enhancement of anaesthesia during assisted ventilation	Ampoule-Solution for Injection	50micrograms/1ml	X	X	X	X	X	X	X	X	X	X	X	X	✓
Glucagon	<ul style="list-style-type: none"> <li>Hypoglycaemia (blood glucose level below 4.0 millimoles per litre)</li> <li>Clinically suspected hypoglycaemia where oral glucose administration not possible</li> <li>Unconscious patients where hypoglycaemia is the suspected cause</li> </ul>	Vial- Powder for Reconstitution	1mg	X	X	X	X	X	✓	✓	✓	✓	✓	✓	✓	✓
Glucose 10% Infusion	<ul style="list-style-type: none"> <li>Hypoglycaemia (blood glucose level below 4.0 millimoles per litre)</li> <li>Clinically suspected hypoglycaemia where oral glucose administration not possible</li> <li>Unconscious patients where hypoglycaemia is the suspected cause</li> </ul>	Solution for Infusion	50g/500ml	X	X	X	X	X	X	X	X	X	✓	✓	✓	✓
Glucose 5% Infusion	Diluent for listed compatible medicines for infusion	Solution for Infusion	5g/100ml	X	X	X	X	X	X	X	X	X	✓	✓	✓	✓

Glucose Gel	• Hypoglycaemia (blood glucose level below 4.0 millimoles per litre)	Oral Gel	40% w/v	X	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Glycerin Trinitrate	Cardiac chest pain due to angina or myocardial infarction, acute cardiogenic pulmonary oedema	MDS - Metered Dose Spray	400micgrams/spray	X	✓	X	X	X	✓	✓	X	X	✓	✓	✓	✓	✓
Glycopyrronium	Excessive respiratory secretions in End of Life Care settings	Ampoule-Solution for Injection	200micrograms/1ml	X	X	X	X	X	X	X	X	X	X	X	✓	✓	✓
Haloperidol	Acute Behavioural Disturbance symptom management	Ampoule-Solution for Injection	5mg/1ml	X	X	X	X	X	X	X	X	X	X	X	✓	✓	✓
Hydrocortisone IM	Adrenal Crisis / Pregnant women with known Addison's disease and established labour	Vial - Powder for Reconstitution / Ampoule-Solution for Injection	100mg powder and 100mg/1ml	X	X	X	X	X	✓	✓	✓	✓	✓	✓	✓	✓	✓
Hydrocortisone IV	Adrenal Crisis / Pregnant women with known Addison's disease and established labour / Acute Exacerbation COPD, Severe or Life Threatening Asthma	Vial - Powder for Reconstitution / Ampoule-Solution for Injection	100mg powder and 100mg/1ml	X	X	X	X	X	X	X	X	X	X	✓	✓	✓	✓
Ibuprofen	Mild to moderate pain, high temperature, soft tissue injury	Tablet	400mg	X	✓	X	X	X	✓	✓	X	X	✓	✓	✓	✓	✓
Ibuprofen	Mild to moderate pain, high temperature, soft tissue injury	Tablet	400mg	X	✓	X	X	X	✓	✓	X	X	✓	✓	✓	✓	✓

V1.4 August 2022

Page 3

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Ipratropium Bromide	Acute severe or life threatening asthma, acute asthma unresponsive to salbutamol, exacerbation of chronic obstructive pulmonary disease unresponsive to salbutamol	Nebuliser Liquid	250micrograms/1ml	X	X	X	X	X	✓	✓	✓	X	✓	✓	✓	✓
Ketamine	Severe traumatic pain and light sedation in the following situations only: Fracture reduction and splinting, multiple or significant fractures, ongoing pain despite Morphine administration, severe burns	Ampoule-Solution for Injection	10mg/1ml		X	X								✓	X	
Ketamine	Severe traumatic pain and light sedation in the following situations only: Fracture reduction and splinting, multiple or significant fractures, ongoing pain despite Morphine administration, severe burns	Ampoule-Solution for Injection	50mg/1ml	X	X	X	X	X	X	X	X	X	X	✓	X	✓
Lansoprazole	Concurrent use with NSAIDs when all the following criteria - in patients 14 years and over at moderate to high risk of developing adverse GI effects from NSAID use	Tablet	15mg	X	X	X	X	X	X	X	X	X	X	X	✓	✓
Lidocaine	Local anaesthesia	Ampoule-Solution for Injection	1% w/v 10ml		X	X								✓	✓	
Lidocaine	Local anaesthesia	Ampoule-Solution for Injection	2% w/v 20ml	X	X	X	X	X	X	X	X	X	X	✓	✓	✓
Magnesium Sulphate	Life threatening Asthma unresponsive to initial emergency drug therapy and management of active seizures or prevention of future seizures associated with Eclampsia	Ampoule-Solution for Injection	500mg/1ml	X	X	X	X	X	X	X	X	X	X	✓	X	✓
Metoclopramide	Nausea and vomiting in adults 20 and over, prevention of nausea/vomiting after opiate administration, management of nausea and vomiting in end of life care settings	Ampoule-Solution for Injection	10mg/2ml	X	X	X	X	X	X	X	X	X	X	✓	✓	✓
Midazolam	APP-CC Only or Doctor Only: Management of prolonged seizures, agitation in end of life care, sedative management of awareness during return of spontaneous circulation, adjunctive therapy for analgesia, and management of agitation in neurosurgical conditions and acute confusional states	Ampoule-Solution for Injection	5mg/5ml		X	X						X	X	✓	X	✓

