MY THERAPY WITH DUPIXENT®

Booklet for patients with severe asthma

sanofi | REGENERON®

CONTENTS

Note: This brochure is intended to supplement the package leaflet, not replace it.
Make sure you read the package leaflet in its entirety before starting the therapy.
There is a package leaflet included in every pack of DUPIXENT®.
You can also find it online at: www.mein.sanofi.de/produkte/dupixent.

DEAR PATIENT,

Your doctor has prescribed you DUPIXENT® (dupilumab) in order to treat your severe asthma.

DUPIXENT® can be used together with other asthma medicines for maintenance therapy in patients aged 6 years and over suffering from severe asthma, when the disease cannot be controlled adequately with other asthma medicines.
DUPIXENT® is administered subcutaneously, i.e. injected under the skin - every 2 weeks in adults and adolescents over 12 years of age. Please refer to the package leaflet for administration to children between 6 and 11 years of age.
DUPIXENT® acts specifically against the cause of asthma, the inflammation in the airways.

This brochure provides answers to your questions about the treatment with DUPIXENT®. It is intended as a reference guide to help you feel more confident in the use of DUPIXENT®.
Of course, this brochure cannot replace a consultation with your doctor. If you have specific questions about your treatment, please contact your treatment team.

Further information on DUPIXENT® can also be found in the login area at **www.aktiv-mit-schwerem-asthma.de**.
For login please use the batch number of your medicine. You will find it on the packaging, marked with "Ch.-B."

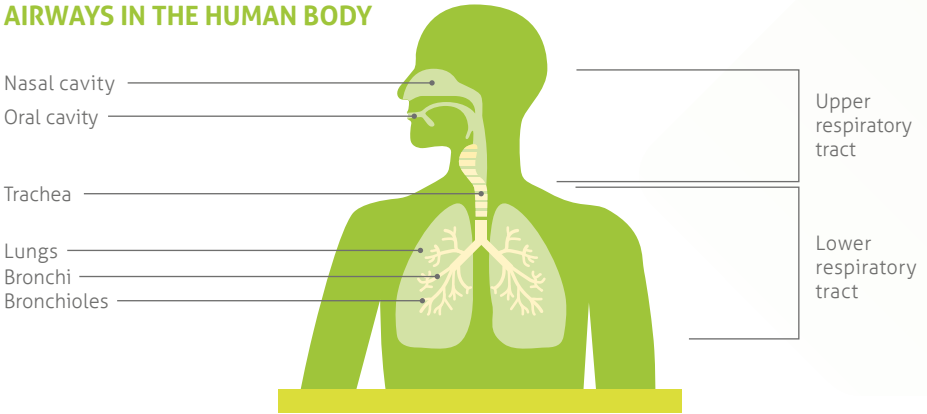
01
SEVERE ASTHMA: AN OVERVIEW

ASTHMA – THE KEY FACTS

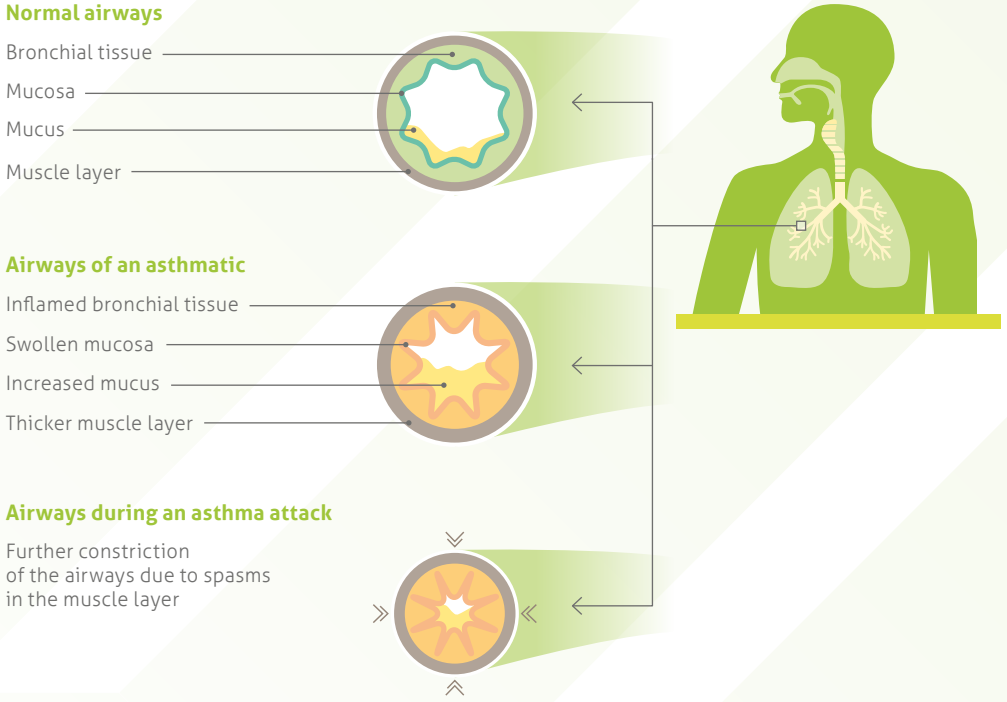
Asthma is one of the most common diseases in Germany. One in 20 adults and one in ten children are affected.

The disease's symptoms vary widely in their nature and severity and may affect individuals very differently. What they all have in common is the chronic, i.e. permanent, inflammation of the airways. As a result, the airways are often highly sensitive to what are actually harmless stimuli, such as pollen or the cold, and constrict in a spasmodic way. The inflammation leads to the swelling of the mucosa throughout the respiratory system, leading to the formation of viscous phlegm. The result is that breathing out is more difficult and this leads to the typical symptoms of asthma, including a wheezing sound when breathing out, shortness of breath and breathlessness, a feeling of tightness in the chest, and coughing.

