

Service: Respiratory

# Nintedanib

Information for respiratory patients  
with interstitial lung disease



## What is nintedanib?

Nintedanib is a medication referred to as a small molecule tyrosine kinase inhibitor. This type of medication interferes with the way that some cells communicate with each other and can increase or decrease the likelihood of them behaving in certain ways.

Nintedanib has been shown to reduce the development of new blood vessels, which slow the growth of some types of cancer.

Nintedanib has also been shown to change the behaviour of a type of cell called a fibroblast which are involved in the development of fibrosis (scarring) in conditions like Idiopathic Pulmonary Fibrosis (IPF).

By changing the way fibroblasts behave nintedanib may reduce the rate at which fibrosis progresses in some people with IPF.

There are no treatments which can reverse the damage cause by fibrosis in IPF but nintedanib may slow the progression of fibrosis in some people.

## Patients who should not take nintedanib or who require extra caution

Patients who should not take nintedanib or who require extra caution Nintedanib should not be taken if you have an allergy to peanuts or to soya.

Nintedanib should be avoided, or used very cautiously, in people with liver problems. Before starting treatment the person prescribing nintedanib will arrange blood tests to check your liver function. You should let them know if you have, or think you have, had problems with your liver in the past, particularly if you have ever experienced jaundice (yellowing of the skin and/or eyes).

Because alcohol can also affect your liver you should let the person prescribing nintedanib know if you regularly drink more than the recommended amount of alcohol so they can provide advice on this.

When you start treatment with nintedanib you will need to book appointments to have your liver function measured every month and then every three months for the duration of treatment. This is done via a simple blood test which can be done at your GP practice.

- The recommended limits are no more than 14 units of alcohol per week, no more than three units in any day, and at least two alcohol-free days per week.

If you are unclear on the number of units per alcoholic drink then ask for advice.

Because nintedanib can interfere with the formation of new blood vessels it may increase the risk of bleeding in some people.

- If you are taking any blood thinning medications you should discuss this with the person prescribing nintedanib. These include antiplatelet such as; **aspirin, clopidogrel, prasugrel or ticagrelor**, and anticoagulants such as; **warfarin, acenocoumarol, phenindione, apixaban, dabigatran and rivaroxaban**. Some anti-inflammatory drugs, such as **ibuprofen**, may also pose a risk.
- People taking anticoagulants should not normally receive nintedanib due to the bleeding risk.

**You should also discuss with the person prescribing nintedanib if any of the following apply;**

- You have suffered a stroke, including a transient ischaemic attack, or subarachnoid haemorrhage within the last 12 months.
- You have had any major bleeding, for example; coughing up blood (haemoptysis), blood in the urine (haematuria) or gastro-intestinal bleeding, within the last three months.
- You have suffered a myocardial infarction (heart attack) within the last six months, or an attack of unstable angina within the last month.

- You have had a major injury or surgery within the last three months.

Nintedanib can cause problems with wound healing. You should therefore not receive this treatment if you have planned major surgery within the next three months.

Because of the risks to an unborn child nintedanib should not be taken where pregnancy is a possibility. If you are unsure if this may apply to you then you should discuss this with the person prescribing nintedanib.

## How to take nintedanib

Nintedanib capsules come in 150mg and 100mg strengths.

The starting dose is 150mg of nintedanib take twice a day. The dose

should be swallowed whole with a glass of water and taken with, or straight after, food.

The doses should be taken 12 hours apart give or take an hour. If the dose is missed by more than an hour then it should be completely missed. Do not take an additional dose to 'catch up' and you should not take more than two capsules in any 24 hour period.

In some patients the dose of nintedanib may be temporarily or permanently reduced to 100mg twice daily. Although the capsule strength is different they should be taken in the same way.

## Medicines labelled as “hazardous waste”

A lot of medicines are classified as 'hazardous waste' and if they are not taken then they need to be disposed of safely. The best way to dispose of hazardous waste would be to return it to a pharmacy in its original container. You should not dispose of them in the household waste or via the sink or toilet.

