This information sheet has been produced by the Australian Rheumatology Association to help you understand the medicine that has been prescribed for you. It includes important information about:

- how you should take your medicine
- what are the possible side effects
- what tests you may have to monitor your condition and to detect unwanted effects
- other precautions you should take when you are taking probenecid.

Please read it carefully and discuss it with your doctor.

### Important things to remember

- While taking probenecid you should see your doctor regularly to make sure the treatment is working and to minimise any possible side effects.
- You should have regular blood tests as directed by your doctor.
- If you are worried about any side effects you should contact your doctor as soon as possible.

For more information about GOUT see Arthritis Australia’s website [www.arthritisaustralia.com.au](http://www.arthritisaustralia.com.au)

### What is probenecid?

Probenecid (brand name Pro-Cid) is a medicine used to treat gout, which is a type of arthritis caused by a build up of uric acid crystals in the joints. Cells produce uric acid normally. In gout the body does not flush it out fast enough.

Probenecid works by making the kidneys flush the excess uric acid from the body. This helps prevent uric acid crystals building up in the joints and therefore helps prevent joints becoming swollen and painful.

Probenecid can also help increase the level of certain antibiotics in the blood. This helps increase the effectiveness of the antibiotics to treat an infection.

### What benefit can you expect from your treatment?

Probenecid is taken on a long-term basis to prevent attacks of gout. The treatment also helps to prevent permanent damage to the joints. It does not treat the pain or inflammation of an ‘attack’ of gout and it is not normally started during a sudden attack.

Probenecid does not work straight away. It may take several weeks to reduce the level of uric acid so you may continue to have gout attacks for some time.

Sometimes starting probenecid or increasing the dose can actually cause an attack of gout.
This does not mean the medicine is not working so keep taking it during such attacks together with any other medicine your doctor may recommend to manage the pain.

Because probenecid works on the kidneys it may not be effective if kidney function is abnormal.

How is probenecid taken?

Probenecid is taken by mouth as a tablet and is usually taken twice a day.

It should be taken after food to reduce stomach upset and the tablets should be swallowed whole.

It should also be taken with plenty of water. In addition you should drink a lot of water each day when you start taking probenecid and while the dose is being adjusted.

For greatest benefit probenecid should be taken regularly. To help you remember take it at the same time(s) each day. If you forget to take a dose there is no need to double the dose at the next scheduled time.

What is the dosage?

Tablets come in 500mg strength. Treatment usually starts with a small dose such as ½ a tablet twice a day. It may be increased to 1 or sometimes 2 tablets twice a day with a maximum of 4 tablets a day.

Can other medicines be taken with probenecid?

Probenecid may be taken in combination with other arthritis and gout medicines including:

- colchicine or allopurinol
- steroid medicines such as prednisolone or cortisone injections into the joint
- anti-inflammatory medicines (NSAIDs) such as naproxen (Naprosyn) or ibuprofen (Brufen/Nurofen)
- simple pain relievers such as paracetamol.

There are separate information sheets for the medicines mentioned above.

How long is the treatment continued?

Treatment with probenecid is usually continued indefinitely as long as it is effective and as long as no serious side effects occur.

If you stop probenecid treatment suddenly there is a risk that your gout will get worse again. Continue with your treatment unless advised by your doctor or unless side effects develop.

Are there any side effects?

Most people do not experience side effects from probenecid. Below are possible side effects that you might experience with your treatment. Tell your doctor if you experience any side effects.

Probenecid should not be taken in some blood disorders or if you have had uric acid kidney stones.

If you do experience side effects a reduction in dose may minimise these so that you can continue to take the medicine. Your doctor will advise on any dose changes that are necessary.

Most common possible side effects

- The most common side effects are nausea, vomiting and loss of appetite. These can be reduced if you eat little and often. Stick to simple foods such as dry toast. If you are sick drink plenty of liquid.

Less common or rare possible side effects

There are some rare but potentially serious possible side effects with probenecid.