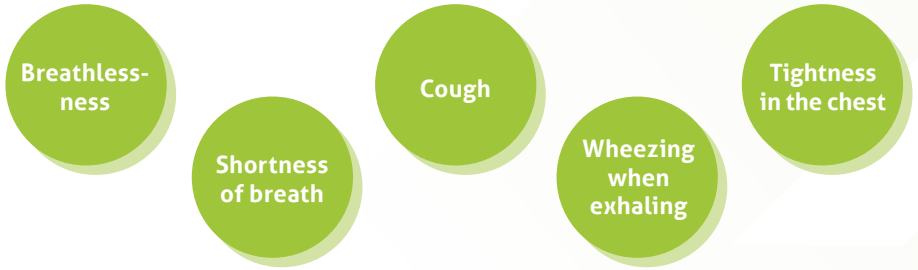
AIRWAYS IN THE HUMAN BODY



CROSS SECTIONS OF NORMAL AND ASTHMATIC AIRWAYS



TYPICAL SYMPTOMS



POTENTIAL TRIGGERS

Non-allergic triggers:
e.g. smoking, infections, exhaust fumes, cold air

Allergic triggers (allergens):
e.g. pollen, animal hair, foodstuffs, dust mites

DRUG-BASED TREATMENT

In general, there are two main types of medicines used to treat asthma:

Long-term medicines (controllers)
are used regularly and over a long period of time. They remain effective over a long period and, over time, develop a preventive effect.

Quick-relief medicines (relievers)
are used to treat acute symptoms, such as breathlessness or an asthma attack. They are used to dilate the airways quickly, although this effect does not last for a long time.

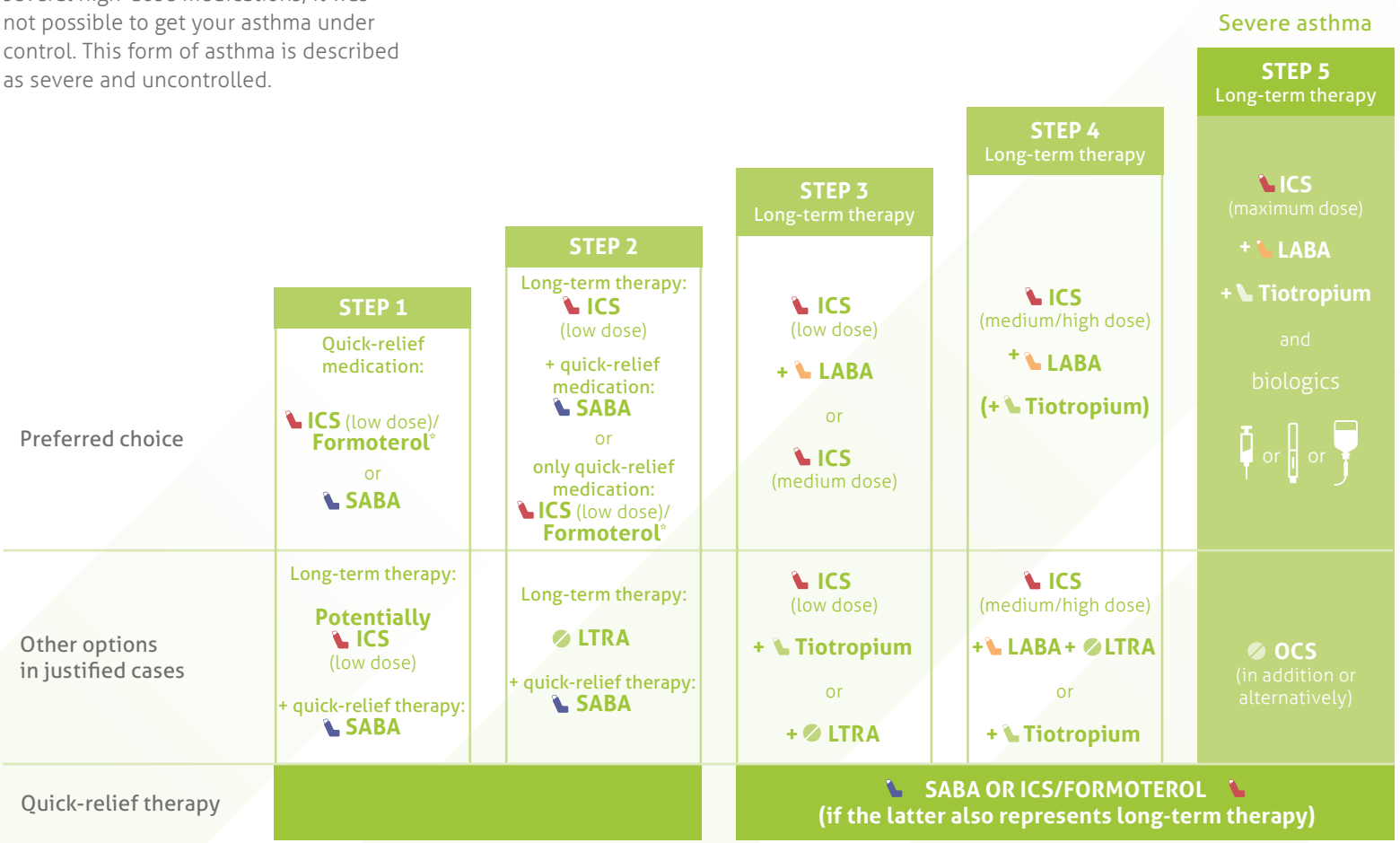
Medicine/ substance class	Type of medicine	Method of administration	Effect
ICS (inhaled corticosteroids)	Long-term medicine		Inhibit the inflammation of the bronchi
SABA (short-acting beta-adrenoceptor agonists)	Quick-relief medicine		Relax/dilate the bronchial muscles and thus the airways, short duration of action
LABA (long-acting beta-adrenoceptor agonists)	Long-term medicine		Relax/dilate the bronchial muscles and thus the airways, long duration of action
LTRA (leukotriene receptor antagonists) **Montelukast**	Long-term medicine		Inhibit the inflammation of the bronchi and relax/dilate the bronchial muscles
OCS (oral corticosteroids)	Fast relief for sudden worsening in symptoms or, if necessary, long-term treatment		Suppress inflammation throughout the body
LAMA (long-acting muscarinic receptor antagonists/ anticholinergics), **Tiotropium**	Long-term medicine		Relax/dilate the bronchial muscles and thus the airways
Monoclonal antbodies (biologics)	Long-term medicine		Take direct action on the inflammation processes that occur with certain forms of asthma

WHAT MAKES ASTHMA 'SEVERE'?

