

Who can administer

Administration restricted- see [appendix 1](#)

Important information

Doses in the literature are usually given as Isoprenaline **hydrochloride**.

Doses are not equivalent for isoprenaline **sulphate**. Take care to use the correct version, or doses would have to be adjusted.

Two very different doses and infusion concentrations are listed here for two very different indications. Take time to read this carefully.

Available preparations

Isoprenaline **hydrochloride** 1mg in 5ml (0.2mg in 1ml, 200 micrograms in 1ml) Macure

Isoprenaline **hydrochloride** (Isoprenalina cloridrato monico) 0.2mg in 1ml (200 micrograms in 1ml) (unlicensed)

Reconstitution

Already in solution

Draw up using a 5 micron filter needle

Infusion fluids

Sodium chloride 0.9% or Glucose 5%

Methods of intravenous administration

Intravenous infusion (administer using an electronically controlled infusion device)

- Add **2mg** (= 10ml of 0.2mg/1ml injection solution) isoprenaline **to 490ml** infusion fluid
- This produces a solution containing **4 microgram** per ml

Dose in adults

Bradycardia due to AV block

Continuous IV infusion

- **Starting dose:** 0.01mcg/kg/minute
- Increase in 0.01mcg/kg/minute increments, to a maximum dose of 0.15mcg/kg/minute, adjusted to achieve a heart rate of 50 to 60 beats per minute
- See table below

Dosage table for Bradycardia due to AV block										
Dose(mcg/kg/min)	Weight 55kg	Weight 60kg	Weight 65kg	Weight 70kg	Weight 75kg	Weight 80kg	Weight 85kg	Weight 90kg	Weight 95kg	Weight 100kg
Â	Rate in ml/hour of a 4microgram/ml solution prepared as above									
0.01	8.3	9	9.8	10.5	11.3	12	12.8	13.5	14.3	15
0.02	16.5	18	19.5	21	22.5	24	25.5	27	28.5	30
0.03	24.8	27	29.3	31.5	33.8	36	38.3	40.5	42.8	45
0.04	33	36	39	42	45	48	51	54	57	60
0.05	41.3	45	48.8	52.5	56.3	60	63.8	67.5	71.3	75
0.1	82.5	90	97.5	105	112.5	120	127.5	135	142.5	150
0.15	123.8	135	146.3	157.5	168.8	180	191.3	202.5	213.8	225

Titrate to patient response.

Monitoring

- Monitor ECG continuously

Further information

Search synonym: Isoproterenol

Storage

- Macure brand: Store in refrigerator 2-8⁰C
- Unlicensed brand: Store <15⁰C. (ref 1)
- Do not use if solution is coloured (pink to pinky-brown) or a precipitate is present.

References

SPC (Macure pharma) June 2022

1: SPC (translated) document downloaded 7th Feb 2019

Therapeutic classification

Adrenergic and dopaminergic agent. Inotrope sympathomimetic