

WHO-PQ recommended clinical and preclinical information for the patient

This information reflects the recommendations of current WHO guidelines and the scope of WHO's prequalification programme.

Information for the patient**Isoniazid/rifampicin 150 mg/300 mg capsules***
Isoniazid/rifampicin

Carers or parents looking after the person who takes this medicine should use this information to give the medicine correctly and take note of the warnings and side effects

1. What Isoniazid/rifampicin 150 mg/300 mg capsule is and what it is used for

Isoniazid/rifampicin 150 mg/300 mg capsule is a medicine used to treat tuberculosis (TB), an infection caused by bacteria called *Mycobacterium tuberculosis*.

Isoniazid/rifampicin 150 mg/300 mg capsule is also used to prevent TB if there is a high chance you could catch tuberculosis.

Isoniazid/rifampicin 150 mg/300 mg capsule contains two tuberculosis medicines, rifampicin and isoniazid. These are antibiotics that work in different ways to kill the bacteria that cause TB.

2. What you need to know before you take Isoniazid/rifampicin 150 mg/300 mg capsules**Do not take Isoniazid/rifampicin 150 mg/300 mg capsules if you:**

- are allergic (hypersensitive) to isoniazid or rifampicin, or any of the other ingredients of Isoniazid/rifampicin 150 mg/300 mg capsules (see section 6, *What Isoniazid/rifampicin 150 mg/300 mg capsules contains*)
- have current liver disease, including yellowing of the skin and eyes (jaundice) or severely reduced liver function
- have had liver problems after taking isoniazid or rifampicin before
- have had severe side effects with isoniazid or rifampicin before that include fever, chills or inflammation of the joints
- are taking certain medicines:
 - voriconazole (a medicine used to treat fungal infections)
 - HIV medicines: atazanavir, darunavir, doravirine, elvitegravir/cobicistat, etravirine, fosamprenavir, lopinavir, nevirapine, rilpivirine, ritonavir, tipranavir
 - chronic hepatitis C medicines: daclatasvir, elbasvir/grazoprevir, glecaprevir/pibrentasvir, ledipasvir/sofosbuvir, ombitasvir/paritaprevir/ritonavir, sofosbuvir
 - lurasidone (a medicine for mental problems)

Check with your health care provider if you are not sure whether your medicine is included.

Speak to your health care provider if you think you should not take this medicine.

Warnings and precautions

Talk to your health care provider before taking Isoniazid/rifampicin 150 mg/300 mg capsules. Tell your health care provider before starting the medicine if you have:

- liver problems such as long-term liver disease
- kidney problems
- diabetes
- epilepsy
- porphyria
- mental problems (psychosis)

* Trade names are not prequalified by WHO. This is the national medicines regulatory agency's responsibility.

- damage to your nerves (peripheral neuropathy) that causes a sensation of tingling in the hands or feet
- HIV infection
- malnutrition
- been told you are a ‘slow acetylator’ (your body breaks down certain medicines more slowly than usual)

Also tell your health care provider if you are allergic to the medicines ethionamide, pyrazinamide, or niacin (nicotinic acid) – this may make it more likely that you will also be allergic to Isoniazid/rifampicin 150 mg/300 mg capsules.

If any of these apply, your health care provider will discuss your treatment with you and explain whether you will need additional checks in case you get side effects.

While taking Isoniazid/rifampicin 150 mg/300 mg capsules your health care provider will regularly check for any problems with your liver. Speak with your health care provider straightaway if you get **symptoms that might suggest liver damage**, especially if you:

- lose your appetite, or get nausea (feel sick), or feel tired all the time, or you have a rash

and you have any of the following:

- belly pain, usually on the right side and near the chest
- unexplained itching
- yellowing of the white parts of your eyes, your nails or your skin
- passing dark urine
- passing stools that are very pale.

You may be at higher risk of liver problems if:

- you are older than 35 years
- you drink alcohol daily (see “Taking Isoniazid/rifampicin 150 mg/300 mg capsules with food and drink”)
- you have a long-term liver disease
- you use recreational drugs by injection (e.g. heroin).

