

Prednisone for Interstitial Lung Diseases

Your treating pulmonologist has discussed the use of prednisone. In this leaflet, you will find information about the effects and use of this medication. You will also read what you can do if you experience side effects. However, this leaflet is not a substitute for the official package insert. If you have any questions after reading this leaflet, you can ask your treating physician.

What are interstitial lung diseases and why are you prescribed prednisone?

In several interstitial lung diseases (pulmonary fibrosis), such as non-specific interstitial pneumonia (NSIP), hypersensitivity pneumonitis (bird fancier's lung), and also interstitial lung diseases in autoimmune diseases, there is activation of the immune system, which leads to damage to the lung tissue. Therefore, treatment focuses on suppressing the immune system. This results in a reduction of the accumulation of inflammatory cells. As a result, the lung abnormalities and symptoms decrease or the worsening of damage and symptoms is prevented. Unfortunately, the disease is not cured by treatment with medication. After tapering off these medications, symptoms may return.

How does prednisone work?

Prednisone or prednisolone is one of the many names under which corticosteroids are available. Prednisone itself is an inactive substance that is converted in the liver into the active substance prednisolone. This conversion is so rapid and complete that it makes no difference for efficacy which of the two you use. Corticosteroids are hormones that are also produced in our own body by the adrenal cortex. It is a stress hormone. One of the properties of this hormone is that it has anti-inflammatory effects by suppressing the immune system. By reducing the accumulation of inflammatory cells, we try to reduce the symptoms of the disease, such as shortness of breath. Prednisone works fairly quickly. However, the way the disease manifests and its severity varies greatly from person to person. Therefore, some notice an effect of prednisone within a week, while for others it takes 6 - 8 weeks. Unfortunately, not everyone experiences sufficient benefit from the medication. Some people receive prednisone in tablet form up to 60 mg per day. Others receive a so-called 'methylprednisolone pulse therapy'. In that case, your doctor will admit you to the hospital for three days and you will receive prednisone as an intravenous therapy (IV) in a high dose.

What is the dosage and how do you take prednisone?

Prednisone can be administered in tablet form or via an IV. Your treating physician will determine which treatment you receive depending on the type and severity of the interstitial lung disease you have. The tablets come in different strengths, usually 5 and 20 milligrams. It is important to pay close attention to taking the correct dosage. For pulse therapy via IV, you will be admitted to the hospital and receive prednisone in a very high dose for 3 days. In addition, the doctor will prescribe a maintenance dose of 20 mg in tablet form. Prednisone is taken once a day. Take the tablets with water, before or during breakfast. It is important to follow your doctor's prescription; do not skip days.

What are the side effects?

The occurrence of side effects is closely related to the amount of prednisone you use and how long you use it. Therefore, the doctor always prescribes the lowest possible dose for as short a time as possible.

The most common side effects are

- Rounding of the face and trunk.
This is due to a different distribution of body fat. This disappears/reduces when the dose is reduced or prednisone is stopped.
- Weight gain.
During prednisone use, the body retains fluid. You may gain one to two kilograms on fluid. In addition, prednisone increases appetite. Try not to give in to this too much to limit additional weight gain.
- Fever, pain when urinating, coughing, and a sore throat are caused by reduced resistance to infections.
This reduced resistance is due to decreased function of the white blood cells, which are responsible for the body's defense. Inform your doctor if you experience these symptoms. Important: prednisone can suppress fever, which is a signal for inflammation.
- Stomach complaints.
This is due to increased stomach acid production. Contact your doctor if you experience the following symptoms: vomiting blood or black, tarry stools.
- Delayed wound healing.
- Smooth, thin skin.
- Bone loss with long-term treatment (longer than 6 months).
Discuss with your doctor what you can do to prevent bone loss as much as possible. With long-term treatment with a higher dose of prednisone, your doctor will prescribe medication to counteract bone loss (alendronic acid and calcium).
- Mood changes.
Difficulty falling asleep, nervousness, depression, and irritability are among the side effects. Sometimes, however, mood improvement can occur.
- Diabetes (sugar disease).
If you have diabetes, your blood sugar levels may become unstable (higher). Therefore, the glucose value (sugar value) must be checked more often and the medication may need to be adjusted. Occasionally, diabetes can develop due to the use of prednisone. Your doctor will check the glucose value for this. You can also have this checked by your general practitioner.

