1 What Augmentin is and what it is used for

Augmentin is an antibiotic and works by killing bacteria that cause infections. It contains two different medicines called amoxicillin and clavulanic acid. Amoxicillin belongs to a group of medicines called "penicillins" that can sometimes be stopped from working (made inactive). The other active component (clavulanic acid) stops this from happening.

Augmentin is used in adults and children to treat the following infections:

- severe ear, nose and throat infections
- respiratory tract infections
- urinary tract infections
- skin and soft tissue infections including dental infections
- bone and joint infections
- intra-abdominal infections
- genital organ infections in women.

Augmentin is used in adults and children to prevent infections associated with major surgical procedures.

2 What you need to know before you have Augmentin

You should not have Augmentin:

- if you are allergic to amoxicillin, clavulanic acid, penicillin or any of the other ingredients of this medicine (listed in section 6).
- if you have ever had a severe allergic reaction to any other antibiotic. This can include a skin rash or swelling of the face or throat.
- if you have ever had liver problems or jaundice (yellowing of the skin) when taking an antibiotic.

Biopharma site used for supply of Augmentin 1000 mg/200 mg powder for solution for injection or infusion only
Do not take Augmentin if any of the above apply to you. If you are not sure, talk to your doctor, pharmacist or nurse before having Augmentin.

Warnings and Precautions
Talk to your doctor or pharmacist or nurse before having Augmentin if you:
• have glandular fever
• are being treated for liver or kidney problems
• are not passing water regularly.
If you are not sure if any of the above apply to you, talk to your doctor, pharmacist or nurse before taking Augmentin.

In some cases, your doctor may investigate the type of bacteria that is causing your infection. Depending on the results, you may be given a different strength of Augmentin or a different medicine.

Conditions you need to look out for
Augmentin can make some existing conditions worse, or cause serious side effects. These include allergic reactions, convulsions (fits) and inflammation of the large intestine. You must look out for certain symptoms while you are taking Augmentin, to reduce the risk of any problems. See ‘Conditions you need to look out for’ in section 4.

Blood and urine tests
If you are having blood tests (such as red blood cell status tests or liver function tests) or urine tests (for glucose), let the doctor or nurse know that you are taking Augmentin. This is because Augmentin can affect the results of these types of tests.

Other medicines and Augmentin
Tell your doctor, pharmacist or nurse if you are using, have recently used or might use any other medicines.

• If you are taking allopurinol (used for gout) with Augmentin, it may be more likely that you will have an allergic skin reaction.

• If you are taking probenecid (used for gout), your doctor may decide to adjust your dose of Augmentin.

• If medicines to help stop blood clots (such as warfarin) are taken with Augmentin then extra blood tests may be needed.

• Augmentin can affect how methotrexate (a medicine used to treat cancer or rheumatic diseases) works.

• Augmentin can affect how mycophenolate mofetil (a medicine used to prevent the rejection of transplanted organs) works.

Pregnancy, breast-feeding and fertility
If you are pregnant or breast-feeding, think you may be pregnant or are planning to have a baby, ask your doctor, pharmacist or nurse for advice before taking this medicine.

Driving and using machines
Biopharma site used for supply of Augmentin 1000 mg/200 mg powder for solution for injection or infusion only
Augmentin can have side effects and the symptoms may make you unfit to drive.
Do not drive or operate machinery unless you are feeling well.

**Augmentin contains sodium and potassium:**
- Augmentin 500 mg/100 mg contains approximately 31.4 mg (1.4 mmol) of sodium. This should be considered if you are on a controlled sodium diet.
- Augmentin 500 mg/100 mg contains approximately 19.6 mg (0.5 mmol) of potassium. This should be considered by patients with kidney problems or patients on a controlled potassium diet.
- Augmentin 1000 mg/200 mg contains approximately 62.9 mg (2.7 mmol) of sodium. This should be considered if you are on a controlled sodium diet.
- Augmentin 1000 mg/200 mg contains approximately 39.3 mg (1.0 mmol) of potassium. This should be considered by patients with kidney problems or patients on a controlled potassium diet.

### 3 How Augmentin is given

You will never give yourself this medicine. A qualified person, like a doctor or a nurse, will give you this medicine.