These include:

- Headache, flushing, sore gums, difficulty sleeping and dizziness.
- Skin problems: Probenecid can cause a rash or flaking skin as well as boils, sore lips or mouth ulcers. If any of these occur contact your doctor straight away.
Kidney problems: Probenecid can cause kidney stones. If you get blood in the urine or severe back pain see your doctor. Infrequently, probenecid may cause leakage of protein into the urine. Traces of protein in the urine are often not a problem; larger amounts usually mean that probenecid will be stopped. If protein leakage does occur, provided the probenecid is stopped, there is little chance of serious kidney damage developing.

The dose of probenecid may need to be reduced or it may need to be stopped if problems occur.

Long term possible side effects
Probenecid can be taken for long periods to manage gout. There seem to be no additional long term side effects.

Probenecid does not affect a person’s ability to have children in the long term. See also Precautions.

What precautions are necessary?

Blood tests
- You may need to have blood tests during the first few months of treatment depending on what other medicines you are taking and on your other health concerns. The uric acid level in your blood will also be checked to make sure the medicine is working.
- It is important to see your general practitioner (GP) regularly as they have an important role in monitoring your condition.

Use with other medicines
- Probenecid can interact with other medicines. You should tell your doctor (including your general practitioner, rheumatologist and others) about all medicines you are taking or plan to take. This includes over-the-counter or herbal/naturopathic medicines. You should also mention your treatment when you see other health professionals.

Probenecid may affect how the kidneys get rid of some other medicines including:
  - acyclovir and ganciclovir (used to treat viral infections)
  - sulfonylureas (used to treat diabetes)
  - zidovudine (AZT, used to treat HIV), and
  - antibiotics including cephalosporins, penicillins and sulphonomides.

Dosage adjustment of these medicines may be required when they are taken with probenecid.

Probenecid also affects how methotrexate is removed by the kidneys and can therefore increase methotrexate toxicity (particularly if the dose of methotrexate is more than 20mg/week). Extra care is needed in elderly people and/or if kidney function is significantly reduced.

Aspirin can be used safely in the low doses taken for prevention of heart attack and stroke. If you have gout you should avoid taking aspirin in other situations.

Probenecid can be taken safely with anti-inflammatory drugs (NSAIDs) as long as your kidney function is reasonably normal.

The simple pain reliever paracetamol, and combined medicines such as Panadeine and Panadeine Forte, can be used while taking probenecid provided you take them as directed.

Use with alcohol
- Alcohol can trigger an attack of gout. When taking probenecid keep your alcohol intake to minimum i.e. 1 to 2 standard drinks once or twice a week. Drinking more than 4 drinks on one occasion, even if infrequently, is strongly discouraged. In some cases total abstinence from alcohol is
recommended. Check with your doctor about your situation.

- In addition to alcohol other things that may trigger an acute gout attack include dehydration, diuretics (fluid tablets) and stopping probenecid treatment.

Use in pregnancy and breastfeeding

- The effects of probenecid during pregnancy and breastfeeding have not been well studied so it is not clear if probenecid causes birth defects.
- If you are pregnant or are considering having a child, or you are considering breastfeeding, you should discuss this with your doctor before starting this medicine.

How to store probenecid

- Store probenecid in a cool, dry place, away from direct heat and light.
- Keep all medicines out of reach of children.

Questions?

If you have any questions or concerns write them down and discuss them with your doctor.

Your doctor’s contact details

If you are taking probenecid you should see your doctor regularly to make sure the treatment is working and to minimise any possible side effects.

The information in this sheet has been obtained from various sources and has been reviewed by the Australian Rheumatology Association. It is intended as an educational aid and does not cover all possible uses, actions, precautions, side effects, or interactions of the medicines mentioned. This information is not intended as medical advice for individual problems nor for making an individual assessment of the risks and benefits of taking a particular medicine. It can be reproduced in its entirety but cannot be altered without permission from the ARA. The NHMRC publication: How to present the evidence for consumers: preparation of consumer publications (2000) was used as a guide in developing this publication.