



ANAGRELIDE

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Anagrelide (Agrylin®) is an oral medication used to treat myeloproliferative neoplasms (MPNs). It is not currently funded under the PBS. Anagrelide is available in 0.5mg (500mcg) capsules and is usually taken twice a day.

HOW DOES ANAGRELIDE WORK?

Anagrelide acts to reduce the number of platelets in the blood. Platelets are produced in the bone marrow by megakaryocytes which are derived from stem cells. Platelets bud-off from the megakaryocytes and enter the blood stream. Anagrelide reduces the production of platelets by megakaryocytes and hence lowers the platelet count in the blood. By controlling platelet numbers in patients with MPNs the risk of thrombotic (clotting) and haemorrhagic (bleeding) complications is reduced.

HOW CAN ANAGRELIDE TREAT MY MPN?

Anagrelide is currently recommended for use in individuals who are unable to tolerate other cytoreductive drugs, such as hydroxycarbamide. It is most commonly used in essential thrombocythaemia (ET) but can be used to lower the platelet count in any MPN. Very occasionally patients are treated with both hydroxycarbamide and anagrelide simultaneously. Anagrelide does not reduce the neutrophil (white cell) count but it can cause anaemia in some patients. Reducing the platelet count in patients with ET reduces the risk of thrombotic (clotting) and haemorrhagic (bleeding) complications. It may also help to reduce any symptoms experienced as a result of having too many platelets, such as headache, visual problems, fatigue, or tingling in fingers and toes.

ARE THERE ANY DRAWBACKS?

As with all medications you may experience side effects whilst taking anagrelide. These are listed in the side effects section below. You will need frequent blood tests and monitoring whilst taking anagrelide to ensure that the dose is correct for you. Anagrelide only reduces platelet counts and if you have elevated red cells or white cells you may either require an additional drug or venesection therapy to control this. A small number of people will not respond to anagrelide or may develop resistance to anagrelide over a period of years, requiring a switch to another treatment. Anagrelide may increase the risk of transformation to post ET myelofibrosis (MF) however this has not been shown in all studies.

SPECIAL WARNING AND PRECAUTIONS FOR USE

Do not stop using anagrelide suddenly without checking first with your doctor. Rather you may need to slowly decrease your dose before stopping it completely. Stopping suddenly will cause the platelet level in your blood to increase quickly. It should be noted that there is risk of thromboembolic events during this rebound phase which may lead to potentially fatal thrombotic complications, such as cerebral infarction. Platelet counts should be monitored closely when anagrelide is ceased.

ARE THERE ANY SIDE EFFECTS?

Most people taking this drug tolerate it well and have few side effects. However, it is important that you inform your doctor if you experience any side effects listed below or any new symptoms, even mild. Anagrelide can cause episodes of fast heart rate, so your haematologist will check your heart rate before you start treatment.

Very common side effects

Approximately 10% of people taking anagrelide will experience some of these side effects:

- Headache
- Palpitations

Less common side effects

Approximately 1–10% of people taking anagrelide will experience some of these side effects:

- Anaemia
- Fluid retention (swollen hands and feet)
- Dizziness
- Fast heartbeat (tachycardia)
- Nausea or diarrhoea
- Rash
- Fatigue



Uncommon side effects

Uncommon side effects affecting less than 1% of patients include:

- Weight loss
- Numbness
- Sleep disturbances
- Depression
- Flu like symptoms
- Loss of strength/weakness
- Cardiac or heart side effects, including heart failure

If you experience any of the symptoms above or on the previous page, please inform your doctor.

The above list is not fully comprehensive and some other side effects can occur. Please consult the official product information if you are experiencing any side effects and it is important that patients inform their doctor if they experience any side effects.

TAKING ANAGRELIDE

How to take anagrelide

- Usually given twice a day. If taking more than one capsule, you can spread the dose throughout the day to avoid palpitations - please discuss with your haematologist.
- Can be taken either before or after food and at any time of the day
- Swallow whole with plenty of water
- Do not split the capsule
- Take at the same time every day

Dosage

Your haematologist will give instructions about what dose you are to take. You will be started on a low dose which will gradually increase until your platelet count falls into the target range.

Non-compliance - It is important that you follow the directions precisely. Failure to do so may increase your risk of vascular and thrombotic disease related complications.

Keeping track

It may be helpful to keep a record to remember when to take your tablets and to record any side effects.

Storage and disposal of anagrelide

- Store in a dry place at room temperature.
- As with all medications anagrelide can be harmful to others. Keep all medications in a secure location well out of the reach of children and pets.
- Return any unused capsules to your local pharmacy or hospital. Do not dispose of them in the bin or flush them down the toilet.
- Do not use tablets after the expiry date which is stated on the packaging.