The aim of any asthma therapy is to keep the asthma under control. In order to achieve the best possible asthma control, your doctor will generally work using a five-step treatment regimen.

You may well remember that when you were first diagnosed, you probably received just one asthma inhaler. If your asthma was not sufficiently controlled by the prescribed drug, i. e. you continued to experience symptoms, your treatment would have been moved up to the next step – either with additional medicines and/or a higher dose. Despite the use of several high-dose medications, it was not possible to get your asthma under control. This form of asthma is described as severe and uncontrolled.

STEP-BY-STEP ASTHMA THERAPY IN ADULTS



* The fixed combination of ICS/formoterol has not yet been approved for use in Steps 1 and 2; therefore it can only be used in these steps at the discretion of the doctor (off-label use).

SABA = short-acting beta-adrenoceptor agonists
LABA = long-acting beta-adrenoceptor agonists
LTRA = leukotriene receptor antagonists
ICS = inhaled corticosteroids
OCS = oral corticosteroids

WHAT MAKES ASTHMA 'UNCONTROLLED'?

Generally speaking, asthma is easy to treat. This means that most people with asthma will be able to control their disease with the drugs in therapy steps 1 to 4. Ideally, the patient will experience no, or only few, symptoms during the day and night. Physical activity can generally be performed without restrictions. Emergency medicines are rarely needed. Well-controlled asthma should always be the therapy goal.

Uncontrolled, or insufficiently controlled, asthma is when symptoms still occur despite the correct and regular administration of the prescribed medicines.

Your treatment team, or you yourself, will be able to determine whether your asthma is controlled or not by using a simple test. The degree of control over the asthma decides whether your therapy needs to be adjusted or not. This may mean that you are prescribed other medicines or that they may need to be taken more frequently or in higher doses.

Answering four questions about your symptoms in the past four weeks helps to gauge the degree of control over the asthma. Keeping an asthma diary may help you to answer these questions.

HELPFUL QUESTIONS IN ORDER TO GAUGE HOW WELL YOUR ASTHMA IS CONTROLLED

In the past four weeks, have you:	No	Yes
asthma symptoms during the day more often than 2x a week*?	☐	☐
Woken up in the night due to asthma symptoms?	☐	☐
se of on-demand medication** more often than 2x a week?	☐	☐
Experienced limitations to your daily activities due to asthma?	☐	☐

* In children and adolescents, the one-time occurrence of asthma symptoms during the day or the single use of on-demand medication during the last 4 weeks applies.

** Excludes on-demand medication used prior to sporting activities.

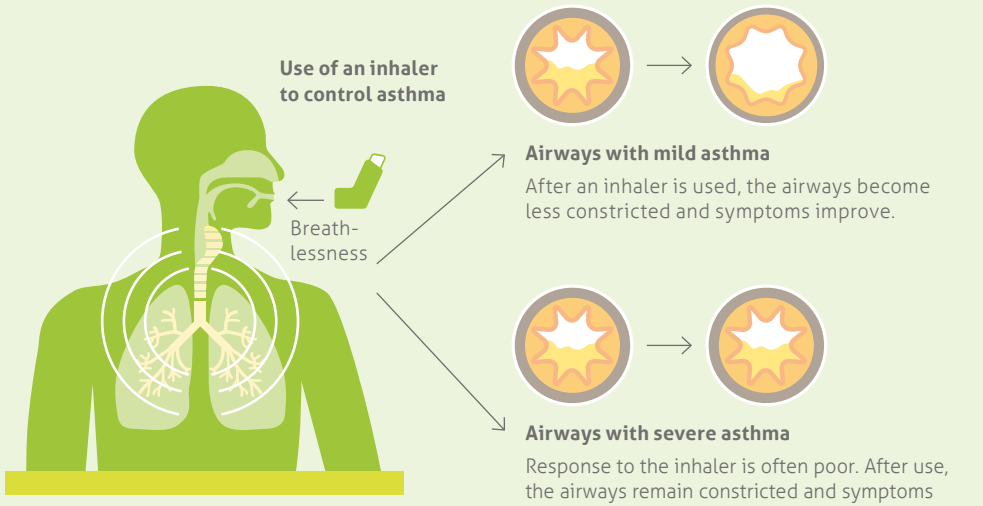
SEVERE ASTHMA – WHAT HAPPENS IN THE LUNGS?

Whether you have mild or severe asthma, the cause is always chronic (ongoing) inflammation of the airways.

The inflammation caused by chronic severe asthma may lead to permanent changes in the structure of the lungs, just as scars form when a wound does not heal properly.

This process is known as airway remodelling. It results in the formation of more connective tissues, the proliferation of muscle cells and an increase in the number of mucilaginous cells. The airways become narrower and this effect cannot be countered by the use of an inhaler. The asthma symptoms persist.

USE OF AN INHALER: DIFFERENCES BETWEEN MILD AND SEVERE ASTHMA



CAUSE OF ASTHMA – A PERMANENT INFLAMMATION OF THE AIRWAYS

Normally, inflammation is a natural and helpful response of the immune system in order to identify foreign bacteria, for example, and render them harmless. With asthma, however, the immune system is overactive and reacts to what are actually harmless triggers with intense inflammation reactions in the airways.

Inflammation is a complex process that involves lots of cells in the immune system and other cells in the body. So that the different cells are able to do their jobs, they need to work in close partnership with one another.

This communication occurs with the aid of various messenger substances. They are produced and released by immune cells in order to coordinate the inflammation process and regulate the activity of the cells involved.

Due to the overactive immune system associated with asthma, there is an excess of pro-inflammatory messenger substances. This means that the inflammation in the airways cannot heal but is triggered and re-inflamed over and over again.