If any of these apply to you, your health care provider will test for liver problems more often. If serious liver problems develop your health care provider may change your treatment and ask you to stop taking Isoniazid/rifampicin 150 mg/300 mg capsules.

If you get flu-like symptoms such as fever, headache and muscle aches, you should report this to your health care provider, since Isoniazid/rifampicin 150 mg/300 mg capsules may be the cause.

Serious skin reactions (often with other symptoms like chills and fever) may happen in some people taking Isoniazid/rifampicin 150 mg/300 mg capsules. Stop taking Isoniazid/rifampicin 150 mg/300 mg capsules and tell your health care provider right away if you have any of the following symptoms: rash; red and painful skin; blistered, peeling or bleeding skin; sores or blisters on the inside of your mouth or lips or on your genitals; swollen face, lips, mouth, tongue or throat; flu-like symptoms.

Tingling, pricking or numbness in the hands and feet (**peripheral neuropathy**) is the most common side effect of isoniazid, one of the active substances in Isoniazid/rifampicin 150 mg/300 mg capsules (see “Possible side effects”). If you have kidney or liver problems, you may be at higher risk of isoniazid side effects including peripheral neuropathy. You are also more likely to get peripheral neuropathy if you are malnourished, have diabetes, are dependent on alcohol, have HIV infection, or are pregnant or breastfeeding. Your health care provider will check on you regularly if any of these apply. Speak with your health care provider right away if you get tingling in your hands and feet.

Your health care provider may recommend that you take vitamin B6 (pyridoxine) if you are more likely to develop peripheral neuropathy.

Tell your health care provider if you get new or worsening **cough and breathlessness** after starting treatment with Isoniazid/rifampicin 150 mg/300 mg capsules or if other TB symptoms (e.g. tiredness, headache, loss of appetite, weight loss, or weakness) seem to get worse.

If you are taking cortisone or any cortisone-like drug, you should report this to your health care provider, since the cortisone dose may have to be increased while taking Isoniazid/rifampicin 150 mg/300 mg capsules.

Isoniazid/rifampicin 150 mg/300 mg capsules may cause a reddish orange discoloration of body fluids such as urine, sputum and tears. This is due to rifampicin, and does not require medical attention. Also, contact lenses or dentures may become stained due to Isoniazid/rifampicin 150 mg/300 mg capsules.

Tell your health care provider about any illness you get, even if you think it is not related to tuberculosis infection or your medicine.

Other medicines and Isoniazid/rifampicin 150 mg/300 mg capsules

Tell your health care provider if you are taking or have recently taken any other medicines, including medicines obtained without a prescription. These may affect the action of Isoniazid/rifampicin 150 mg/300 mg capsules, or Isoniazid/rifampicin 150 mg/300 mg capsules may affect their action. Side effects of either medicine may become worse and/or the medicines may become less effective.

Medicines you must not take with Isoniazid/rifampicin 150 mg/300 mg capsules

- **You must not take Isoniazid/rifampicin 150 mg/300 mg capsules with** certain medicines (see the full list of these medicines above under ‘*Do not take Isoniazid/rifampicin 150 mg/300 mg capsules if you*’).

This is because Isoniazid/rifampicin 150 mg/300 mg capsules may significantly decrease the amount of these medicines in your blood, preventing them from working well enough.

Check with your health care provider if you are not sure you can take your medicines with this one.

Other medicines that can interfere with Isoniazid/rifampicin 150 mg/300 mg capsules

You should avoid using antacids (for heartburn or indigestion) that contain aluminium hydroxide as it can interfere with your body’s ability to take up this medicine.

