Drug Therapy Protocols: Propofol

Policy code	DTP_PRO_0722
Date	July, 2022
Purpose	To ensure a consistent procedural approach to propofol administration.
Scope	Applies to all Queensland Ambulance Service (QAS) clinical staff.
Health care setting	Pre-hospital assessment and treatment.
Population	Applies to all ages unless specifically mentioned.
Source of funding	Internal – 100%
Author	Clinical Quality & Patient Safety Unit, QAS
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Propofol

July, 2022

Drug class[1,2]

General anaesthetic

Pharmacology

Uncertain, but thought to act via GABA receptors at a site independent from barbiturates and benzodiazepines. May also affect the sodium channels in the cerebral cortex.[1,2]

Metabolism

Hepatic metabolism, renal excretion.[1]

Indications[1,2]

- **Induction of anaesthesia** (in haemodynamically stable and euvolaemic patients)
- **Sedation** for the maintenance of an established SAD/ETT

Contraindications

- Allergy AND/OR Adverse Drug Reaction
- Egg, glycerol, soya oil hypersensitivity
- Patients less than 3 years of age

Precautions

- Severe respiratory compromise
- CNS depressant use (will potentiate effects)

Side effects[1,2]

- Hypotension
- Bradycardia
- Pain at injection site
- Flushed skin
- Cough
- Excitation at induction

Presentation

- Vial, 200 mg/20 mL *propofol*

Onset	Duration	Half-life
30–60 seconds	5 minutes	30–60 minutes

Propofol

Schedule

- S4 (Restricted drugs).

Routes of administration

Intravenous infusion (IV INF) — ECCP

Intravenous injection (IV) — ECCP

Special notes [1–3]

- Ambulance offers must only administer medications for the listed indications and dosing range. Any consideration for treatment outside the listed scope of practice requires mandatory approval via the *QAS Clinical Consultation and Advice Line*.
- All cannulae and IV lines must be flushed thoroughly with sodium chloride 0.9% following each medication administration.
- Use of propofol in patients with haemodynamic instability requires prior consultation with the QAS on-call medical officer.
- All parenteral medications must be prepared in an aseptic manner. The rubber stopper of all vials must be disinfected with an appropriate antimicrobial swab and allowed to dry prior to piercing.
- Propofol infusions must be administered through a dedicated line.
- Patients on propofol infusions must have their NIBP measured regularly (every 5 mins at a minimum).
- The optimal sedation target is a patient who is not responsive to simple stimuli (e.g. gentle patient movement) however will respond to painful stimuli.
- NIBP cuffs must not be placed on limbs with infusions to ensure flow is not obstructed.

Adult dosages [1–3]

Induction of anaesthesia
(in haemodynamically stable and euvolaemic patients)

ECCP — **IV**

QAS Clinical Consultation and Advice Line consultation and approval required in all situations.

1–2.5 mg/kg
Single dose only.
Total maximum dose 150 mg.

Sedation
(for the maintenance of an established **SAD**/ETT)

ECCP — **IV**

10–20 mg
Consider administration with narcotics.
Repeated PRN.
No maximum dose.

ECCP — **IV INF**

Commence infusion at **50 mg/hour (5 mL/hr)** – titrate according to indication and patient's physiological response to treatment.

Infusion preparation: *Withdraw 200 mg propofol (20 mL) in a 20 mL syringe to achieve a final concentration of 200 mg propofol in 20 mL. Ensure syringe is appropriately labelled.*

Paediatric dosages [1–3]

Induction of anaesthesia
(in haemodynamically stable and euvolaemic patients)

ECCP — **IV**

QAS Clinical Consultation and Advice Line consultation and approval required in all situations.

1 – 2.5 mg/kg
Single dose only.