Midazolam	Management of prolonged seizures, agitation in end of life care and (for APP-CC only): sedative management of awareness during return of spontaneous circulation, adjunctive therapy for analgesia, and management of agitation in neurosurgical conditions and acute confusional states	Ampoule-Solution for Injection	5mg/1ml	X	X	X	X	X	X	X	X	X	X	X	✓	✓	✓
Misoprostol	<ul style="list-style-type: none"> <li>For the treatment of primary postpartum haemorrhage (PPH), defined as bleeding of &gt;500ml (of symptomatic of this blood loss) within the first 24hours after birth.</li> <li>For the treatment of life threatening bleeding following a confirmed diagnosis of miscarriage.</li> <li>Misoprostol can be administered as a second-line drug treatment after Syntometrine® or as an alternative first-line drug treatment if Syntometrine® is contraindicated or unavailable</li> </ul>	Tablet	200micrograms	X	X	X	X	X	X	X	X	X	✓	✓	✓	✓	✓
Morphine (Injection)	Pain associated with suspected myocardial infarction, severe pain	Ampoule-Solution for Injection	10mg/1ml	X	X	X	X	X	X	X	X	X	X	✓	✓	✓	✓

V1.4 August 2022 Page 4

Medication Name	Indication	Formulation(s)	Strength	NETS	ER	AAP	TEAC 1	TEAC 2	EAC	EMT	Nurse	Midwife	Paramedic	APP-CC	APP-UC	Doctor
Morphine (Oral)	Pain associated with suspected myocardial infarction, severe pain	Oral Solution	10mg/5ml	X	X	X	X	X	X	X	X	X	✓	✓	✓	✓
Naloxone IM	<ul style="list-style-type: none"> <li>Opioid overdose producing respiratory/cardiovascular/central nervous system depression</li> <li>Loss of consciousness with respiratory depression</li> <li>Respiratory/central nervous system depression in a neonate following maternal opioid use during labour</li> </ul>	Solution for Infusion	400micrograms /1ml	X	X	X	X	✓	✓	✓	✓	✓	✓	✓	✓	✓
Naloxone IV	<ul style="list-style-type: none"> <li>Opioid overdose producing respiratory/cardiovascular/central nervous system depression</li> <li>Loss of consciousness with respiratory depression</li> <li>Respiratory/central nervous system depression in a neonate following maternal opioid use during labour</li> </ul>	Ampoule-Solution for Injection	400micrograms /1ml	X	X	X	X	X	X	X	X	X	✓	✓	✓	✓
Naproxen	Acute and chronic pain from musculoskeletal disorders	Tablet	250mg	X	X	X	X	X	X	X	X	X	X	X	✓	✓
Nitrofurantoin	Acute lower urinary tract infection	Capsule	100mg	X	X	X	X	X	X	X	X	X	X	X	✓	✓
Nitrous Oxide (Entonox)	Moderate to severe pain, labour pains	Gas	50:50 mixture	X	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Ondansetaron	Treatment of nausea/vomiting, prevention/treatment of nausea/vomiting after opiate administration	Ampoule-Solution for Injection	2mg/1ml	X	X	X	X	X	X	X	X	X	✓	✓	✓	✓
Paracetamol	Mild to moderate pain, high temperature	Tablet	500mg	X	✓	X	X	X	✓	✓	X	X	✓	✓	✓	✓
Paracetamol Suspension	Mild to moderate pain, high temperature	Suspension	250mg/5ml	X	✓	X	X	X	✓	✓	X	X	✓	✓	✓	✓
Paracetamol Infusion	Mild to moderate pain, high temperature	Infusion	1000mg/100ml	X	X	X	X	X	X	X	X	X	✓	✓	✓	✓
Paracetamol Suspension	Mild to moderate pain, high temperature	Suspension	120mg/5ml	X	✓	X	X	X	✓	✓	X	X	✓	✓	✓	✓
Pivmecillinam	Acute lower urinary tract infection	Tablet	100mg	X	X	X	X	X	X	X	X	X	X	X	✓	✓
Prednisolone	Moderate to sever acute Asthma and acute exacerbation of Chronic Obstructive Pulmonary Disease	Tablet	5mg	X	X	X	X	X	X	X	X	X	X	X	✓	✓
Prochlorperazine	Nause and vomiting and or Vertigo to due Iarbyrithitis, Ménière's disease or benign paraoxysmal positional vertigo	Buccal tablet	3mg	X	X	X	X	X	X	X	X	X	X	X	✓	✓
Rocuronium Bromide	Neuomuscular blockade for use in anaesthesia	Ampoule-Solution for Injection	10mg/1ml	X	X	X	X	X	X	X	X	X	X	X	X	✓
Salbutamol Infusion / Injection	Life Threatening Asthma	Ampoule-Solution for Injection	500micrograms /1ml	X	X	X	X	X	X	X	X	X	X	✓	X	✓