The active substances in Isoniazid/rifampicin 150 mg/300 mg capsules may also interfere with a great number of other medicines, including for instance:

- other medicines to treat HIV infection (e.g. dolutegravir, maraviroc, raltegravir,)
- other medicines to treat fungal infections (e.g. ketoconazole, fluconazole, itraconazole)
- antibiotics (e.g. clarithromycin, chloramphenicol, doxycycline, trimethoprim)
- ethionamide (another TB medicine)
- medicines to treat malaria (e.g. amodiaquine, artemether, artesunate, dihydroartemisinin, lumefantrine, quinine)
- immunosuppressant drugs (e.g. ciclosporin, tacrolimus)
- medicines to treat heart conditions (e.g. verapamil, digoxin, clopidogrel)
- medicines to treat blood lipids (e.g. atorvastatin, simvastatin)
- some medicines to treat diabetes (e.g. glibenclamide, glimepiride, repaglinide)
- oral contraceptive pills
- mifepristone (a medicine for abortions)
- medicines to treat epileptic seizures (e.g. phenytoin, carbamazepine, valproate)
- medicines used to help you sleep (benzodiazepines, e.g. diazepam, flurazepam, nitrazepam, triazolam, midazolam; also zolpidem or zopiclone)
- medicines for the treatment of certain psychiatric conditions (neuroleptics, e.g. chlorpromazine, haloperidol; antidepressants such as amitriptyline or nortriptyline)
- medicines for prevention of blood clots (warfarin)
- medicines used in surgery (narcotics or anaesthetics, e.g. alfentanil, enflurane)
- corticosteroids (e.g. prednisolone, medicines for the treatment of inflammations and other diseases, such as asthma or rheumatoid arthritis)
- levothyroxine for thyroid problems
- medicines to treat pain (e.g. morphine, paracetamol)
- codeine (medicine to treat cough)

- methadone (medicine for drug addiction)
- disulfiram (medicine used for the treatment of chronic alcoholism)
- praziquantel for worm infections.

Taking any of these medicines together with Isoniazid/rifampicin 150 mg/300 mg capsules may be unsuitable or your health care provider may need to alter your dose.

Isoniazid/rifampicin 150 mg/300 mg capsules with food and drink

Isoniazid/rifampicin 150 mg/300 mg capsules should be taken on an empty stomach (at least 1 hour before or 2 hours after a meal).

You should not drink alcohol while taking Isoniazid/rifampicin 150 mg/300 mg capsules as it increases the risk of liver damage.

When taken with cheese or fish (histamine- or tyramine-rich food) Isoniazid/rifampicin 150 mg/300 mg capsules may cause redness/itching of the skin, hot feeling, rapid or pounding heartbeat, sweating, chills or clammy feeling, headache, and/or light-headedness. If you get these side effects, you should avoid eating cheese and fish while taking this medicine.

Pregnancy, breast-feeding and contraception

This medicine can be used during pregnancy. However, you may need to be carefully monitored for side effects. If you become pregnant, think you might be, or are planning a pregnancy, tell your health care provider right away, so you can discuss your treatment.

You can breast-feed while taking this medicine. Isoniazid and rifampicin pass into breast milk but only in very small amounts. No negative effects have been reported in breast-fed-infants whose mothers were receiving this medicine. However, amounts in breast milk are so low that you cannot rely upon breast-feeding to prevent or treat tuberculosis in your child.

As a precaution, your health care provider may recommend that you take vitamin B6 (pyridoxine) while you are pregnant and breast-feeding; your baby may also be given vitamin B6. Because rifampicin can interfere with vitamin K, which affects blood clotting, your health care provider may also give you or your baby extra vitamin K around the time the baby is born.

Isoniazid/rifampicin 150 mg/300 mg capsules may reduce the effects of **contraceptive** pills, implants or injections. As a precaution, if you need contraception you should use a different or additional method (condoms, intra-uterine device, pessary) during treatment with Isoniazid/rifampicin 150 mg/300 mg capsules.

3. How to take Isoniazid/rifampicin 150 mg/300 mg capsules

Your health care provider will decide on the right doses and combination of medicines for your TB, based on your age, weight and condition.

Always take Isoniazid/rifampicin 150 mg/300 mg capsules exactly as your health care provider has told you. Check with your health care provider if you are not sure.

Do not change the dose unless your health care provider tells you to. Your treatment will go on for several months, but it is important to take the full course of treatment recommended by your health care provider, even if you feel better.

For information on how to take any other medicines you need for your TB treatment, discuss with your health care provider and see the leaflets that come with those medicines as well.