02
ASTHMA WITH TYPE 2 INFLAMMATION

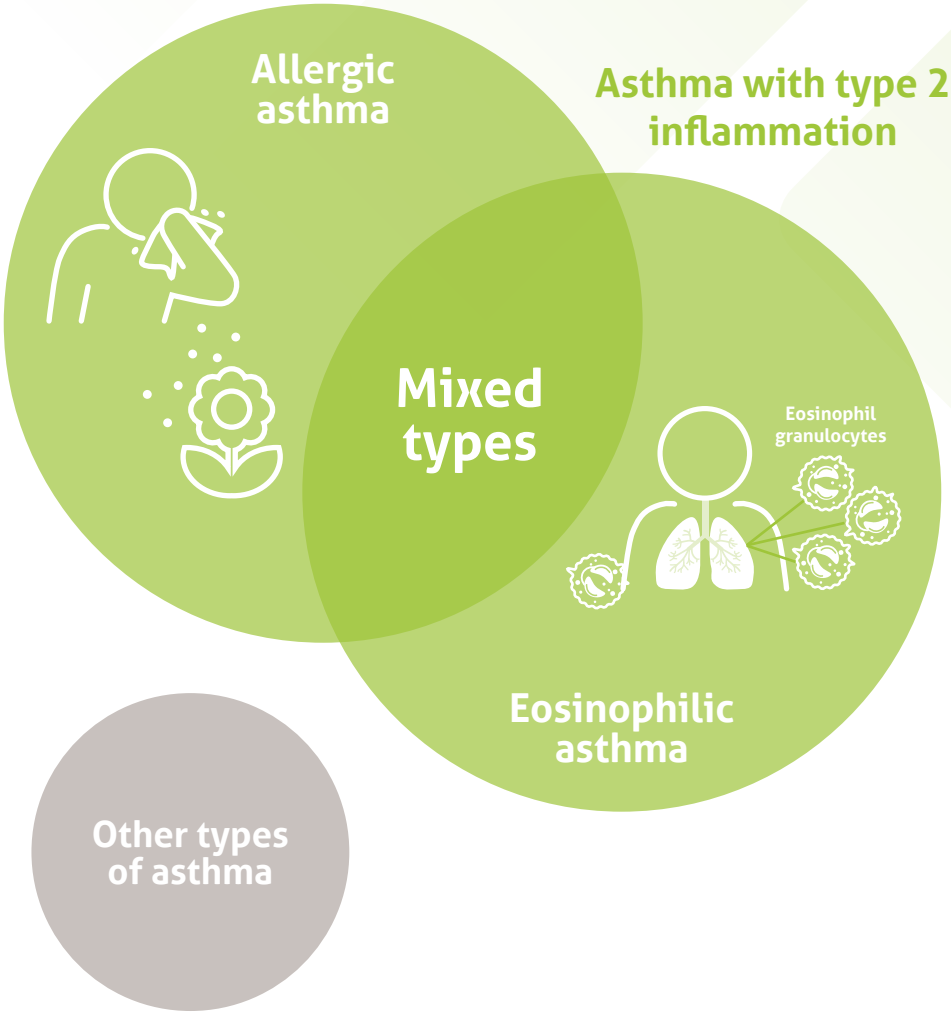
NOT ALL TYPES OF ASTHMA ARE THE SAME

Not all types of asthma are the same. In fact, there are various types. In the past, we used to distinguish between allergic and non-allergic asthma, depending on the triggers.

Nowadays, it is known that many adult patients with severe asthma have a specific type of inflammatory reaction, so-called type 2 inflammation. As a result, we now distinguish between asthma either with or without type 2 inflammation. Type 2 inflammation reactions are observed both with allergic and non-allergic asthma, as well as in mixed types. One of the types of non-allergic asthma is eosinophilic asthma. Eosinophilic granulocytes (or eosinophils for short) are immune system cells that are much more prevalent in the lungs and blood with this type of asthma.

Types of asthma that do not involve type 2 inflammation are much rarer. Such forms may include asthma caused by obesity, or neutrophilic asthma, which is a form of asthma where certain cells known as neutrophilic granulocytes are present in higher numbers.

THE DIFFERENT TYPES OF ASTHMA



TYPE 2 MESSENGER SUBSTANCES – THE TRIGGERS OF TYPE 2 INFLAMMATION

The type 2 messenger substances interleukin-4 (IL-4), interleukin-13 (IL-13) and interleukin-5 (IL-5) play a particular role in asthma with type 2 inflammation.

The type 2 messenger substances trigger their effect via specific attachment sites on cells known as receptors. Receptors for IL-4, IL-13 and IL-5 can be found on many cells that are involved in inflammation processes and that are present in various types of asthma.

