BRODALUMAB

What are the aims of this leaflet?
This leaflet has been written to help you understand more about brodalumab (Kyntheum®). It tells you what it is, how it works, how it is used to treat skin conditions, and where you can find out more about it.

What is brodalumab and how does it work?
Brodalumab is a biologic medicine that has been designed to treat psoriasis. It works by blocking the effects of a family of chemical messengers (known as a ‘cytokines’) in the body called ‘interleukin-17s’ (IL-17s). We know that the IL-17 group of cytokines are one of the main causes of inflammation in psoriasis and, by blocking their effects, brodalumab can improve symptoms of psoriasis.

What skin conditions are treated with brodalumab?
Brodalumab is used to treat psoriasis.

Why have I been selected for treatment with brodalumab?
You have psoriasis which is severe enough to require treatment based on national guidelines. These include failure to improve on other treatments such as methotrexate. Alternatively, there may be safety reasons why you cannot receive these standard treatments, or they may have been tried but caused you problems so you had to stop them.

How long will I need to take brodalumab before it has an effect?
Some improvement in your psoriasis may occur in the first few weeks of treatment but it can take 3 months to see the full benefit. In clinical trials, more than 8 out of 10 patients were clear or nearly clear of their psoriasis by 3 months. If no significant improvement occurs the treatment will be stopped.

How do I take brodalumab?
Brodalumab is given as an injection under your skin (subcutaneously) using a pre-filled syringe device. A nurse or doctor will teach you how to use the syringe to inject yourself, and details are also given in the package insert. Injections are made under the skin of the stomach, thighs or upper outer arms. You will be provided with a special bin so that you can dispose of your syringes safely.
Brodalumab must be stored in a refrigerator (between 2 to 8°C). If you are travelling with your treatment, you should have a cool box or cool bag with icepacks to maintain the recommended temperature. Once brodalumab has been removed from the refrigerator and has reached room temperature (up to 25°C) it must either be used within 14 days or thrown away – it should not be put back in the fridge.

How should I take my medicine?
You will need to inject brodalumab once a week for the first three weeks and then every other week. If you respond this can be continued to maintain long-term control of your psoriasis.

What are the possible side effects of brodalumab?
Most of the side effects reported during clinical trials of brodalumab were mild, easily manageable, and did not require discontinuation of the treatment.

Mild
Reactions at the injection sites are usually mild and include redness, a rash, swelling, itching, or bruising. They usually go away within 3 to 5 days. If you have pain, redness or swelling around the injection site that doesn't go away, or gets worse, contact your dermatologist.

Cold & flu symptoms, sore throat
Mild fungal infections such as athlete’s foot, oral or genital thrush (candidiasis).

Headaches, sickness, diarrhoea.

Eye infections (conjunctivitis)

Aching joints (arthralgia), muscle pain (myalgia)

Tiredness (fatigue)

Potentially severe

Serious infections. Brodalumab may decrease your ability to fight infection. Your doctor will ask you about any current or past infections (particularly tuberculosis), or if you are prone to infections such as cold sores or urinary tract infections. If you develop any symptoms of tuberculosis (e.g. a dry cough that doesn’t go away, weight loss, fever, night sweats) call your doctor. Your doctor will also ask if you have or have ever had any disease that affects your immune system, such as cancer, human immunodeficiency virus (HIV) infection or viral hepatitis. Try to avoid close contact with anyone with a bad cold, influenza or chest infections, and wash your hands frequently when taking this medication.

Blood problems. Some patients in clinical trials were found to have problems producing enough of the blood cells that help to fight infections or stop bleeding.

Allergic reactions. It is a possible that some patients could experience an allergic reaction to brodalumab. Severe reactions requiring emergency treatment are very rare.

Thoughts of suicide and suicidal behaviour occurred in a small number of people taking brodalumab in clinical trials. Most of these people had a history of depression or suicidal
behaviour before the trial and no evidence has been found to suggest brodalumab caused this. If you have new or worsening symptoms of depression and/or suicidal thoughts you must tell a healthcare professional as you may need to stop brodalumab treatment. Your doctor will also ask about this at your regular follow up appointments.

How can the risk of side effects be minimised?

**Before you start taking brodalumab**, you will have a thorough consultation with your dermatologist/team including a clinical examination and a number of blood tests. Additional investigations may be required depending on your medical history (for example, a chest Xray or other imaging).

Your dermatologist will go through the below checklist. These situations do not necessarily mean that you cannot be treated with brodalumab, but may mean that other precautions are needed for you to have this treatment safely. Your dermatologist will discuss your individual situation and explain more about this.