INTERACTIONS WITH OTHER MEDICATIONS OR VITAMINS, HERBAL SUPPLEMENTS OR REMEDIES

Whenever you take anagrelide (or in fact any medication), always provide the names of other medicines prescribed for you as well as any over-the-counter medications (e.g vitamins, herbal supplements or remedies) to the health care team who are treating you. It can be very helpful to carry a list of the names and dosages of all your medicines to show to your haematologist at appointments.



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INTERACTIONS WITH OTHER MEDICATIONS OR VITAMINS, HERBAL SUPPLEMENTS OR REMEDIES (CONT.)

Some medicines may interact or need to be used with caution when taking with anagrelide. These include:

- Omeprazole
- Ciprofloxacin
- Norfloxacin
- Fluvoxamine
- Imipramine
- Anti-inflammatory medications (eg Naproxen, Voltaren)
- Sucralfate
- Some COVID antivirals (Paxlovid - (nirmatrelvir + ritonavir))

Please note that the above list is not fully comprehensive and some other medicines may interact or need to be used with caution when taking with anagrelide. It is important that patients inform their haematologist if they are taking other medications. [The MPN AA has a wallet card which provides for medications to be listed.](#)

WHAT SHOULD I EXPECT WHEN I BEGIN TREATMENT?

How fast does it work?

Anagrelide can take several weeks to start reducing your platelet count particularly since it is recommended to start therapy at a low dose and increase gradually. You will probably not feel any benefits until your counts are under control.

How will I feel?

As your blood counts reduce you may notice you experience fewer symptoms. Most people taking this drug tolerate it well and have relatively few side effects. If there are initial side effects, they often become less noticeable over time.

Will I need follow up?

You will need frequent blood tests during the first few weeks of treatment to determine how your blood count is responding to the medication. Once your blood count begins to normalise you will need less frequent checks, perhaps every two to three months.

What if I have other medical conditions?

Anagrelide should be used under supervision if you have or have had any of the following conditions:

- Heart problems
- Kidney problems
- Liver problems

If you think you may have or have had one of these conditions please discuss this with your doctor.

FREQUENTLY ASKED QUESTIONS

Can I eat and drink normally?

Yes. We recommend that you eat a normal, healthy diet and drink plenty of water.

Can I drink alcohol?

While it is safe to drink alcohol in moderation whilst taking anagrelide, Australian NHMRC guidelines state that for healthy women and men drinking no more than two standard drinks on any day reduces your risk of harm from alcohol-related disease. Alcohol can cause dehydration, and it is important to avoid becoming dehydrated if you have an MPN. Please ask your doctor if you require more information regarding alcohol consumption.



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What if I want to have a child?

It is strongly recommended that you use contraception whilst taking anagrelide, because this medication can be harmful to a developing foetus.

It is imperative to discuss your plans together with your haematologist prior to becoming pregnant or fathering a child. Your doctor can recommend treatment options for you that will not cause harm to your developing foetus and will increase your chance of a successful pregnancy. If you are planning to conceive or to father a child it will be necessary to stop taking anagrelide for at least three months to allow the drug to clear from your system before trying to conceive. (Noting the warning that you must not stop anagrelide suddenly without first checking with your doctor). If you or your partner becomes pregnant while taking this drug please contact your haematologist immediately for further advice.

Can I breastfeed while taking anagrelide?

It is strongly recommended not to breastfeed your child whilst taking anagrelide. It is a very strong drug that inhibits blood cell development and can be secreted in breast milk. This may affect your baby's development.

Can I drive?

Anagrelide can occasionally cause dizziness and drowsiness; if you experience these side effects your ability to drive may be affected. If you are feeling drowsy or fatigued for any reason do not drive.

Do I need to take any special precautions?

Your skin may be more sensitive to sun whilst you are taking anagrelide. You may need to protect your skin by avoiding exposure to the sun, using SPF30+ sunscreen and wearing protective clothing and a hat.

Oral contraceptives

If you experience diarrhoea whilst taking anagrelide it may reduce the effectiveness of the oral contraceptive pill and you may need to use extra methods of contraception.

Can I have vaccinations such as the flu and COVID-19 jabs while taking anagrelide?

You can have most vaccinations including the flu vaccine and COVID-19 vaccine whilst taking anagrelide. However, some vaccinations are live vaccines and should not be taken with anagrelide. It is important you talk to your haematologist and tell the person giving you the vaccine that you are taking anagrelide so they can check if it will be safe for you.

