

Do you experience side effects?

Strong medication has the advantage of having a strong effect on a disease, however, it is sometimes also associated with unwanted side effects. You may not feel 100% after your injection, but we have some tips to help you through.

Are you experiencing fever, chills or body aches after Betaferon® administration?

Of course your doctor is always your first address to go to, if you feel unsecured and worried. He/she will know what is the best treatment plan for your particular type of MS. Apart from them you can ask a dedicated **Betaferon® nurse** in your vicinity (if available).

The face-to-face contact with someone experienced health care professional you trust is always a big relief and support.

It is a known mechanism that the interferon will start to make you having side effects such as so-called flu-like symptoms. They may come out 4-5 hours after injection, particular during the first weeks of your therapy. If you experience extreme or unbearable symptoms after injection, your doctor might put you on a titration schedule, which could look something like this one.

Week 1 and 2 -> 0.25 mL

Week 3 and 4 -> 0.5 mL

Week 5 and 6 -> 0.75 mL

There after -> full dose

Two more tips to get rid of flu-like symptoms are:

- inject Betaferon® at night-time. Inject yourself before you go to bed and you simply sleep it away, or
- take a fever-reducing medication like paracetamol or ibuprofen half an hour before drug administration. This will reduce the symptoms.

Do your injection sites concern you for any reason?

First of all you don't need to panic. It is known that in many patients Betaferon® therapy causes injection site reactions (ISR). ISRs tend to become less frequent with time.

About 25% of the Betaferon® patients reported the first occurrence of such events in the first five days of therapy, in approximately 50% these symptoms first occurred by day 16 of treatment.

In clinical trials the incidence of ISRs of Betaferon® patients decreased from 62.8% during the first 3 months to a quarterly incidence of 5%-8% from month 4 to 2 years of treatment. 26.5 % of the patients did not report any injection site reaction during 30 months of treatment.

There is a wide range of recommendations and tips to overcome this problem:

- Betaferon®-Hotline to ask for instant help (if available in your country)
- If you feel uncertain with your injection technique check with your MS nurse or seek help from a dedicated Betaferon® nurse in your vicinity (if available)
- Avoid intracutaneous injection, i.e. injection deeply into the skin
- Leave the needle free of Betaferon® solution before injection. This can best be managed by using different

- needles for reconstituting and injecting the drug
- Rotate the injection sites with dose, e.g. day1: right thigh, day3: left abdomen, day5: left thigh and so on
 - Do not use any areas where there are lumps, bumps, firm knots or pain
 - Do not use any area in which the skin is red, discoloured or depressed
 - Stop any painful injection
 - Put a cool pack before and after injection at the injection site
 - Review periodically the procedure for the self-administration especially if ISRs have occurred
 - If you have multiple lesions Betaferon® should be discontinued until healing has occurred. With a single lesion you may continue on Betaferon® unless the lesion is too big
 - Use an automated injection technique, i.e. one of the autoinjectors Betaject comfort® or Betaject Light®. It has been proven in medical trials that use of autoinjectors minimises occurrence of injection site reactions.

How to avoid fever under Betaferon® therapy?

To avoid a worsening of MS symptoms due to the occurrence of Betaferon®-related flu-like symptoms one approach is to give anti-inflammatory drugs like Paracetamol or Ibuprofen in a dose range between 500mg and 1000mg at the time of and 4 hours after injection.

In cases of short-term onset of flu-like symptoms a prophylactic intake 4 hours before Betaferon® injection is also possible.

Is there a causal relation between Betaferon® and depression?

It has been found by researchers that occurrence of is increased in the MS population compared to the healthy population. However, you should be aware that depressive disorders may also be a side effect of Betaferon® treatment.

If you experience depression under Betaferon®, you should talk to your doctor. They may prescribe you an anti-depressive medication or recommend additional psychotherapeutic interventions. In a medical trial the researchers attributed a somewhat higher frequency of depressive symptoms in the Betaferon® treatment group than in the placebo arm of the trial.

Depression is no contraindication of Betaferon®, though therapy may be inappropriate in individuals who have a history of suicide attempts or who have major depressive ideation requiring psychiatric intervention or admission to an institution.