

## 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									
<b>0.01</b>	8.3	9	9.8	10.5	11.3	12	12.8	13.5	14.3	15
<b>0.02</b>	16.5	18	19.5	21	22.5	24	25.5	27	28.5	30
<b>0.03</b>	24.8	27	29.3	31.5	33.8	36	38.3	40.5	42.8	45
<b>0.04</b>	33	36	39	42	45	48	51	54	57	60
<b>0.05</b>	41.3	45	48.8	52.5	56.3	60	63.8	67.5	71.3	75
<b>0.1</b>	82.5	90	97.5	105	112.5	120	127.5	135	142.5	150
<b>0.15</b>	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 2-8<sup>0</sup>C
- Unlicensed brand: Store <15<sup>0</sup>C. (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