Treatment of tuberculosis

To treat TB, you will need to take a combination of medicines for the first 2 months of treatment. After that, you will take Isoniazid/rifampicin 150 mg/300 mg capsules on its own for another 2 or 4 months. Your health care provider will explain how long you need to take the medicine for, and what other medicines you need.

The dose of Isoniazid/rifampicin 150 mg/300 mg capsules needed to treat TB depends on weight, as follows:

Patient's weight	Number of Isoniazid/rifampicin 150 mg/300 mg capsules
25 to less than 30 kg	1 tablet once daily
30 to less than 35 kg	If you gain or lose weight to between 30 and 35 kg, your health care provider will recommend a different medicine to make sure you get the right dose
35 to less than 65 kg	2 tablets once daily
65 kg and over	If you gain weight to 65 kg or more, your health care provider may recommend a different medicine to make sure you get the right dose

This medicine is not recommended for children weighing less than 25 kg; your health care provider will recommend a different medicine to make sure you get the right dose.

Prevention of tuberculosis

To prevent TB, Isoniazid/rifampicin 150 mg/300 mg capsules is taken once a day on its own, for 3 months. The dose is the same as for treatment, above.

Instructions for taking Isoniazid/rifampicin 150 mg/300 mg capsules tablets

Isoniazid/rifampicin 150 mg/300 mg capsules should be swallowed with water or another drink.

The medicine should be taken on an empty stomach (at least 1 hour before or 2 hours after a meal). Try to take Isoniazid/rifampicin 150 mg/300 mg capsules at the same time each day.

If you take more Isoniazid/rifampicin 150 mg/300 mg capsules than you should

If you accidentally take too many Isoniazid/rifampicin 150 mg/300 mg capsules, immediately contact your health care provider or the nearest hospital emergency department. Take your medicine with you so that you can easily describe what you have taken.

If you forget to take Isoniazid/rifampicin 150 mg/300 mg capsules

It is important not to miss a dose of Isoniazid/rifampicin 150 mg/300 mg capsules. If you miss or forget to take a dose, the missed dose should be taken as soon as possible, unless it is less than 6 hours till your next dose, in which case skip the missed dose and just take the next regular dose.

If you vomit less than 1 hour after taking this medicine, take another dose. You do not need to take another dose if you were sick more than 1 hour after taking Isoniazid/rifampicin 150 mg/300 mg capsules.

If you stop taking Isoniazid/rifampicin 150 mg/300 mg capsules

Don't stop taking Isoniazid/rifampicin 150 mg/300 mg capsules without checking with your health care provider. Talk to your health care provider before you stop taking Isoniazid/rifampicin 150 mg/300 mg capsules for any reason, particularly if you get any side effects or have another illness.

If you have stopped your treatment with Isoniazid/rifampicin 150 mg/300 mg capsules for any reason, speak to your health care provider before you start taking Isoniazid/rifampicin 150 mg/300 mg capsules again.

If you have any further questions on the use of this medicine, ask your health care provider.

4. Possible side effects

Like all medicines, Isoniazid/rifampicin 150 mg/300 mg capsules can cause side effects, although not everybody gets them. When treating tuberculosis, it is not always possible to differentiate between unwanted effects caused by Isoniazid/rifampicin 150 mg/300 mg capsules and those caused by any other medicines you may be taking at the same time. For this reason, it is important that you inform your health care provider of any change in your health.

The most important adverse effects of isoniazid and rifampicin are nerve injuries (peripheral neuropathy, see below) and inflammation of the liver (hepatitis) which can sometimes be severe or even fatal. **Tell your**

health care provider right away if you get signs of *liver problems* (see Warnings and Precautions, in section 2, above). Other important side effects you need to tell your health care provider about right away are *severe skin reactions* and *new or worsening breathlessness*.

The following side effects have been reported in patients treated with Isoniazid/rifampicin 150 mg/300 mg capsules:

Very common side effects

(may affect more than 1 in 10 people):

- fever and chills

Common side effects

(may affect up to 1 in 10 people):

- low levels of blood platelets (needed for blood to clot normally), sometimes with small purplish spots on the skin
- headache, dizziness
- feeling sick (nausea)
- vomiting
- worsening of TB symptoms that had previously been getting better
- increased liver enzymes or bilirubin as measured in blood tests. Usually, liver enzyme increases occur during the first 1-3 months of therapy and return to normal despite continued treatment. When the values rise above a certain level, your health care provider may decide to stop treatment with Isoniazid/rifampicin 150 mg/300 mg capsules.

