



Essential Y–Site and solution compatibility guidance

Learn how essential Y–Site and solution compatibility guidance through Drug Compatibility Checker supports confident decision-making at the point of care.

Expert knowledge on the compatibility and stability of injectable drugs



Available through





Essential Y-Site and solution compatibility guidance

Using essential knowledge at the point of care



Compatibility of a drug in solution – Patient A

Georgia is a newly registered nurse working in the general medicine ward at the local hospital. During one of her shifts, she sees a patient is prescribed 1.2g of amoxicillin sodium–clavulanate potassium via intermittent intravenous infusion administered with 100mL of any compatible fluid.

Georgia is aware that sodium chloride 0.9% is commonly used but wants to check if this fluid is compatible with amoxicillin sodium–clavulanate potassium and searches Drug Compatibility Checker through MedicinesComplete.

Drug Compatibility Checker
Publication last updated on 14-Feb-2023 >

Essential compatibility knowledge to support the administration of injectable drugs combining published data and clinical practice reports.

[About Drug Compatibility Checker](#)

[^ Less information](#)

Which compatibility type are you using?

Syringe Y-Site Additive **Solution**

> Compatibility types explained

Which drug and solution are you using?
Enter a drug and a solution (solution optional)

amoxicillin sodium with potassium clavulanate

Sodium chloride 0.9%

Search

There are 5 search results for amoxicillin sodium–clavulanate potassium and sodium chloride 0.9%.



Which compatibility type are you using?

Syringe Y-Site Additive **Solution**

> Compatibility types explained

You searched for:

amoxicillin sodium with potassium clavulanate + Sodium chloride 0.9%

5 results for Solution compatibility

5 published results

[Search again](#)

Published results:

Data from: ASHP Injectable Drug Information

4 Compatible 0 Variable 1 Incompatible

[See detailed results](#)

Compatibility	Drug	Solution	Drug concentration (L or %)
Compatible	Amoxicillin Sodium-Clavulanate Potassium	Sodium chloride 0.9%	10 g
Compatible	Amoxicillin Sodium-Clavulanate Potassium	Sodium chloride 0.9%	10 g
Compatible	Amoxicillin Sodium-Clavulanate Potassium	Sodium chloride 0.9%	10 g
Compatible	Amoxicillin Sodium-Clavulanate Potassium	Sodium chloride 0.9%	20 g
Incompatible	Amoxicillin Sodium-Clavulanate Potassium	Sodium chloride 0.9%	8.33 g

Georgia sees there are 4 compatible results and 1 incompatible result for amoxicillin sodium-clavulanate potassium and sodium chloride 0.9%. Georgia clicks detailed view to find more information and discusses her findings with her team. After reviewing, the team decides the combination is safe to be administered but recommends the GlaxoSmithKline brand is used.

Compatibility	Drug	Drug concentration (L or %)	Drug manufacturer	Solution	Solution manufacturer
Compatible	Amoxicillin Sodium-Clavulanate Potassium	10 g	GlaxoSmithKline	Sodium chloride 0.9%	
General remarks Complete administration within 3 hr if stored at 25°C; also stable for 8 hr if added to pre-refrigerated bags and stored at 5°C c Amoxicillin component. Amoxicillin in a 5:1 fixed-ratio concentration with clavulanic acid.		References GlaxoSmithKline UK. Augmentin® Intravenous summary of product characteristics (SmPC). Middlesex, United Kingdom; 2020 Mar.			
Incompatible	Amoxicillin Sodium-Clavulanate Potassium	8.33 g	Beecham	Sodium chloride 0.9%	Boots ^a
General remarks Physically compatible with 10% loss in 4.4 hr at 25°C and 12.5 hr at 5°C a Tested in polyethylene containers.		References Ashwin J, Lynn B. Stability and administration of intravenous Augmentin. <i>Pharm J</i> 1987; 238: 116-8			

Georgia now wants to check how fast amoxicillin sodium-clavulanate potassium infusion should be given. Georgia clicks amoxicillin sodium-clavulanate potassium hyperlink in the results page which directs her to the Injectable Drug Information monograph.

Compatibility	Drug	Drug concentration (L or %)	Drug manufacturer	Solution	Solution manufacturer
Compatible	Amoxicillin Sodium-Clavulanate Potassium	10 g	GlaxoSmithKline	Sodium chloride 0.9%	
General remarks Complete administration within 3 hr if stored at 25°C; also stable for 8 hr if added to pre-refrigerated bags and stored at 5°C		References GlaxoSmithKline UK. Augmentin® Intravenous summary of product characteristics (SmPC). Middlesex, United Kingdom; 2020 Mar.			



Medicines Complete

Amoxicillin Sodium-Clavulanate Po

ASHP Injectable Drug Information

Publication last updated on 14-Feb-2023 >

Information and background on various injectable drugs.