- **Tuberculosis**, or close contact with someone who has had it.
- **Hepatitis or an HIV infection**, or if you think you are at risk of having these.
- **Infection and vaccination history.** If you are scheduled to have *any type of vaccination.*
- **Crohn’s disease;** if you have active disease or have a history of Crohn’s disease
- **Suicidal thoughts or behaviour.** You dermatologist will discuss with you whether you have ever experienced suicidal thoughts or behaviour. If you do have a history of depression your dermatologist will assess the risks and benefits of starting brodalumab.
- If you are scheduled to have *major surgery.*
- If you are *pregnant or breastfeeding or are planning a family.*

You are encouraged to take part in any *National Health screening programmes* at the routine time points recommended (e.g. with cervical smears, mammograms)

**During your treatment with brodalumab** you will be asked about side effects and have blood tests from time to time (for example every 6 months) at your clinic appointments. Keep your own doctor and/or your dermatology team informed at all times of changes to your medications, planned procedures and surgery or health problems including:

- **If you get an infection, or any symptom or sign of an infection that doesn’t go away,** including fever, lethargy, cough, influenza-like symptoms, burning on passing urine, dental problems, night sweats. Your dermatologist may suggest stopping brodalumab temporarily.

- **If you bruise or bleed very easily, or look very pale**

- **If you develop signs of a severe allergic reaction, such as a swollen face/tongue, throat tightness or difficulty with breathing (known as anaphylaxis), dial 999 for an ambulance**
immediately and go to a hospital Accident and Emergency department. Afterwards you should make sure that your dermatologist has been informed.

What will happen if I need an operation or dental surgery?
Brodalumab comes under the category of an ‘immune suppressant’ and therefore may increase your risk of getting an infection after a surgical procedure. For planned procedures, you may be advised to stop brodalumab prior to the surgery. Please discuss this with your doctor or dentist.

Can I have immunisations (vaccinations) whilst on brodalumab?

Patients on brodalumab should not be given any of the 'live' vaccines such as the flu vaccine administered through the nose (because when given this way a live vaccine is used), measles, mumps and rubella (MMR), yellow fever, bacillus Calmette-Guérin bacillus (BCG), rotavirus, oral typhoid, varicella (chickenpox) and herpes zoster (shingles). If you require immunisation with a live vaccine, brodalumab should be stopped for at least 6 months before (12 months in the case of shingles vaccine) and until 4 weeks after the vaccination. You should discuss this with your dermatologist.

‘Inactivated’ vaccines (e.g. Pneumovax and the annual flu vaccine administered by injection) are safe and recommended.

However you should always check with your healthcare professional when having a vaccination and make them aware that you are on brodalumab.

For more detailed information see the British Association of Dermatologists patient information leaflet on Immunisations).

Does brodalumab affect pregnancy?
We do not know the effect of brodalumab on conception (getting pregnant), on the developing baby or in breastfed babies, and so pregnancy and breastfeeding should be avoided during brodalumab treatment. The effect of brodalumab continues for some time after stopping treatment, so it is important that this is taken into account. If you are pregnant or are planning to become pregnant please discuss with your dermatologist as they will be able to advise on your individual circumstances.

Can I travel abroad while taking brodalumab?
Please discuss with your dermatologist if you are planning to travel abroad. Depending on where you are travelling, precautions may need to be taken against infections.

May I drink alcohol while taking brodalumab?
There is no known interaction between alcohol and brodalumab.

Can I take other medicines at the same time as brodalumab?
Most medicines are safe to take with brodalumab. However, it is important that your GP and other doctors are aware that you are taking it.

The BAD Biologic Interventions Register (BADDIR)
Because brodalumab treatment for psoriasis is relatively new, you will be asked to take part in a national register if it is prescribed for you. This register will collect valuable information on side effects and benefits and will inform doctors on how best to use brodalumab and similar drugs. No information will be passed to the register without your informed consent.

Where can I get more information about brodalumab?
This information sheet does not list all of the side effects of brodalumab. If you wish to find out more about brodalumab please speak to your doctor, specialist nurse or pharmacist.

For further details, look at the drug information sheet which comes as an insert with your prescription for brodalumab.

Or visit the emc website to view the patient information leaflet online
https://www.medicines.org.uk/emc/product/751/pil

The Psoriasis Association
https://www.psoriasis-association.org.uk/

Psoriasis and Psoriatic Arthritis Alliance (PAPAA)
http://www.papaa.org/

For details of source materials used please contact the Clinical Standards Unit (clinicalstandards@bad.org.uk).

This leaflet aims to provide accurate information about the subject and is a consensus of the views held by representatives of the British Association of Dermatologists: individual patient circumstances may differ, which might alter both the advice and course of therapy given to you by your doctor.

This leaflet has been assessed for readability by the British Association of Dermatologists’ Patient Information Lay Review Panel

BRITISH ASSOCIATION OF DERMATOLOGISTS
PATIENT INFORMATION LEAFLET
PRODUCED FEBRUARY 2019
REVIEW DATE FEBRUARY 2022