## **As with all medicines nintedanib should be:**

- Kept out of the reach and sight of children.
- Taken as directed by your doctor or pharmacist and should only be taken by the patient named on the label.

## **What side-effects can nintedanib cause?**

Some patients will experience no side-effects from treatment. Where side-effects occur they are often mild to moderate in severity and can be managed with advice from the specialist team.

A small number of patients may experience more troublesome side-effects which mean that nintedanib needs to be temporarily or permanently stopped, or that the dose needs to be reduced.

If you experience, or think you are experiencing, any side-effects due to nintedanib you should discuss this with the specialist team at the earliest opportunity. If you are very unwell or very worried by the problem then you should not delay getting emergency advice (for example from the 111 telephone service or an emergency service).

The most common side-effects seen in IPF patients treated with nintedanib are related to the gastrointestinal system.

- Diarrhoea, which can be managed through dose adjustment, dietary changes and supportive medications to treat symptoms, occurred in more than half of patients receiving the treatment (about 60%). The onset of diarrhoea while taking nintedanib can be unpredictable and may happen at any time during treatment.

In addition to having loose or more frequent stools, some patients experienced urgency and faecal incontinence. This can obviously be quite distressing and you should consider how you would manage if this affected you. In addition to the measures discussed below the person prescribing nintedanib or your specialist nurse can provide

advice if you would like to discuss this further.

Overall about 1 in 20 patients had to stop nintedanib because of unmanageable changes in bowel habit.

- Nausea effected about a quarter of patients taking nintedanib and around 1 in 10 experienced vomiting as a result. You will be provided with medications to help with this symptom if it occurs and if you experience nausea or vomiting whilst taking nintedanib you should discuss this with the specialist team who can provide advice.
- Around 1 in 10 patients taking nintedanib experienced a loss of appetite (anorexia) and in some of those effected unintentionally lost weight as a result. You should consider weighing yourself regularly and making a note of any changes.
- Some patients taking nintedanib experienced abdominal pain (pain in the belly). This may be due to trapped wind or cramping. Severe pain may be a sign of something more serious and you should seek medical advice if this occurs, particularly if you are finding it difficult to eat or drink or are experiencing any signs or symptoms of dehydration, which include; excessive thirst, dry mouth, infrequent urination, dark urine, weakness or dizziness.
- A small number of patients experienced abnormalities in liver function tests whilst taking nintedanib. During treatment you will need to have a blood tests to check your liver function every month for the first three months. This can then normally be reduced to every three months.

Liver problems may present as; pain over the liver (which is below the bottom right rib), yellowing of the eyes or skin, severe itching, darkening of the urine or very pale stools. If you experience any of these you should seek advice.

- Based on the way nintedanib works it might also have an effect on wound healing and might increase the risk of

bleeding. Because of this nintedanib should be stopped prior to planned surgery and certain treatments which can increase the risk of bleeding should be avoided (see section on 'Patients who should not take nintedanib' above).

If you are aware that a surgical or dental procedure may be required then you should discuss this with the specialist team who can provide advice.

If you experience symptoms of bleeding, including; darkening of the stool, vomiting blood or any dark material, having blood present in the urine or a change in the urine to dark or brown, or coughing up blood then you should seek urgent medical advice.

## Measures that may help prevent and control diarrhoea

The likelihood and severity of diarrhoea may be reduced by;

- Eating smaller amounts of food more often (eating little and often) and avoiding large meals.
- Avoiding coffee, tea, alcohol and sugary food and drinks.
- Avoiding high-fibre foods which can cause diarrhoea and cramping. These include; whole-grain breads and cereals, raw vegetables, beans, nuts, seeds and both fresh and dried whole fruits.
- Avoiding fried, greasy, or spicy foods.
- Avoiding milk and milk products such as yoghurt and cheese if they make diarrhoea worse. If you cannot avoid these then consider low-fat options instead.
- Do not take laxatives, unless otherwise instructed by your doctor.
- It is advisable to carry ensure you have a supply of anti-diarrhoeal medicine (e.g. loperamide) to hand at all times.