COVID - Can I take antivirals while on anagrelide?

If you test positive for COVID-19, you may be eligible for antiviral therapy. The antiviral most suitable for you will depend on what other medications you are taking as some antivirals are not suitable for patients taking anagrelide, and your kidney function. Treatment must be commenced within 5 days of symptom onset, or as soon as possible if you have no symptoms but test positive. Please contact your GP or haematologist to arrange the appropriate antiviral therapy immediately if required.

WHAT TO DO IF...

You have taken too much medicine/someone else has taken your medicine

If you have taken extra tablets or if another person has taken your medication please contact your nurse or doctor as soon as possible.

You were sick shortly after taking your tablets

If you are sick just once, take your next dose as usual. If you are sick over several days, contact your haematologist.

You forget to take a dose

If you have forgotten to take a dose, do not take any extra but take your next dose as normal. If you have forgotten to take a few doses, start taking them again and contact your haematologist.

If you feel anxious about taking anagrelide

If you have concerns, please discuss this with your haematologist or GP.



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If you need to have a medical procedure or operation

You may occasionally be required to adjust or stop taking anagrelide if you need an operation. It is important that the doctor or dentist planning the procedure or operation be informed that you are taking anagrelide and that he or she plans your procedure together with your haematologist. (Noting the warning that you must not stop anagrelide suddenly without first checking with your doctor). We always recommend that you inform your haematologist when planning any procedures or operations.

What if I do not want to take this medication?

Whether or not to take anagrelide is your decision. If after discussing everything with your haematologist you still feel uncertain or prefer not to take this medication, you can choose not to take it but it is best to discuss this with your treating haematologist so alternate therapy for your MPN can be prescribed. If you decide not to take anagrelide or if you elect to stop after you begin treatment, it is important to inform your haematologist of your decision (Noting the warning that you must not stop anagrelide suddenly without first checking with your doctor). He or she can recommend alternatives or other suggestions if necessary to safeguard your health.

WHAT CAN I DO TO HELP MYSELF IF I HAVE AN MPN?

It's important to take good care of yourself. There are many things you can do to feel better.

- Don't neglect your general health, **particularly your cardiovascular health including stopping smoking and managing your cholesterol**. It is a good idea to have regular physical checkups, including skin checks, eye health examinations and screening tests for mammograms, cervical cancer and prostate cancer.
- **Be blood clot aware**. Having an MPN puts patients at higher risk of having a blood clot. It's good to know the signs and how to prevent blood clots. See STOP THE CLOT website at: https://www.stopthecLOT.org/learn_more/signs-and-symptoms-of-blood-clots/
- **Have regular skin cancer check ups for both melanoma and non melanoma skin cancers**, especially if you are also on treatment regimes such as hydroxycarbamide (hydroxyurea) or ruxolitinib.
- **Good nutrition is important**. Eat a balanced diet: lots of fresh fruit & vegetables, lean protein and whole grains.
- **Drink plenty of water** and prevent dehydration by avoiding excessive alcohol and caffeinated drinks.
- **Maintain a normal weight** and maintain your muscle mass to help keep cholesterol and blood sugar within normal limits.
- **Exercise is very beneficial** for people with MPNs and helps to fight fatigue. Before starting on any new programme, check with your GP or haematologist and start slowly and gently.
- **Stop smoking**. Ask your GP if you need help.
- **Consider wellness activities** such as yoga, aerobic activity, strength training, meditation, massages, support groups, improved nutrition etc. An international study of hundreds of MPN patients showed wellness activities had a pattern of decreased levels of symptom burden, fatigue, depression, and a higher quality of life for MPN patients. (Survey of integrative medicine in myeloproliferative neoplasms – the SIMM study).

More information on living well with an MPN is available at www.mpnallianceaustralia.org.au

MAKING THE ADJUSTMENT

It can be disconcerting to start a new medication or find you must increase your dosage. You may feel that your MPN is getting worse or that you are at greater risk of serious medical problems. You may also feel concerned about the long and short term risks of taking this medication. It is normal to feel this way and many people with MPNs have had similar experiences. It's worth bearing in mind that many people with MPNs have a long life expectancy, and that the treatments are very effective at controlling cell production.

You may want to seek support via one of the sources listed on the MPNAA website under the Australian support section.

GENERAL ADVICE

This leaflet is intended to give you general information about taking anagrelide, or as a reference for people already taking this medication. It is important that in addition to this leaflet you read the product information provided with your medicine and discuss any concerns with your general practitioner or haematologist.