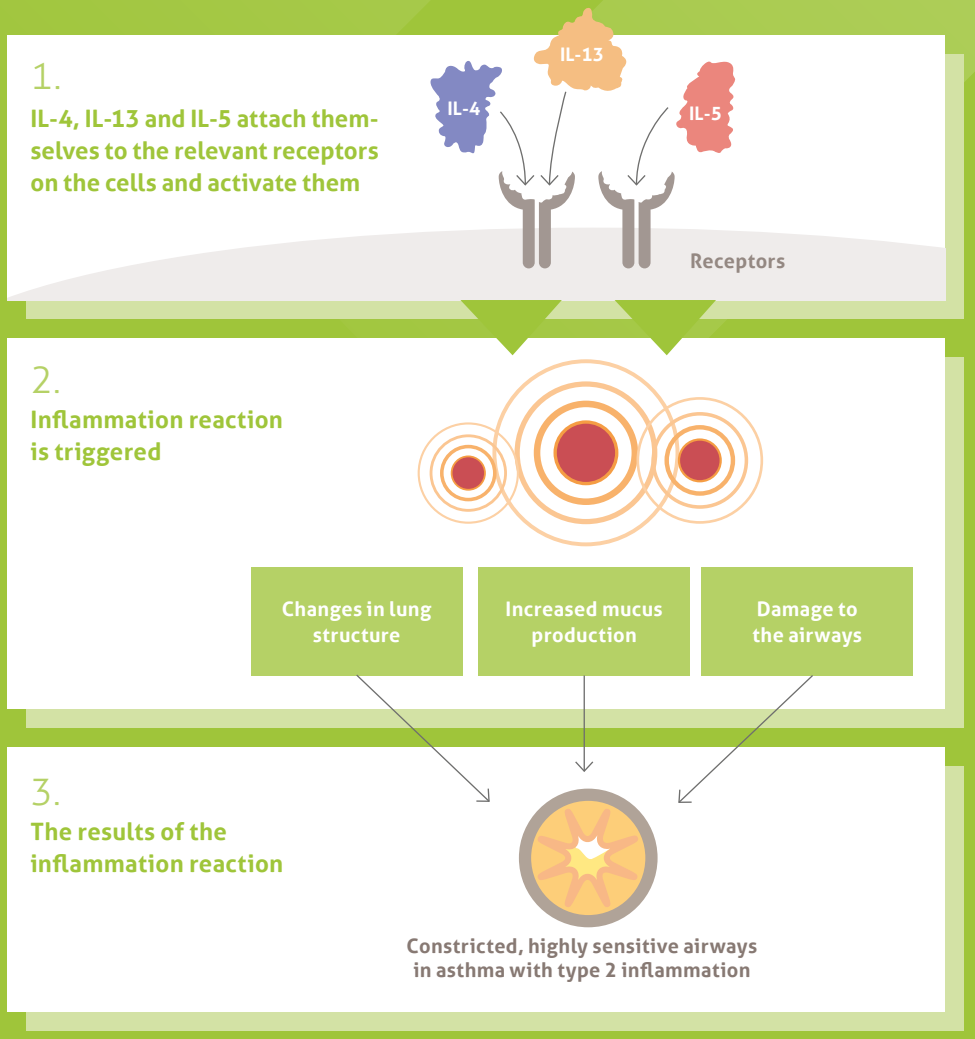
If the interleukin attaches to the relevant receptor, an inflammation reaction is triggered. This may cause damage to the lung tissue, a change in lung structure and increased mucus production. The result is constricted and highly sensitive airways.

The overactive immune system resulting in excess interleukins causes the ongoing and recurrent, i.e. chronic, inflammation of the airways.

INTERLEUKINS (IL)

Interleukins are messenger substances that regulate immune system processes by transmitting messages between cells. They are divided into several groups, which are numbered in the order in which they were discovered. Depending on the type of interleukin and the target cell, they fulfil a wide range of functions. In this way, interleukins may promote inflammation but also inhibit it. In asthma with type 2 inflammation, IL-4, IL-13 and IL-5 are in the 'pro-inflammatory' category and play a major role in the permanent inflammation of the airways.

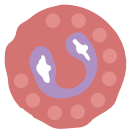
THE EFFECTS OF THE TYPE 2 MESSENGER SUBSTANCES IL-4, IL-5 AND IL-13 ON THE AIRWAYS



BIOMARKERS – WHAT ARE THEY?

In order to be able to distinguish between the different types of asthma, we analyse different disease characteristics in the blood, saliva and breath. These characteristics are called biomarkers and they provide information about the type of asthma. The better we can understand the individual 'asthma fingerprint', the easier it is to optimise the therapy because not all forms of asthma respond to all drugs in the same way.

THE FOLLOWING BIOMARKERS MAY BE ELEVATED WITH ASTHMA:



Eosinophilic granulocytes are cells in the body's immune system and are found in the blood. With eosinophilic asthma, caused by type 2 inflammation, they are responsible for the inflammation of the airways. Because they enter the airways via the bloodstream, they are present in excessive amounts not only in the saliva but also in the blood with eosinophilic asthma.

IgE antibodies (immunoglobulin E antibodies) play a central role in allergic asthma, which is also caused by type 2 inflammation. In this form of asthma, substances that are actually harmless, such as pollen and dust, trigger an allergic reaction and thus also asthma. IgE antibodies are therefore present in high numbers in the blood of patients with allergic asthma.

FeNO describes the amount of exhaled nitric oxide (NO). When the airways are inflamed, more nitric oxide than normal is released by the cells in the respiratory tract mucosa. FeNO can therefore serve as a marker for the degree of inflammation in the airways.

03
WHAT IS DUPIXENT® AND HOW DOES IT WORK?

WHAT IS DUPIXENT®?

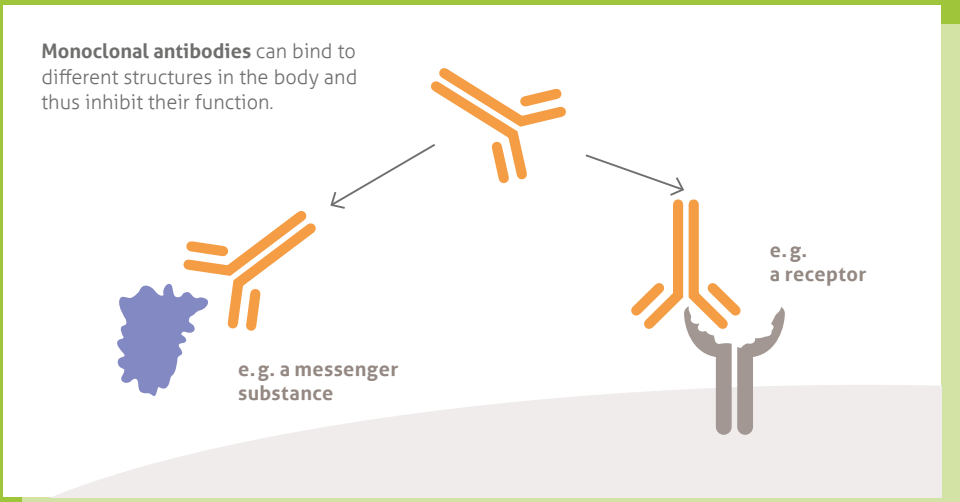
Your doctor has prescribed you DUPIXENT® in order to treat your severe asthma.