The recommended doses are:

**Adults, and children weighing 40 kg and over**

<table>
<thead>
<tr>
<th>Standard dose</th>
<th>1000 mg/200 mg every 8 hours.</th>
</tr>
</thead>
<tbody>
<tr>
<td>To stop infections during and after surgery</td>
<td>1000 mg/200 mg before the surgery when you are given your anaesthetic. The dose can differ depending on the type of operation you are having. Your doctor may repeat the dose if your surgery takes longer than 1 hour.</td>
</tr>
</tbody>
</table>

**Children weighing less than 40 kg**

All doses are worked out depending on the child’s bodyweight in kilograms.

<table>
<thead>
<tr>
<th>Children aged 3 months and over:</th>
<th>25 mg/5 mg for each kilogram of bodyweight every 8 hours.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Children aged less than 3 months or weighing less than 4 kg</td>
<td>25 mg/5 mg for each kilogram of bodyweight every 12 hours.</td>
</tr>
</tbody>
</table>

**Patients with kidney and liver problems**
- If you have kidney problems you may be given a different dose. A different strength or a different medicine may be chosen by your doctor.
- If you have liver problems your doctor will keep a close check on you and you may have more regular liver function tests.
How Augmentin will be given to you
- Augmentin will be given as an injection into a vein or by intravenous infusion.
- Make sure you drink plenty of fluids while having Augmentin.
- You will not normally be given Augmentin for longer than 2 weeks without the doctor reviewing your treatment.

If more Augmentin is given to you than recommended
It is unlikely you will be given too much, but if you think you have been given too much Augmentin, tell your doctor, pharmacist or nurse immediately. Signs may be an upset stomach (feeling sick, being sick or diarrhoea) or convulsions.

If you have any further questions about how this medicine is given, ask your doctor, pharmacist or nurse.

4 Possible side effects
Like all medicines, this medicine can cause side effects, although not everybody gets them. The side effects below may happen with this medicine.

Conditions you need to look out for

Allergic reactions:
- skin rash
- inflammation of blood vessels (vasculitis) which may be visible as red or purple raised spots on the skin, but can affect other parts of the body
- fever, joint pain, swollen glands in the neck, armpit or groin
- swelling, sometimes of the face or throat (angioedema), causing difficulty in breathing
- collapse.
  ➔ Contact a doctor immediately if you get any of these symptoms. Stop taking Augmentin.

Inflammation of large intestine
Inflammation of the large intestine, causing watery diarrhoea usually with blood and mucus, stomach pain and/or fever.
  ➔ Contact your doctor as soon as possible for advice if you get these symptoms.

Common side effects
These may affect up to 1 in 10 people
- thrush (candida - a yeast infection of the vagina, mouth or skin folds)
- diarrhoea

Uncommon side effects
These may affect up to 1 in 100 people
- skin rash, itching
- raised itchy rash (hives)
- feeling sick (nausea), especially when taking high doses
- vomiting
- indigestion

Biopharma site used for supply of Augmentin 1000 mg/200 mg powder for solution for injection or infusion only
• dizziness
• headache.

Uncommon side effects that may show up in your blood tests:
• increase in some substances (enzymes) produced by the liver.

**Rare side effects**
These may affect up to 1 in 1,000 people
• skin rash, which may blister, and looks like small targets (central dark spots surrounded by a paler area, with a dark ring around the edge - *erythema multiforme*)
  ➔ if you notice any of these symptoms contact a doctor urgently.
• swelling and redness along a vein which is extremely tender when touched

Rare side effects that may show up in your blood tests:
• low number of cells involved in blood clotting
• low number of white blood cells.

**Frequency not known**
Frequency cannot be estimated from the available data.

• Allergic reactions (see above)
• Inflammation of the large intestine (see above)
• Inflammation of the protective membrane surrounding the brain (*aseptic meningitis*)
• Serious skin reactions:
  - a widespread rash with blisters and peeling skin, particularly around the mouth, nose, eyes and genitals (*Stevens-Johnson syndrome*), and a more severe form, causing extensive peeling of the skin (more than 30% of the body surface - *toxic epidermal necrolysis*)
  - widespread red skin rash with small pus-containing blisters (*bullous exfoliative dermatitis*)
  - a red, scaly rash with bumps under the skin and blisters (*exanthemous pustulosis*).
  ➔ Contact a doctor immediately if you get any of these symptoms.

