



Information for  
patients and  
carers

**Tablet Medication Options for Kidney  
Disease caused by the Immune System**

The immune system is the body's defense mechanism against infection. In certain illnesses this mechanism becomes inappropriately activated to target parts of the body. This type of illness is called an auto-immune disease. Medications such as **steroids, azathioprine, mycophenolate, methotrexate and ciclosporin/tacrolimus** will lower the activity of the immune system to help treat disease. You may be treated with one or more of these medications. Your doctor will explain to you which one may be used as part of your treatment plan. Further information on each medication is listed below.

## What are the potential side effects of steroids?

Steroids, such as prednisolone, are a highly effective treatment in managing autoimmune conditions. In conditions such as vasculitis, they remain a crucial part of treatment in helping to get disease under control and reducing the risk of organ damage while other treatments take effect. Steroids have the potential for a wide range of side effects, which are listed below. The likelihood of experiencing these side effects often depends on the dose of steroids being used and how long they are taken for. Our team aim to try and reduce the risk of any potential side effects by using low doses and minimising how long steroids are taken for. In vasculitis, a low daily dose of steroid is generally reached by 10 weeks and may need to be continued for a total course of up to 12 months.

### Common potential side effects of steroids include:

- Increased risk of infection
- Reduced bone strength and increased risk of fractures
- Development of diabetes – this typically occurs in people who are already more likely to develop diabetes. It often improves when steroids are reduced or stopped
- Irritation to the lining of the stomach and stomach ulcers
- Weight gain
- Sleep/mood disturbance

- Easy bruising & stretch marks
- Slower healing of any wounds
- Muscle weakness
- Increased risk of glaucoma and cataracts

Additional medications will be prescribed to help reduce the risk of stomach irritation / ulcers and protect bone strength

## What are the potential side effects that can occur with azathioprine, mycophenolate, methotrexate or ciclosporin/tacrolimus?

**Infection:** As all of these medications work by lowering your immune system, this will place you at increased risk of infection. You will have regular blood tests to help monitor your immune system.

**Cancer:** As well as fighting infection, another job of the immune system is to detect and get rid of any potential cancerous cells in the body. With any treatment that lowers the activity of the immune system, the potential risk of cancer in the future will go up. Following treatment with any of these medications, there is a very small risk of developing cancer in the future. To help reduce this risk, we strongly recommend you participate in any national screening programmes offered to you for breast, cervical, prostate and bowel cancer. We also recommend avoiding sunbathing and using high factor sunblock when you go out in the sun to reduce the likelihood of skin cancers.

**Feeling sick:** **Azathioprine, mycophenolate and methotrexate** may cause you to feel sick. Please tell your doctor if this occurs. After excluding other potential causes, your dose may be reduced, and you may benefit from an anti-sickness medication. Alternatively, you may be changed to a different medication.

**Liver function:** Both **azathioprine** and **methotrexate** can affect your liver function. However, this is not common and if this does occur any

changes are usually temporary and resolve after stopping the medication. Your liver function will be monitored as part of your routine blood tests.

**Diarrhoea & stomach discomfort:** These symptoms can occur with mycophenolate. Please tell your doctor if this occurs. After excluding other potential causes, your dose may need to be reduced or you may need to change to a different medication.

## Other guidance

**Pregnancy & breast feeding:** Pregnancy and breast feeding are not recommended when taking Mycophenolate or Methotrexate, and for the 3 months after stopping these medications. Contraception is advised for both men and women while taking these medications and for 3 months after stopping them. Azathioprine, ciclosporin/tacrolimus and steroids are all safe during pregnancy and breast feeding.

**Can I take other medications while taking any of the medications listed above?** Before starting a new medication, you should always tell the prescribing doctor if you are taking azathioprine, mycophenolate, methotrexate or steroids. Please check with your doctor or pharmacist before taking any 'over-the-counter', herbal, or complementary medicines.

**Can I have vaccinations while taking any of the medications listed above?** As azathioprine, mycophenolate, methotrexate, ciclosporin/tacrolimus and steroids can all lower your immune system and ability to fight infection, they may also reduce the effectiveness of any administered vaccine. When considering live vaccines, such as shingles, these should be avoided while you are on treatment. Talk to your doctor before having any vaccinations while you are receiving treatment.

**Can I drink alcohol while taking any of the medications listed above?** Yes, in moderation and within current recommended safe limits.

## What are the alternatives?

Based on your individual needs and understanding of the disease, your team may have recommended a certain treatment option. Other medications may be considered depending on the disease being treated. There is also the option not to undertake any treatment. The lack of any treatment would carry a significant risk of uncontrolled disease and organ damage. In diseases that can affect multiple organs, such as vasculitis or lupus, there is the potential for death without any treatment.

## Contact details

Should you require further advice or information please contact the Renal Department: [Lancashire.Vasculitis.patient@lthtr.nhs.uk](mailto:Lancashire.Vasculitis.patient@lthtr.nhs.uk)

## Sources of further information

[www.lancsteachinghospitals.nhs.uk](http://www.lancsteachinghospitals.nhs.uk)

[www.nhs.uk](http://www.nhs.uk)

[www.accessable.co.uk](http://www.accessable.co.uk)

[www.patient.co.uk](http://www.patient.co.uk)

If you would like any further information or have any questions about your planned treatment, please speak with your consultant and treating team.

All our patient information leaflets are available on our website for patients to access and download:

[www.lancsteachinghospitals.nhs.uk/patient-information-leaflets](http://www.lancsteachinghospitals.nhs.uk/patient-information-leaflets)

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Please ask if you would like help in understanding this information. This information can be made available in large print and in other languages.

**Gujarati:**

આ માહિતીને સમજવામાં સહાયતા જોઈતી હોય તો કૃપા કરીને પૂછો. આ માહિતી મોટા છપાણ માં અને અન્ય ભાષામાં ઉપલબ્ધ કરી શકાય છે.

**Romanian:**

Vă rugăm să întrebați dacă aveți nevoie de ajutor pentru înțelegerea acestor informații. Aceste informații pot fi puse la dispoziție în format mare și în alte limbi.”

**Polish:**

Poinformuj nas, jeśli potrzebna jest ci pomoc w zrozumieniu tych informacji. Informacje te można również udostępnić dużym drukiem oraz w innych językach

**Punjabi:**

ਜੇ ਤੁਸੀਂ ਇਹ ਜਾਣਕਾਰੀ ਸਮਝਣ ਵੱਲੋਂ ਮਦਦ ਲੈਣੀ ਚਾਹੋਗੇ ਤਾਂ ਕਰਿਪਾ ਕਰਕੇ ਇਸ ਬਾਰੇ ਪੁੱਛੋ। ਇਹ ਜਾਣਕਾਰੀ ਵੱਡੇ ਪ੍ਰਿੰਟ ਅਤੇ ਹੋਰਨਾਂ ਭਾਸ਼ਾਵਾਂ ਵੱਲੋਂ ਮੁਹੱਈਆ ਕੀਤੀ ਜਾ ਸਕਦੀ ਹੈ।

**Urdu:**

دوسری زبانوں اور بڑی اگر آپ کو ہی معلومات سمجھنے کے لئے مدد کی ضرورت ہے تو  
یہی چھپا جس یہ ابی دست ہو سکت ہے براے مہر بیان پوے چھہ۔ معلومات

**Arabic:**

مطبوعة بأحرف كبيرة وبلغات إذا كنت تريد مساعداً في فهم هذه المعلومات يرجى أن تطلب  
أخرى يمانن تو فیر هذه المعلوما

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