What monitoring is needed when using prednisone?

Depending on the dose of prednisone, monitoring of blood sugar and blood pressure is necessary during treatment. This can be done by your general practitioner. If you also use diuretics, extra blood tests may be needed. Arrangements for blood tests are made with your treating physician.

When should you not use prednisone?

Because prednisone suppresses the immune system, it is better not to start prednisone during acute infections. Also, if you have a stomach or duodenal ulcer, it is better not to use prednisone. However, sometimes prednisone is necessary even in these situations. If you are already using prednisone and an infection or ulcer is diagnosed, consult your treating physician. If you are already using prednisone, it should not be stopped suddenly; not even in case of an infection or ulcer.

Stopping prednisone

As previously described, prednisone is a hormone, a corticosteroid, that is also produced in our own body by the adrenal cortex. Due to the use of prednisone as a medication, the adrenal glands produce less corticosteroids themselves. Depending on the dosage and duration of treatment, they may even stop completely. In this case, your body becomes completely dependent on the medication. Suddenly stopping or reducing prednisone can then cause a serious condition with the following symptoms: excessive fatigue, nausea and vomiting, increased pain, swelling, blood in the stool, and a drop in blood pressure.

With fever, illness, or surgical procedures, these symptoms can also occur because the body then needs more corticosteroids. Therefore, pay attention to the following:

- Always inform your treating physicians about your prednisone use (also the dentist) when you need to undergo a surgical or dental procedure. The doctor can then temporarily increase the dose of prednisone if necessary.
- Never change the dose of prednisone without your doctor's permission. If you use prednisone for more than a few weeks, your treating physician will always gradually reduce the dose according to a strict schedule (the so-called tapering).

Can you use prednisone with other medications?

You can use prednisone with almost all medications. Always inform your general practitioner, specialist(s), and anticoagulation clinic about which medications you use.

- Phenytoin (Diphantoïne, Epanutin®) or rifampicin (Rifadin®) can affect the action of prednisone.
- Simultaneous use with painkillers such as naproxen, ibuprofen, diclofenac, or Aleve® can increase the risk of a stomach ulcer.
- Simultaneous use with potassium-excreting diuretics (hydrochlorothiazide, chlortalidone, and indapamide) can cause the potassium concentration in the blood to become too low. Extra blood tests may be needed.
- The effect of certain blood thinners, namely acenocoumarol (Sintrom) and phenprocoumon (Marcoumar), can be enhanced by prednisone.

What is the effect on fertility, pregnancy, and breastfeeding?

As far as is known, prednisone does not affect fertility and pregnancy. You may use prednisone if you are breastfeeding. However, with the use of prednisone during pregnancy, growth

retardation in the unborn child is sometimes seen. But a severe increase in the disease is considered more harmful for mother and child than treatment with prednisone. Therefore, prednisone use is continued during pregnancy or prescribed if necessary. It is very important to tell your treating physician if you want to become pregnant or are already pregnant. Men wishing to have children can also use prednisone.

Do you need a new prescription?

You can request a repeat prescription from your treating specialist during your outpatient visit.

If you need a new prescription earlier, you can request it by

- 'Mijn Dossier' and then 'Medicines'. Click on 'Request repeat prescriptions'.
- Call the pulmonary medicine outpatient clinic to request a repeat prescription by phone.
 - Please do this at least 2 weeks before you need your new prescription. Otherwise, we cannot guarantee that your prescription will be sent to your pharmacy on time

Do you have any questions?

If you have any questions or doubts, please contact the pulmonary diseases outpatient clinic using the contact options and details known to you.