The active substance in DUPIXENT® is called dupilumab. Dupilumab is what is known as a monoclonal antibody. It specifically targets the most common cause of severe asthma, type 2 inflammation, by blocking the effect of the pro-inflammatory type 2 messenger substances interleukin-4 and interleukin-13.

WHAT ARE MONOCLONAL ANTIBODIES?

Monoclonal antibodies are complex substances that have been successfully used for several years now to treat lots of different types of disease (such as asthma and eczema, but also autoimmune diseases such as multiple sclerosis and rheumatism and even cancer). As a result of their highly specific effect, they have revolutionised medicine. Monoclonal antibodies are classed as biologics. Biologics are drugs that are manufactured using biotechnology.

Monoclonal antibodies are effective because of their precision: they can identify a specific molecule in the body – such as a particular receptor for a pro-inflammatory messenger substance. The monoclonal antibody binds to the receptor and thus prevents the messenger substance from binding to it. The molecule 'bound' or 'blocked' by the antibody can therefore no longer fulfil its original function, such as to trigger an inflammation reaction.



HOW DOES DUPIXENT® WORK?

As described in Chapter 02 (page 16), the most common cause of asthma is type 2 inflammation of the airways. Various type 2 messenger substances are involved here in the inflammatory reactions, including interleukins 4 and 13.

DUPIXENT® specifically blocks the effect of IL-4 and IL-13 by binding with their receptors. This means that these interleukins can no longer attach to their receptors and trigger the pro-inflammatory reaction. DUPIXENT® therefore contains the inflammation reactions triggered by IL-4 and IL-13.

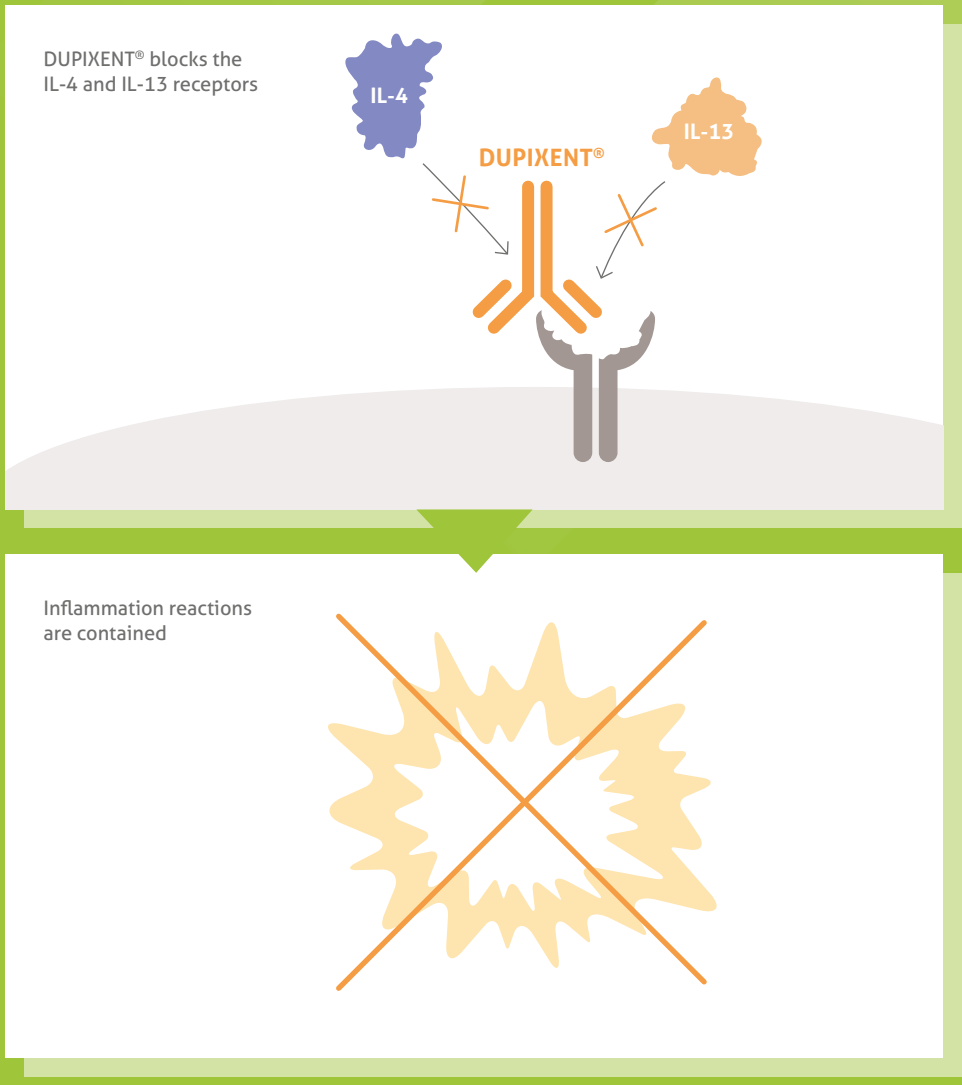
In other words: DUPIXENT® acts like a doorman at the attachment sites for IL-4 and IL-13. This means that the damaging messenger substances can no longer cause the negative inflammation reactions.

DUPIXENT® helps prevent severe asthma attacks (exacerbations) and can improve your breathing. DUPIXENT® may also help reduce the amount of another group of medicines you need to control your asthma, called oral corticosteroids, while preventing severe asthma attacks and improving your breathing.

ACCOMPANYING CONDITIONS COMMON WITH SEVERE ASTHMA

It is quite common for patients with severe asthma to suffer from other diseases also caused by type 2 inflammation.

Common accompanying conditions include:
• Hayfever • Atopic dermatitis • Nasal polyps



04
HOW SAFE IS DUPIXENT®?

Clinical trials have proven both the efficacy and the good overall tolerability of DUPIXENT®. Having said this, DUPIXENT® – just like any medicine – can cause side effects, although not everybody gets them.

The most commonly reported side effects are reactions at the injection site, such as redness, swelling and itching.

Very rarely, DUPIXENT® can cause serious side effects, including allergic (hypersensitivity) reactions and anaphylactic reactions.

