

BIOLOGIC THERAPIES

What are biologic drugs?

In some people with arthritis, high levels of certain proteins may be present in the blood and joints leading to inflammation (and therefore pain, swelling and stiffness). Biologics work to calm the body's overactive immune system by blocking these proteins and therefore help to stop inflammation from getting worse.

These biologic therapies have dramatically improved the lives of patients with conditions including rheumatoid arthritis (RA), ankylosing spondylitis (AS), psoriasis and psoriatic arthritis (PsA), and inflammatory bowel disease (IBD), as well as systemic inflammatory diseases such as lupus erythematosus (SLE) and vasculitis.

Biologic drugs we use in Rheumatology:

There are currently nine registered biologic drugs in South Africa. They are classified according to their target:

TNF-inhibitors: adalimumab (*Humira*), etanercept (*Enbrel*), golimumab (*Simponi*), and infliximab (*Remicade*)

T-cell costimulation inhibitor: Abatacept (*Orencia*)

B cell inhibitor: Rituximab (*Mabthera*)

IL 6 receptor inhibitor: Tocilizumab (*Actemra*)

IL-17 and IL-23 inhibitor: Ustekinumab (*Stelara*)

IL 12 inhibitor: Sekukinumab (*Consentyx*)

When is Biologic medicine prescribed?

In most cases, these drugs are prescribed when other drugs (such as Methotrexate and Leflunomide) have not worked.

How are biologics given?

Generally biologic need to be either injected just under the skin or given by a drip

What do I need to do BEFORE I take biologics?

Make sure that all your childhood vaccinations are up to date.

Have a **flu vaccine** every year **and a pneumonia vaccine** every 5 years.

If you are planning to travel overseas, please check with your doctor before have any vaccines. Live vaccines (such as Yellow Fever) cannot be taken if you are using a biologic.

How much do they cost?

Biologic are expensive drugs (R8 000- 10 000 per month), whether you are paying for them yourself, or through a provincial or private drug plan.

What are the possible Side Effects?

The common side effects are:

More frequent infections:

colds, tonsillitis and sinusitis, bronchitis, pneumonia, bladder or kidney infection, infection of the blood (septicemia), fungal Infections and shingles. Contact your doctor (GP) or Day

Hospital urgently if you have high temperature (fever), burning urine, cough, non-healing wounds, or toothache.

If you have to take antibiotics for an infection, you must stop taking your biologic until you are better. Your doctor will let you know when you can start your biologic treatment again.

Tuberculosis (TB):

Try not to have contact with anyone who has TB as you can get TB more easily than other people. Visit your doctor or local clinic for a TB test if you have:

- cough for more than 2 weeks,
- weight loss
- night sweats
- swollen glands.

Because the risk of TB in SA is so high, your doctor may prescribe isoniazid (INH) and pyridoxine to take every day to reduce your risk of developing TB. INH is one of the drugs used to treat TB, and studies show that taking this tablet once a day greatly reduces your chances of catching the TB. Talk to your doctor if you are unhappy with using INH.

Other uncommon side effects:

Upset stomach (Nausea, stomach pain), Itching, Headache, Depression

Pain, redness, swelling and itching at the injection site

There is a slight increased risk of skin cancer. Talk to your doctor if you notice changes to your skin.

There is a very small increased risk of nervous system disorders like multiple sclerosis: talk to your doctor if this diagnosis is in your family, or if you experience numbness or tingling, arm or leg weakness or double vision.

What are some things I need to know or do while I take Biologics?

- Smoking increases your risk of cancer and infections and reduces the chances of the biologic drugs working. Time to quit already!
- If you have an **infection (cold, flu, septic wound)** or still be on antibiotics on the day that you need to inject your biologic, wait till you are better, or till the antibiotics are finished before injecting.
- If you are about to undergo **surgery** or dental procedures, please inform your doctor that you are taking a Biologic. Speak to your Surgeon and Rheumatologist – who will decide whether you should stop biologic before your operation, and when to restart after the operation.
- **If you are travelling**, Biologics need to be refrigerated and kept in a cold at all times. A travel pouch is provided should you need to take your injection with you on holiday or a business trip. When travelling overseas you need a doctor's letter stating what your injection is, and there should be no problems with customs.
- Talk your doctor if you want to get pregnant.

Contact us:

- Talk to your rheumatologist and rheumatology nurse at your next appointment or phone during clinic times: (021) 404 5394 (Monday or Friday) or (021) 404 5313 (Thursday)
- The SA arthritis foundation (www.arthritis.org.za, 021 425 2344) is the charity leading the fight against arthritis, and offers online or telephone advice.