Uncommon side effects

(may affect up to 1 in 100 people)

- low levels of white blood cells in blood tests (leukopenia)
- convulsions (fits)
- brain problems leading to confusion or reduced consciousness (toxic encephalopathy)
- inflammation or damage to the optic nerve
- memory problems
- psychosis (abnormal thinking, sometimes with delusions or hallucinations)
- dizziness
- increased seizures (fits) in people with epilepsy
- bleeding in the brain (cerebral haemorrhage)
- diarrhoea
- inflammation of the liver (hepatitis), which can be severe.

Side effects of which it is not known how often they may occur

- infection of the bowel leading to pain and severe diarrhoea (pseudomembranous colitis)
- flu
- formation of tiny clots in the blood vessels, which can affect circulation and lead to damage to the kidneys (thrombotic microangiopathy, thrombocytopenic purpura, haemolytic-uraemic syndrome)
- changes in the white blood cell counts (eosinophilia, agranulocytosis), possibly resulting in an increased risk of infection
- anaemias (low red blood cell counts), sometimes with breakdown of red blood cells (haemolytic anaemia) or problems with bone marrow (aplastic anaemia)
- problems with blood clotting
- swollen lymph glands (lymphadenopathy)
- life-threatening allergic (anaphylactic) reactions with breathing difficulties and low blood pressure
- problems with adrenal glands
- breast enlargement in men (gynaecomastia)
- decreased appetite
- high blood sugar (hyperglycaemia)

- a vitamin deficiency syndrome called pellagra (with e.g. dementia, loose stools and skin inflammation)
- sensations of tingling, pricking, or numbness of the skin, especially in the feet and hands (peripheral neuropathy). Your health care provider may recommend you take vitamin B6 (pyridoxine) to reduce the risk (see above, “Warnings and Precautions”).
- problems with walking and balance (possible signs of a brain problem called cerebellar syndrome); this is more likely if you already have kidney disease
- shock (loss of blood flow to your organs)
- flushing
- inflammation of blood vessels (vasculitis)
- unexpected bleeding
- shortness of breath, wheezing
- reddish discoloration of body fluids such as urine, phlegm, tears, saliva and sweat, staining of soft contact lenses, dentures or teeth
- inflammation of the lungs (pneumonitis)
- belly pain or discomfort
- constipation
- dry mouth
- inflammation of the pancreas (usually with severe pain in the back or stomach)
- severe skin reactions with fever and flu-like symptoms, blisters or pustules, or involvement of the mucous membranes of mouth or genitals
- itching or itchy rashes, nettle rash (urticaria)
- acne
- hair loss
- muscle weakness or soreness
- bone pain
- rheumatic condition with rashes, kidney problems (lupus-like syndrome)
- kidney damage
- excess bleeding after delivery of a baby
- menstrual disturbances
- porphyria (a condition where the body cannot break down certain chemicals called porphyrins)
- swelling of the feet or ankles (oedema)
- low blood pressure.

Reporting of side effects

If you get a side effect, talk to your health care provider. This includes side effects not listed in this leaflet. You may also be able to report such effects directly to your national reporting system if one is available. By reporting side effects, you can help to improve the available information on this medicine.

5. How to store Isoniazid/rifampicin 150 mg/300 mg capsules

Product specific information on the storage conditions is shown in the product information as approved by the reference authority, stated in WHOPAR part 1.

6. Contents of the pack and other information

What Isoniazid/rifampicin 150 mg/300 mg capsule contains

What Isoniazid/rifampicin 150 mg/300 mg capsule looks like and contents of the pack

Supplier and Manufacturer

This leaflet was last revised in November 2025

Product specific information on the composition, visual appearance of the formulation, appearance and size of packs as well as on the supplier, is shown in the product information as approved by the reference authority, stated in WHOPAR part 1.