Although this may restrict some of your dietary options you should continue to ensure you are eating enough.

- Ensure you are getting enough high-protein and high-calorie foods to keep your strength up.
- Eat low-fibre foods, such as; white bread, white rice or noodles, creamed cereals, ripe bananas, canned or cooked fruit without skins, eggs, mashed or baked potatoes without the skin, puréed vegetables, fish, chicken or turkey without the skin.
- Consider weighing yourself regularly and keeping a diary of this so that you can keep track of any weight loss.

## **What to do if you experience diarrhoea or a change in bowel habit**

If you experience diarrhoea you should drink plenty of fluids to replace what you have lost, but drink slowly and allow any fizzy drinks to become flat before drinking them.

If you are experiencing an increase of more than four stools per day despite use of loperamide you may need to take additional fluids with an electrolyte supplement (Dioralyte®).

If you are experiencing an increase of seven or more stools per day then in addition to the above steps you should also stop taking nintedanib and seek medical advice. If the diarrhoea is associated with fever (at temperature more than 38.3°C or 101°F), shaking chills or severe abdominal pains then seek urgent medical advice.

## Measures that may help prevent nausea and vomiting

The likelihood of nausea and vomiting and their severity may be reduced by;

- Eating smaller amounts of food more often (eating little and often) and avoiding large meals so that your stomach won't feel too full.
- Drinking liquids at least an hour before or after meals instead of with meals.
- Drinking cool, clear liquids, such as apple juice or ginger ale that has lost its fizz.
- Eating and drinking slowly, ensuring that you chew food thoroughly to aid with digestion.
- Avoiding sweet, fried or fatty foods.
- Avoiding strong smells. This might be helped by eating foods cold or at room temperature. Avoiding some odours, such as; cooking smells, smoke or perfume if these affect you.
- If nausea is a problem in the morning then dry breakfast foods, such as; cereal, toast or crackers, may be preferable.
- Resting in a chair after eating (but avoiding lying flat for at least two hours after finishing meals).
- Sucking on ice cubes or mints.
- Wearing loose- or comfortably-fitting clothes.
- Breathing deeply and slowly if you are feeling sick.

## **What to do if you experience nausea or vomiting**

If you are experiencing nausea or vomiting whilst taking nintedanib despite these measures you should contact the specialist team for advice, particularly if this is interfering with your ability to eat and drink.

If you have vomited it is important to ensure you have taken in enough fluid to replace any you have lost. As discussed above slowly drinking cool, clear liquids is appropriate. It is important to be aware that repeated, or prolonged, vomiting can cause dehydration. You should seek advice if you are experiencing any signs or symptoms of dehydration which include; excessive thirst, dry mouth, infrequent urination, dark urine, weakness or dizziness.

If you vomit after taking nintedanib, no matter how soon after you have taken the dose, then you should not take another dose to replace any that may have come back up.

If you have six or more bouts of vomiting separated by five or more minutes during any one day despite taking anti-sickness medications then you should stop taking nintedanib completely until you have discussed this with the specialist team.



**PATIENT  
APPROVED** 

### How to contact us:



ILD team  
Brunel building  
Southmead Hospital Bristol  
BS10 5NB



0117 414 7762

Mon-Fri 8-4.30



ILD@nbt.nhs.uk



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

If you or the individual you are caring for need support reading this leaflet please ask a member of staff for advice.

© North Bristol NHS Trust. This edition published April 2019. Review due April 2021. NBT002951

Take Part  
Be Involved  
*in research*

Research is everyone's business

Learn more about the wide range of research that takes place here every day.

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



[southmeadhospitalcharity.org.uk](http://southmeadhospitalcharity.org.uk)

Southmead Hospital Charity raises funds for departments and wards throughout the Trust, meaning you can support an area close to your heart