

# OXYTOCIN

SYNONYM	Synthetic oxytocin
BRAND NAME	SYNTOCINON, VIATOCINON, OXYTOCIN, GH
DRUG CLASS	Oxytocic
AVAILABILITY	<p>Ampoule contains 5 international units/mL or 10 international units/mL of oxytocin. GH ampoule also contains sodium chloride, sodium acetate and glacial acetic acid.<sup>1</sup> Syntocinon also contains sodium acetate, glacial acetic acid, chlorobutanol and ethanol.<sup>1</sup></p> <p>APX ampoule (discontinued) also contains glacial acetic acid and chlorobutanol.<sup>1</sup> Viatocinon (discontinued) also contains sodium acetate, glacial acetic acid and sodium hydroxide.<sup>1</sup></p> <p>Oxytocin 10 international units/mL concentrate for solution for infusion (Wockhardt) is available under S19A during shortage of Australian registered products. Ampoule contains 10 international units/mL of oxytocin. Also contains sodium acetate, glacial acetic acid and sodium hydroxide.<sup>2</sup></p> <p>The solution is clear and colourless.<sup>1</sup></p>
pH	3–5 <sup>3,4</sup>
PREPARATION	Not required
STABILITY	<p>Store at 2 to 8 °C. Do not freeze. Protect from light.<sup>1,2</sup></p> <p>GH ampoules are stable for 3 months below 25 °C. Do not return to the fridge.<sup>1</sup></p> <p>Wockhardt ampoules are stable for 3 months below 30 °C. Do not return to the fridge.<sup>2</sup></p>
ADMINISTRATION	
<b>IM injection</b>	<p>Oxytocin GH, Syntocinon: suitable for third stage of labour and postpartum period.<sup>1</sup> Not recommended for induction or enhancement of labour.<sup>1</sup></p> <p>The Wockhardt ampoule is labelled for IV infusion, however the concentration, excipients and pH are similar to Oxytocin GH and Viatocinon, which are approved in Australia for IM use in the third stage of labour and postpartum period. Check your local guidelines or ask your pharmacy service for advice.</p>
<b>SUBCUT injection</b>	Not recommended
<b>IV injection</b>	<p>Suitable for third stage of labour and postpartum period. Inject slowly over 3 to 5 minutes. Rapid injection can cause transient hypotension and tachycardia.<sup>1</sup></p> <p>Not recommended for induction or enhancement of labour.<sup>1</sup></p>
<b>IV infusion</b>	<p>Suitable for induction and enhancement of labour.<sup>1,2</sup> Dilute to a suitable volume with a compatible fluid.<sup>1,2</sup> See the table below for examples. Use an infusion pump. Start the infusion at 1–4 milliunits/minute. Increase at intervals of at least 20 minutes as required to a maximum of 20 milliunits/minute.<sup>1,2</sup></p> <p>Standard volume infusion practical examples:</p>

Oxytocin	Compatible fluid	Final concentration	Rate to deliver 1 milliunit/minute
10 international units	1000 mL	10 milliunits/mL	6 mL/hour
10 international units	500 mL	20 milliunits/mL	3 mL/hour
30 international units	500 mL	60 milliunits/mL	1 mL/hour
40 international units	500 mL	80 milliunits/mL	0.75 mL/hour

For patients with fluid restrictions, a low volume infusion may be required.<sup>1</sup> Consult your local guidelines.

Low volume infusion practical examples:

Oxytocin	Compatible fluid	Final concentration	Rate to deliver 1 milliunit/minute
10 international units	100 mL	100 milliunits/mL	0.6 mL/hour
10 international units	50 mL	200 milliunits/mL	0.3 mL/hour

#### COMPATIBILITY

**Fluids** Sodium chloride 0.9%<sup>1-3</sup>, glucose in sodium chloride solutions<sup>1,4</sup>, Hartmann's<sup>4</sup>, Ringer's<sup>2,4</sup>, Plasma-Lyte 148 via Y-site<sup>5</sup>  
Compatible with glucose 5% but not recommended as it increases the risk of water intoxication.<sup>1,2</sup>

**Y-site** Heparin sodium<sup>4</sup>, meropenem<sup>4</sup>  
More information is available.<sup>6</sup> Ask your pharmacy service for advice.

**INCOMPATIBILITY** Solutions that contain bisulfites and metabisulfites as preservatives.<sup>1,2</sup>

**SPECIAL NOTES** Monitor fetal heart rate and maternal contractions during infusion.<sup>1,2</sup>  
Latex allergy may be an important predisposing risk factor for anaphylaxis following oxytocin administration.<sup>1,2</sup>

#### REFERENCES

1. Product information. Available from [www.tga.gov.au](http://www.tga.gov.au). Accessed 24/02/2025.
2. Oxytocin 10 IU/mL Concentrate for Solution for Infusion. Summary of product characteristics. Wrexham, UK: Wockhardt UK Ltd. Approved 20/05/2019. Available from [www.mhra.gov.uk](http://www.mhra.gov.uk). Accessed 24/02/2025.
3. Medical information. pH of oxytocin injection [phone call]. Cremorne, Vic: Arrotex Pharmaceuticals; 04/03/2025.
4. ASHP Injectable drug information 2021. Bethesda, MD: American Society of Health-System Pharmacists; 2021.
5. Medical Information. Plasma-Lyte 148 compatibility summary. Toongabbie, NSW: Baxter; March 2022.
6. Oxytocin. In: IV Index [internet]. Trissel's 2 clinical pharmaceuticals database (parenteral compatibility). Ann Arbor, MI: Merative. Accessed 16/03/2023.

#### VERSION

9.2