Subsections

Related Content

- Drug Nomenclature
- Products
- Administration
- Stability
- Compatibility Information
- Additional Compatibility Information
- References

Amoxicillin Sodium-Clavulanate Potassium

AHFS Class: 8:12.16.08 Aminopenicillins

Drug Nomenclature

Products

The fixed combination of amoxicillin sodium-clavulanate potassium is available as a powder for injection in single-use vials or bottles containing 600 mg (amoxicillin 500 mg as the sodium salt plus clavulanate potassium equivalent to clavulanic acid 100 mg), 1.2 g (amoxicillin 1 g as the sodium salt plus clavulanate potassium equivalent to clavulanic acid 200 mg), and 2.2 g (amoxicillin 2 g as the sodium salt plus clavulanate potassium equivalent to clavulanic acid 200 mg).^{3558 3559 3560} The 600-mg and 1.2-g vials should be reconstituted with 10 and 20 mL, respectively, of sterile water for injection, resulting in an amoxicillin to clavulanic acid ratio of 5:1.^{3358 3359 3360} The 2.2-g vials should be reconstituted with 20 mL of sterile water for injection, resulting in an amoxicillin to clavulanic acid ratio of 10:1.³⁵⁵⁸

For administration by intravenous infusion, the reconstituted solution containing 500 mg of amoxicillin plus 100 mg of clavulanic acid should be diluted in 50 mL of, or to 50 mL with, a compatible diluent and the reconstituted solution containing 1 or 2 g of amoxicillin plus 200 mg of clavulanic acid should be diluted in 100 mL of, or to 100 mL with, a compatible diluent.^{3558 3559 3560} (See Solution Compatibility.)

Georgia checks the administration section of the amoxicillin sodium-clavulanate potassium monograph and finds this infusion can be administered over 30-40 minutes following dilution.

Georgia checks all her findings with a colleague and safely administers 1.2g of amoxicillin sodium-clavulanate potassium in 100mL of sodium chloride 0.9% via intermittent infusion over 30 minutes.



Compatibility of drugs via Y-site administration – Patient B

Alex is a ward pharmacist at the local hospital. Alex is on a ward round with his team as they are reviewing a patient who is on a continuous intravenous morphine infusion and feeling very nauseous. The doctor prescribes the patient IV ondansetron as needed and consults Alex if ondansetron can be given via Y-site as they have had previous difficulty with intravenous access for this patient.

Alex searches Drug Compatibility Checker through MedicinesComplete.

The screenshot shows a web interface titled "Which compatibility type are you using?". There are four buttons: "Syringe", "Y-Site" (selected), "Additive", and "Solution". Below these is a link "Compatibility types explained". The next section asks "Which drugs are you using?" with the instruction "Enter 2 drugs". Two search boxes contain "morphine" and "ondansetron". A "Search" button is at the bottom.

There is one compatible result for morphine and ondansetron via Y-site administration.

The screenshot shows the search results page. It repeats the "Which compatibility type are you using?" section with "Y-Site" selected. Below, it says "You searched for: morphine + ondansetron" and "1 result for Y-Site compatibility". A link for "1 published result" is shown, along with a "Search again" button.

Published results:

Data from: [ASHP Injectable Drug Information](#)

1 Compatible 0 Variable 0 Incompatible [See detailed results](#)

Compatibility	Drug	Drug concentration
Compatible	Morphine Sulfate	1 mg/ml
	Ondansetron Hydrochloride	1 mg/ml



Alex wants to know more about this compatibility and clicks detailed view. Alex finds this combination was visually compatible via Y-site at 22°C for 4 hours.

The screenshot shows the Medicines Complete Drug Compatibility Checker interface. At the top, the search results for Amoxicillin Sodium-Clavulanate Po are displayed. Below this, the 'Published results' section shows data from ASHP Injectable Drug Information. A summary indicates 1 Compatible, 0 Variable, and 0 Incompatible results. A table lists the following compatibility data:

Compatibility	Drug	Drug concentration	Drug manufacturer
Compatible	Morphine Sulfate	1 mg/mL ^a	Winthrop
	Ondansetron Hydrochloride	1 mg/mL ^b	Glaxo

Below the table, the 'General remarks' section states: 'Visually compatible for 4 hr at 22°C'. The 'References' section lists: 'Trissel LA, Tramonte SM. Visual compatibility of ondansetron hydrochloride with other selected drugs during simulated Y-site injection. *Am J Hosp Pharm* 1991; 48: 988-92'. Footnotes indicate: ^a Tested in dextrose 5%, ^b Tested in sodium chloride 0.9%.

Alex wants to review the strength of the evidence and easily finds the reference displayed. Alex is then able to search the reference paper online and critically appraise the source.

This screenshot is identical to the previous one, but with a pink box highlighting the 'References' section in the table. The reference text is: 'Trissel LA, Tramonte SM. Visual compatibility of ondansetron hydrochloride with other selected drugs during simulated Y-site injection. *Am J Hosp Pharm* 1991; 48: 988-92'.

Alex provides the medical team with this information. The team review the risks and benefits and decide to give morphine and ondansetron via Y-site with close observation.



ASHP Injectable Drug Information

Published by the American Society of Health-System Pharmacists (ASHP) with evidence-based practical guidance on the stability, compatibilities, and incompatibilities of injectable drugs commercially available worldwide. ASHP Injectable Drug Information supports health professionals in primary and secondary care settings when prescribing, preparing, and administering injectable drugs.



Drug Compatibility Checker

Drug Compatibility Checker through MedicinesComplete supports confident decision making at the point of care. This unique tool combines published data from ASHP Injectable Drug Information with clinical practice reports from Palliative Care Formulary's Syringe Driver Database.

Access this essential knowledge today

MedicinesComplete makes it easy for health professionals to access essential medicines information at the point of care. Providing trusted evidence-based knowledge for confident decision-making and effective patient care.



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