You must look out for signs of these conditions while you are taking DUPIXENT®:

- Breathing problems
- Swelling of the face, lips, mouth, throat or tongue (angio-oedema)
- Fainting
- Dizziness
- Feeling lightheaded (low blood pressure)
- Fever
- General ill feeling
- Swollen lymph nodes
- Hives
- Itching
- Joint pain
- Skin rash

Stop using DUPIXENT® and tell your doctor or get medical help immediately if you notice any signs of an allergic reaction.

Please read the package leaflet for a complete list of side effects.

If you get any side effects, talk to your doctor, pharmacist or nurse. This includes any possible side effects not listed in this leaflet.

05

HOW IS DUPIXENT® TREATMENT CARRIED OUT?

DUPIXENT® is used together with other asthma medicines for maintenance therapy in patients 6 years of age and older suffering from severe asthma when the disease is not adequately controlled by their current asthma medications alone.

DUPIXENT® is available in two different doses – 200 mg and 300 mg. It is a solution for injection supplied in a pre-filled glass syringe with a needle shield or in a pre-filled pen. Your doctor will decide which dose of DUPIXENT® is right for you and whether you will be prescribed a pre-filled syringe or pre-filled pen.

ADMINISTRATION OF DUPIXENT® IN ADULTS AND ADOLESCENTS AGED 12 YEARS AND OVER**

DUPIXENT® is given by injection under your skin (subcutaneous injection) every two weeks. You will receive two injections of DUPIXENT® on the first day of your treatment. This is your initial dose. Once you have started the treatment, you will just need one dose of DUPIXENT® every two weeks.

* Only the pre-filled syringe may be used for children under 12 years of age.

** Other information applies to the treatment of children from 6 to 11 years of age. Please refer to the package leaflet.

WHY IS IT IMPORTANT THAT DUPIXENT® IS INJECTED EVERY TWO WEEKS?

Several clinical trials have investigated the dose and dose frequency of DUPIXENT® in order to achieve the best effect. The best effect on lung function and the best reduction in asthma attack frequency was achieved when DUPIXENT® was administered in two-week intervals at a dose of 200 or 300 mg, depending on the patient population.

DUPIXENT® is intended for long-term therapy. Do not stop using DUPIXENT® without consulting your doctor. Discontinuation of therapy may, under certain circumstances, lead to a worsening of asthma control.

So that you can keep an overview of your DUPIXENT® therapy, you can note down the date of your injection in your asthma diary every two weeks. It is also useful for you and your doctor to be able to track the progression of your disease and to monitor the success of the treatment. Therefore, take your asthma diary with you to every check-up with your pulmonologist.

CAN DUPIXENT® ALSO BE ADMINISTERED AT HOME?

DUPIXENT® is given by injection under your skin (subcutaneous injection). You and your doctor or nurse should decide if you should inject DUPIXENT® yourself.

You must not try to give yourself or someone else the injection unless you have received training from your healthcare professional. In adolescents 12 years and older, it is recommended that DUPIXENT® be administered by or under supervision of an adult. For children under 12 years of age DUPIXENT® should be administered by a caregiver.

You can find an in-depth, step-by-step guide to how to use DUPIXENT® in the accompanying instructions for use. This shows you in simple steps how to use the pre-filled syringe or pre-filled pen at home.

06
FREQUENTLY ASKED QUESTIONS

I'm allergic to DUPIXENT® or one of the components in the medical product. What should I bear in mind?

Do not use DUPIXENT® if you are allergic to DUPIXENT® or any of the other ingredients of this medicine or if you think you may be allergic, or you are not sure, ask your doctor, pharmacist or nurse for advice before using DUPIXENT®. Besides dupilumab as the active substance of DUPIXENT® the other ingredients are arginine hydrochloride, histidine, polysorbate 80 (E433), sodium acetate, glacial acetic acid (E260), sucrose, water for injections.

Can DUPIXENT® cause allergic reactions?

Very rarely, DUPIXENT® can cause serious side effects, including allergic (hypersensitivity) reactions and anaphylactic reactions. You must look out for signs of these conditions (i.e. breathing problems, swelling of the face, mouth, and tongue, fainting, dizziness, feeling lightheaded (low blood pressure), fever, general ill feeling, swollen lymph nodes, hives, itching, joint pain, skin rash) while you are taking DUPIXENT®.

Stop using DUPIXENT® and tell your doctor or get medical help immediately if you notice any signs of an allergic reaction.

I am suffering from a parasitic infection (e. g. worms) or want to travel to a country where such infections are common. What should I bear in mind?

DUPIXENT® may weaken your resistance to infections caused by parasites. If you already have a parasitic infection it should be treated before you start treatment with DUPIXENT®. Check with your doctor if you have diarrhoea, gas, upset stomach, greasy stools, and dehydration, which could be a sign of a parasitic infection.

If you live in a region where these infections are common or if you are travelling to such a region check with your doctor.

Can I take DUPIXENT® in conjunction with other medicines?

If you are using, have recently used or might use any other medicines, or if you have recently had or are due to have a vaccination you should always inform your doctor or pharmacist.

DUPIXENT® is an add-on treatment. You should always continue to take all other medicines as discussed with your doctor.

Do not stop or reduce your asthma medicines, unless instructed by your doctor. These medicines (especially ones called corticosteroids) must be stopped gradually. This must be done under the direct supervision of your doctor and dependent on your response to DUPIXENT®.

What needs to be borne in mind with DUPIXENT® and vaccines?

There are a few important points that need to be observed with regard to vaccines. Inform your doctor if you have recently had or are due to have a vaccination.

How quickly does DUPIXENT® take effect?

The speed at which DUPIXENT® takes effect may vary widely from patient to patient. Please ask your doctor whether they have experience in the manifestation of the effect of DUPIXENT® from other patients.

What should I do if I am pregnant, or planning to become pregnant?

If you are pregnant, think you may be pregnant, or are planning to have a baby, ask your doctor for advice before using this medicine. The effects of this medicine in pregnant women are not known; therefore it is preferable to avoid the use of DUPIXENT® in pregnancy unless your doctor advises you to use it.

I am currently breast-feeding. Is there anything I need to bear in mind?