• inflammation of the liver (*hepatitis*)
• jaundice, caused by increases in the blood of bilirubin (a substance produced in the liver) which may make your skin and whites of the eyes appear yellow
• inflammation of tubes in the kidney
• blood takes longer to clot
• convulsions (in people taking high doses of Augmentin or who have kidney problems).

Side effects that may show up in your blood or urine tests:
• severe reduction in the number of white blood cells
• low number of red blood cells (*haemolytic anaemia*)
• crystals in urine.

**Reporting of side effects**

*Biopharma site used for supply of Augmentin 1000 mg/200 mg powder for solution for injection or infusion only*
If you get any side effects, talk to your doctor or pharmacist. This includes any possible side effects not listed in this leaflet. You can also report side effects directly via the Yellow Card Scheme at: www.mhra.gov.uk/yellowcard.

By reporting side effects you can help provide more information on the safety of this medicine.

5 How to store Augmentin

Augmentin Intravenous is for use in hospital only and the expiry date and storage instructions stated on the label are for the doctor, nurse or pharmacist’s information. The doctor, pharmacist or nurse will make up your medicine. It should be used within 20 minutes of reconstitution.

Keep this medicine out of the sight and reach of children.

Do not use this medicine after the expiry date shown on the carton. The expiry date refers to the last day of that month.

Do not store above 25°C.

Do not throw away any medicines via wastewater or household waste. Ask your pharmacist how to throw away medicines you no longer use. These measures will help protect the environment.

6 Contents of the pack and other information

What Augmentin contains:
500 mg/100 mg powder for injection or infusion
- The active substances are amoxicillin and clavulanic acid. Each vial or bottle contains sodium amoxicillin equivalent to 500 mg amoxicillin and potassium clavulanate equivalent to 100 mg of clavulanic acid.

1000 mg/200 mg powder for injection or infusion
- The active substances are amoxicillin and clavulanic acid. Each vial or bottle contains sodium amoxicillin equivalent to 1000 mg amoxicillin and potassium clavulanate equivalent to 200 mg of clavulanic acid.

There are no other ingredients. However, please see section 2 for further important information about sodium and potassium in Augmentin.

The doctor, nurse or pharmacist will make up the injection before use using an appropriate fluid (such as Water for Injections or an injection/infusion fluid).

What Augmentin looks like and contents of the pack

Augmentin IV 500 mg/100 mg powder for solution for injection or infusion is supplied as clear glass vials of sterile powder for making up as an injection or infusion. The vials are supplied in packs of 1, 5 or 10.

Augmentin IV 1000 mg/200 mg powder for solution for injection is supplied as clear glass vials or bottles of sterile powder for making up as an injection or infusion. The vials are supplied in packs of 1, 5, 10, 25 or 100. The bottles are supplied in packs of 5.
Not all pack sizes may be marketed.

**Marketing Authorisation Holder and Manufacturer**

Marketing Authorisation Holder:
Beecham Group Ltd, Stockley Park West, Uxbridge, Middlesex UB11 1BT

Manufacturer:
SmithKline Beecham, Worthing, West Sussex BN14 8QH

or

Biopharma S.r.l., Via delle Gerbere 22/30, 00134 Santa Palomba, Roma - Italy

**Other formats**
To listen or to request a copy of this leaflet in Braille, large print or audio please call, free of charge:

0800 198 5000 (UK Only)

Please be ready to give the following information:

**Product name** Augmentin Intravenous
Reference number 00038/0320

This is a service provided by the Royal National Institute of Blind People.

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Information for the Healthcare Professional

AUGMENTIN® Intravenous

co-amoxiclav (amoxicillin and clavulanic acid)

Please refer to the Summary of Product Characteristics for further information

Administration

Augmentin may be administered either by slow intravenous injection over a period of 3 to 4 min directly into a vein or via a drip tube or by infusion over 30 to 40 min. Augmentin is not suitable for intramuscular administration.

Reconstitution

For single use only. Discard any unused solution.
The reconstitution/dilution is to be made under aseptic conditions. The solution is to be inspected visually for particulate matter and discolouration prior to administration. The solution should only be used if the solution is clear and free from particles.
Any unused medicinal product or waste material should be disposed of in accordance with local requirements.

Preparation of solutions for intravenous injection

500 mg/100 mg powder for solution for injection or infusion
Water for Injections Ph.Eur. is the normal solvent. Augmentin 500 mg/100 mg should be dissolved in 10 ml of solvent. This yields approximately 10.5 ml of solution for single-dose use. A transient pink colouration may or may not develop during reconstitution.
Reconstituted solutions are normally colourless to yellow in colour.
Augmentin should be administered within 20 min of reconstitution.

