

## Critical medicines where timeliness of administration is crucial



This is a list of medicines where timeliness of administration is crucial to minimise harm for patients. Every effort should be made to avoid omitted and delayed doses of critical medicines. Staff must follow trust procedures for obtaining supply and escalating to medical staff should an omission or delay occur.

- A **delay** is a dose administered more than two hours beyond the prescribed time
- An **omitted dose** is any dose that is not administered before the next dose is due
- **This list is a guide and is not intended to be exhaustive**

Class of medicines/or generic name of medicine	Examples	Potential consequence of omission or delay
STAT doses of any medicine (prescribed for immediate administration)	e.g. Loading doses, first dose antibiotics, resuscitation medicines, emergency intravenous fluids	Any medicine that is deemed urgent enough to be prescribed as a 'STAT' on the front of the Medicine Kardex
Anticholinesterases	e.g. pyridostigmine / neostigmine	Loss of symptom control (increased spasms) and patient distress
Anticoagulants	e.g. Enoxaparin, warfarin, rivaroxaban, apixaban, dabigatran, edoxaban	Risk of thrombus and serious embolic episode. For DVT/PE and ACS treatment
Anticonvulsants	e.g. Epilim®, Tegretol®, levetiracetam, lacosamide, perampanel, phenytoin, phenobarbital, zonisamide, primidone	Loss of seizure control
Antidotes	e.g. phytomenadione, naloxone, flumazenil, dried prothrombin complex, IV glucose, IV glucagon, idarucizumab (dabigatran reversal agent)	Failure to reverse toxicity resulting in patient harm.
Anti-infectives (injectable route/ oral first dose)	Antibiotics Antifungals Antivirals	Potential worsening of systemic infection and deterioration of condition. Management of sepsis, first dose anti-infectives must be given immediately.
Antiplatelets and thrombolytics (for acute indications)	e.g. Aspirin, clopidogrel, dipyridamole, prasugrel, ticagrelor, alteplase	Progression of thrombus and risk of serious embolic episode.
Antiretrovirals	e.g. Efavirenz, ritonavir, raltegravir, Symtuza®, Triumeq®, Genvoya®, Biktarvy®	Leads to viral replication and detectable viral load increasing the risk of resistance, treatment failure and increased transmission risk on contact where doses have been delayed or omitted
Bronchodilator (injectable or nebulised route)	e.g. Salbutamol, terbutaline	Management of respiratory emergencies.
Chemotherapy (injectable route)		Delay in treatment / disruption of chemotherapy regimen scheduling. Treatment failure
Clozapine		Missed doses or delayed doses may lead to the need for re titration resulting in worsening of the mental state and prolonged hospital stays.
Corticosteroids	e.g. Methylprednisolone, hydrocortisone, dexamethasone, prednisolone	Treatment failure in acute conditions or flare up when used in the long-term management of inflammatory disorders. Risk of acute adrenal insufficiency with abrupt withdrawal after a prolonged period of corticosteroid use (Addisonian crisis)
Desmopressin (treatment of cranial diabetes insipidus)		Risk of serious hypernatraemia
End of life medication	e.g. Midazolam, levomepromazine, glycopyrronium bromide	Poor symptom control
Immunoglobulin		
Immunosuppressants	e.g. tacrolimus, sirolimus, mycophenolate, azathioprine, ciclosporin	Risk of rejection due to sub therapeutic levels
Insulin	e.g. Novorapid®, Novomix 30®, Lantus®, Toujeo®, Tresiba®, Abasaglar®	Poor glycaemic control and potential for symptomatic hyperglycaemia; Management of diabetic ketoacidosis (DKA).
Medicines for active bleeding	e.g. Omeprazole infusion, terlipressin injection, tranexamic acid injection	Medical emergency, to treatment major peptic ulcer or peptic ulcer bleeding.
Opioids (all routes)	e.g. Morphine, diamorphine, fentanyl, oxycodone, buprenorphine patches	Loss of pain control and patient distress
Oxygen		Management of respiratory emergencies, Myocardial infarction
Parenteral electrolyte replacement	e.g. Calcium, potassium, phosphate infusion, sodium bicarbonate, magnesium	Deterioration in clinical condition or compromised breathing. Magnesium used in arrhythmias, pre-eclampsia and severe acute asthma
Parkinson's Disease medicines	e.g. Co-beneldopa, co-careldopa, rotigotine patches, Stalevo®	Loss of symptom control and major distress to the patient.