If you are breast-feeding or are planning to breast-feed, talk to your doctor before using this medicine. You and your doctor should decide if you will breast-feed or use DUPIXENT®. You should not do both.

Can DUPIXENT® affect my ability to drive?

DUPIXENT® is unlikely to influence your ability to drive and use machines.

Does DUPIXENT® contain sodium?

DUPIXENT® contains less than 1 mmol sodium (23 mg) per 300 mg or 200 mg dose, that is to say essentially 'sodium-free'.

What should I do if I have used more DUPIXENT® than prescribed?

If you use more DUPIXENT® than you should or the dose has been given too early, talk to your doctor, pharmacist or nurse.

What should I do if I have missed an injection?

If you have forgotten to inject a dose of DUPIXENT®, talk to your doctor, pharmacist or nurse.

When should I stop taking DUPIXENT®?

Do not stop taking any medicine unless instructed by your doctor. Do not stop using DUPIXENT® without having first discussed it with your doctor. DUPIXENT® is intended for the long-term treatment of severe asthma. Your doctor will check regularly whether you should continue to take DUPIXENT®.

How should DUPIXENT® be stored?

Keep this medicine out of the sight and reach of children.

Store in a refrigerator (2 °C to 8 °C).
If necessary, pre-filled syringes and pre-filled pens may be kept at room temperature up to 25 °C for a maximum of 14 days. Do not store above 25 °C.

If you need to permanently remove the carton from the refrigerator, write down the date of removal in the space provided on the outer carton, and use DUPIXENT® within 14 days.

Store in the original package in order to protect from light.

When should I no longer use DUPIXENT®?

Do not use this medicine after the expiry date which is stated on the label and carton after 'Verw. bis' or 'Verwendbar bis'. The expiry date refers to the last day of that month. Do not use this medicine if you notice that the medicine is cloudy, discoloured, or has particles in it. If the medicine has been frozen, it should no longer be used. Please dispose of this medicine in line with local regulations. Ask your doctor, pharmacist or nurse how to throw away medicines you no longer use. These measures will help protect the environment.

07
GLOSSARY

Add-on treatment – An add-on treatment, or add-on maintenance therapy, is the additional administration of a medicine alongside an existing medication.

Airway remodelling – Airway remodelling is a process describing changes to the lung structure that, with asthma, is caused by chronic inflammation. It leads to the increased growth of the muscle layer in the bronchi, which constricts the airways.

Allergens – Allergens are substances (such as pollen or animal hair) which are actually harmless but which may trigger allergic reactions.

Atopic dermatitis – Atopic dermatitis, or eczema, is a chronic inflammatory skin condition that is characterised by a highly itchy rash.

Biologics – Biologics are pharmaceutical substances that are made using biotechnology (e.g. monoclonal antibodies) and that are intended to target specific inflammatory messenger substances, for example.

Biomarkers – Biomarkers are verifiable characteristics that may indicate a specific disease or provide information about the progression of a disease. With asthma, the number of eosinophilic granulocytes, concentration of IgE antibodies or the amount of exhaled nitric oxide (FeNO) may act as biomarkers.

Bronchi – The bronchi are part of the respiratory system and branch out from the windpipe to supply the entire lung.

Bronchioles – The bronchioles are the finest branches of the respiratory system. They end in tiny air sacs (alveoli), which is where the gaseous exchange of oxygen and carbon dioxide takes place.

Chronic – A chronic disease means that the disease occurs over a long period of time, or is a life-long illness.

Eosinophilic granulocytes – Eosinophilic granulocytes are cells in the body's immune system and are found in the blood. In eosinophilic asthma, they are responsible for damaging the airways. Because they enter the airways via the bloodstream, they are detectable as biomarkers not only in the sputum but also in the blood of affected patients.

Exacerbation – Exacerbation means the acute worsening of a disease. For asthma, this includes an asthma attack.

Fractional exhaled nitric oxide (FeNO) – FeNO describes the amount of nitric oxide exhaled. When the airways are inflamed, more nitric oxide than normal is released by the cells in the lungs. FeNO is therefore a biomarker for the degree of inflammation in the airways.

IgE antibodies – IgE antibodies are proteins in the body's immune system and play a major role in allergic asthma, which makes them a biomarker present in elevated concentrations in the blood of affected individuals.

Interleukin – Interleukins are messenger substances that regulate immune system processes by transmitting messages between cells.

Maintenance therapy – Maintenance therapy, or long-term therapy, is the administration of a medicine for several years or for a lifetime.

Nasal polyps – Nasal polyps are build-ups of mucous membrane lining the nose that occur in the sinuses and migrate from there into the nasal cavity.

Neutrophilic granulocytes – Neutrophilic granulocytes are cells in the body's immune system. With neutrophilic asthma, they are present in elevated amounts in the sputum or blood.

Receptor – Receptors are found on the surface of cells, for example. They are attachment sites for specific messenger substances and transmit information from the cell's exterior to the interior, for example.

Sputum – Sputum is the mucous secretion coughed up from the bronchi. It is also known as phlegm.

Type 2 inflammation – Type 2 inflammation is the most common cause of asthma. It is the result of an overactive immune system that reacts to what are actually harmless triggers with extreme inflammation reactions in the airways. Types of asthma that are caused by type 2 inflammation include eosinophilic asthma and allergic asthma.

Type 2 messenger substances/interleukins – Type 2 messenger substances are substances that play a major role in type 2 inflammation. Some of these type 2 messenger substances include interleukin-4, interleukin-13 and interleukin-5, for example. They are produced and released by specific cells in the immune system. These messenger substances may cause damage to the lung tissue, change the lung structure and increase mucus production.

FURTHER INFORMATION:

Reading this information brochure is no substitute for reading the package leaflet. The DUPIXENT® package leaflet contains more in-depth information about the treatment with DUPIXENT®.

The package leaflet is included with your medicine. You can also find it at **www.mein.sanofi.de/produkte/DUPIXENT**.

If you have any more questions about the use of DUPIXENT®, please consult your doctor, pharmacist or nurse.

NOTES

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