1000 mg/200 mg powder for solution for injection or infusion
Water for Injections Ph.Eur. is the normal solvent. Augmentin 1000 mg/200 mg should be dissolved in 20 ml of solvent. This yields approximately 20.9 ml of solution for single-dose use. A transient pink colouration may or may not develop during reconstitution.
Reconstituted solutions are normally colourless to yellow in colour.
Augmentin should be administered within 20 min of reconstitution.

Preparation of solutions for intravenous infusion

Augmentin vials are not suitable for multi-dose use.

500 mg/100 mg powder for solution for injection or infusion
Augmentin should be reconstituted as described above for injection. Without delay the reconstituted solution should be added to 50 ml of infusion fluid using a minibag or in-line burette.

Biopharma site used for supply of Augmentin 1000 mg/200 mg powder for solution for injection or infusion only
1000 mg/200 mg powder for solution for injection or infusion
Augmentin should be reconstituted as described above for injection. Without delay the reconstituted solution should be added to 100 ml of infusion fluid using a minibag or in-line burette.

**Stability of prepared solutions**

Reconstituted vials (for intravenous injection or before dilution for infusion)

500 mg/100 mg powder for solution for injection or infusion
The reconstituted solution (1 vial with 10 ml of Water for Injections Ph.Eur.) should be used or diluted immediately, within 20 minutes.

1000 mg/200 mg powder for solution for injection or infusion
The reconstituted solution (1 vial with 20 ml of Water for Injections Ph.Eur.) should be used or diluted immediately, within 20 minutes.

Diluted for intravenous infusion

500 mg/100 mg powder for solution for injection or infusion
Chemical and physical in-use stability has been demonstrated for 2-3 hours at 25°C, or 8 hours at 5°C. From a microbiological point of view, the reconstituted and diluted solution (1 reconstituted vial in a minimum volume of 50 ml of infusion fluid) should be used immediately.

1000 mg/200 mg powder for solution for injection or infusion
Chemical and physical in-use stability has been demonstrated for 2-3 hours at 25°C, or 8 hours at 5°C. From a microbiological point of view, the reconstituted and diluted solution (1 reconstituted vial in a minimum volume of 100 ml of infusion fluid) should be used immediately.

Intravenous infusions of amoxicillin/clavulanic acid may be given in a range of different intravenous fluids. Satisfactory antibiotic concentrations are retained at 5 °C and at room temperature (25°C) in the recommended volumes of the following infusion fluids. If reconstituted and maintained at room temperature (25°C), infusions should be completed within the times stated in the table below.

<table>
<thead>
<tr>
<th>Intravenous infusion</th>
<th>Stability period at 25°C</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water for Injections Ph.Eur.</td>
<td>3 hours</td>
</tr>
<tr>
<td>0.9% w/v Sodium Chloride intravenous infusion (9 mg/ml)</td>
<td>3 hours</td>
</tr>
<tr>
<td>Compound Sodium Chloride Injection 1959 (Ringer's)</td>
<td>2 hours</td>
</tr>
<tr>
<td>Compound Sodium Lactate Intravenous Infusion (Ringer-Lactate:Hartmann's)</td>
<td>2 hours</td>
</tr>
<tr>
<td>0.3% w/v Potassium Chloride and 0.9% w/v Sodium Chloride Intravenous Infusion (3 mg/ml and 9 mg/ml)</td>
<td>2 hours</td>
</tr>
</tbody>
</table>

For storage at 5°C, reconstituted solutions of Augmentin IV may be added to pre-refrigerated infusion bags containing either Water for Injections Ph. Eur. or sodium chloride BP (0.9% w/v), which may be stored for up to 8 hours. Thereafter, the infusion should be administered immediately after reaching room temperature.
The stability of Augmentin IV solutions is concentration dependent. In the event that the use of more concentrated solutions is required, the stability period should be adjusted accordingly.

Augmentin IV is less stable in infusions containing glucose, dextran or bicarbonate. Reconstituted solutions of amoxicillin/clavulanic acid may be injected into the drip tubing over a period of 3 to 4 min. Any residual antibiotic solution should be discarded.

**This leaflet was last revised in October 2015.**