

# Sativex (nabiximols)

# Fact Sheet



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We hope you find the information in this factsheet helpful. If you would like to speak with someone about any aspect of MS, contact the MS Trust information team and they will help find answers to your questions.

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# Sativex (nabiximols)

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This factsheet is aimed at anyone affected by MS who needs basic information about Sativex and should be used to support discussion with a neurologist, MS nurse or other health professional.

## 1. Introduction

Sativex was the first cannabis-based medicine to be licensed in the UK. It is licensed for use as an add-on treatment for MS-related spasticity (muscle stiffness) when people have found that other medicines have not worked well or found their side effects intolerable.

## 2. What is Sativex?

Sativex is a mouth (oromucosal) spray formulated from two chemical extracts derived from the cannabis plant and contains delta-9 tetrahydrocannabinol (THC) and cannabidiol (CBD). Cannabis plants are thought to contain more

than 60 such chemicals - known as cannabinoids - but these two specific cannabinoids have been studied for their effects in MS.

### **3. How does Sativex work?**

The way cannabinoids work is not fully understood but discovery of the endocannabinoid system, a natural system of receptors in the human body, has provided some insight. Receptors are protein molecules in or on the surface of cells to which a substance (such as a drug) can bind, causing a change in cell behaviour or activity. The active ingredients of Sativex exert their effects upon the CB1 receptor and the CB2 receptor. CB1 receptors are thought to exert their effects in the brain while CB2 receptors are thought to exert their effects on immune cells.

### **4. Who can be prescribed Sativex?**

The established anti-spasticity drugs, such as baclofen and gabapentin, remain the first line treatments for MS spasticity. If these treatments are not working well or have intolerable side effects, Sativex may be considered. Sativex is licensed as an add-on therapy – meaning that it will be prescribed in combination with other anti-spasticity medications. The addition of Sativex means that it may be possible to decrease the dose of other anti-spasticity medication and so decrease any troublesome side effects.

Clinical trials investigating the effects of Sativex on MS spasticity demonstrated that those people who experienced improvement (42%) did so within four weeks of receiving the medicine<sup>1-4</sup>. