

SECTION 24: ELECTROCONVULSIVE THERAPY

A close-up photograph of various pills and capsules scattered on a blue surface. The pills are in various shapes, sizes, and colors, including white, yellow, orange, and dark brown. Some have markings like 'ES' or 'AV'. The background is a blue surface with some faint, illegible text.

Formulary and
Prescribing Guidelines

24.1 Introduction

Electroconvulsive therapy (ECT) is an effective treatment for patients with a range of psychiatric conditions and is endorsed in a number of national guidelines. To safely administer ECT however patients require treatment with a general anaesthetic which is a treatment that is different from other areas of psychiatry and therefore carries different risks. This guideline aims to set out the approved list of medicines that will be available within the ECT suites to enable ECT to be safely administered.

This guideline must be read in conjunction with the Trust's clinical guideline, CLPG26 Electroconvulsive therapy (ECT) procedural guidelines and the Trust's guidelines on cardiopulmonary resuscitation CLPG14

The medication recommended for use within ECT is in line with the requirements of the Electroconvulsive therapy accreditation service (ECTAS)

24.2 Medicines approved for use within Electroconvulsive Therapy Departments

See latest BNF for licensed indications.

Drug	Formulation	Comment
Emergency Medicines		
Anaphylactic shock pack		
Aspirin	Dispersible tablets, 300mg	
Flumazenil	Injection 500microgram/5ml	
Glucose	Juice 60ml Tablets 4g Oral gel, 40% 25g	
Glyceryl Trinitrate	Sublingual spray 400 micrograms	
Naloxone	Injection 400 micrograms	
Salbutamol	Inhaler 100 microgram Nebules 5mg/2.5ml	
Adrenaline	Injection 1 in 1,000, 1 in 10,000	
Midazolam	Buccal 10mg	
Glucagon	Injection 1mg	
Anaesthetics		
Propofol	Injection 200mg/20ml	
Thiopental	Injection 500mg	
Sevoflurane	Inhalation Vapour 250ml	
Muscle Relaxants		
Suxamethonium	Injection 100mg/2ml	
Rocuronium	Injection 050mg/5ml	
Medicines to treat unwanted autonomic, cardiovascular, respiratory or neurological effects.		
Atropine	Injection 600 microgram,/1ml, 1mg/5ml Pre-filled syringe	

Drug	Formulation	Comment
Dantrolene	Injection 20mg	
Glycopyrronium	Injection 600 micrograms/ 3ml	
Midazolam	Injection 10mg/2ml	
Miscellaneous		
Lubricating Jelly	Gel	
Multistix-8	Test strips	
Aquagel	Gel	
EMLA	Cream	
Ethyl Chloride	Fine Spray	
Sodium Citrate	Oral Solution 88.23 mg per 1 ml	
Infusions		
Glucose	Infusion 5%, 500ml infusion 20%, 50ml	
Sodium Bicarbonate	Infusion 8.4%, 100ml	
Sodium Chloride	Infusion 0.9% 500ml, 1000ml	
Sodium Lactate compound (Hartmann's)	Infusion 500ml	
Volplex Plasma substitute	Infusion 500ml	
Diluents		
Sodium Chloride	0.9 % Injection 10ml	
Water for Injections	Injection 20ml, 100ml	
Injections		
Adenosine	Injection 6mg/2ml	
Aminophylline	Injection 250mg/10ml	
Amiodarone	Injection 300mg/10ml pre-filled syringe	
Calcium Chloride	Injection 10%, 10ml pre-filled syringe	
Chlorphenamine	Injection 10mg/1ml	
Cyclizine	Injection 50mg/1ml	
Digoxin	Injection 500 micrograms/2ml	
Ephedrine	Injection 30mg/1ml, 30mg/1ml pre-filled syringe	
Esmolol	Injection 100mg/10ml	
Hydrocortisone	Injection 100mg	
Labetalol	Injection 100mg/20ml	
Lidocaine	Injection 1% (2ml)	
Magnesium Sulfate	Injection 50% 1g/2ml	
Metaraminol	Injection 10mg/1ml, 2.5mg/5ml pre-filled syringe	
Metoclopramide	Injection 10mg/2ml	
Metoprolol	Injection 5mg/5ml	
Neostigmine / Glycopyrronium	Injection 2,5mg / 500 microgram /ml	

Drug	Formulation	Comment
Ondansetron	Injection 4mg/2ml	
Suggamadex	Injection 200mg/2ml	
Doxapram	Injection 100mg/ 5ml	
Refrigerated products		
Lorazepam	Injection 4mg/1ml	
Rapid acting insulin	Solution for injection 100 units/ml (Trurapi)	
Tetracaine	Gel 4%	
Controlled Drugs		
Alfentanil	Injection 1mg/2ml	

24.3 MEDICATION USE AND ECT

The Trust's clinical guideline, CLPG26 Electroconvulsive therapy (ECT) procedural guidelines, provides information on the use of medicines during ECT.

Further information on the use of medication during ECT including potential interactions with ECT can also be found in the Maudsley and Prescribing Guidelines and the Psychotropic Drug Directory.

24.4 USE OF FLUMAZENIL FOR BENZODIAZEPINE REVERSAL

Flumazenil is a specific reversal agent for benzodiazepine-induced respiratory depression. It is held at all sites where injectable benzodiazepines are stocked. See section 8 for further information.

24.5 REFERENCES

- 1 Royal College of Psychiatrists, Electroconvulsive Therapy Accreditation Service (ECTAS) <https://www.rcpsych.ac.uk/improving-care/ccqi/quality-networks-accreditation/ectas>
- 2 Taylor D, Barnes T, Young A. The Maudsley Prescribing Guidelines in Psychiatry, 14th Edition, 2021
- 3 Bazire S, Greenhalgh N, Psychotropic Drug Directory, Pharmaceutical Press, 2024. Accessed online via www.medicinescomplete.com