Salbutamol Inhaler	Moderate to severe acute Asthma and acute exacerbation of Chronic Obstructive Pulmonary Disease	MDI-Metered Dose Inhaler	100micrograms /spray	X	X	X	X	X	X	X	X	X	X	X	X	✓	✓
Salbutamol Nebuliser	<ul style="list-style-type: none"> <li>Acute asthma attack</li> <li>Expiratory wheeze associated with allergy, anaphylaxis, smoke inhalation or lower airway causes</li> <li>Exacerbation of chronic obstructive pulmonary disease</li> </ul>	Nebuliser Liquid	2.5mg/2.5ml	X	✓	X	X	X	✓	✓	✓	X	✓	✓	✓	✓	✓

V1.4 August 2022 Page 4

Medication Name	Indication	Formulation(s)	Strength	NETS	ER	AAP	TEAC 1	TEAC 2	EAC	EMT	Nurse	Midwife	Paramedic	APP-CC	APP-UC	Doctor
Sodium Chloride 0.9% w/v	<ul style="list-style-type: none"> <li>Medical conditions with or without haemorrhage</li> <li>Trauma related haemorrhage</li> <li>Burns</li> <li>Limb crush injury</li> <li>Sepsis</li> <li>Flushing cannulas</li> </ul>	Solution for Infusion	50g/500ml	X	X	X	X	X	X	X	X	X	✓	✓	✓	✓
Sodium Chloride 0.9% w/v	Diluent for listed compatible medicines for infusion	Solution for Infusion	100ml	X	X	X	X	X	X	X	X	X	✓	✓	✓	✓
Sodium Chloride 0.9% w/v	Diluent for listed compatible medicines for infusion and flushing cannulas	Ampoule-Solution for Injection	10ml	X	X	X	X	X	X	X	X	X	✓	✓	✓	✓
Syntometrine	Postpartum haemorrhage within 24 hours of delivery of infant where bleeding of the uterus is uncontrolled by uterine massage, miscarriage with life threatening bleeding and confirmed diagnosis	Ampoule-Solution for Injection	500micrograms (Ergometrine and 5 units(Oxytocin) per 1ml	X	X	X	X	X	X	X	X	✓	✓	✓	✓	✓
Tranexamic Acid	Patients with time critical injuries where significant internal/external haemorrhage is suspected, patients fulfilling step 1 or 2 of the trauma triage protocol, patients with a primary post-partum haemorrhage and adults with head injuries	Ampoule-Solution for Injection	100mg/1ml	X	X	X	X	X	X	X	X	X	✓	✓	✓	✓
Water for Injection	Diluent for listed compatible medicines for infusion and flushing cannulas	Solution for Infusion	10ml	X	X	X	X	X	X	X	✓	✓	✓	✓	✓	✓

Abbreviations:	
NETS	Non-Emergency Transport Services
ER	Emergency Responder
AAP	Associate Ambulance Practitioner
TEAC 1/2	Trainee Emergency Ambulance Crew (stage 1 and 2)
EAC	Emergency Ambulance Crew
EMT	Emergency Medical Technician
APP CC/UC	Advanced Paramedic Practitioner - Critical Care / Urgent Care
CPG	Clinical Practice Guideline
PGD	Patient Group Direction
IM	Intramuscular
IV	Intravenous
HMR	Human Medicines Regulations 2012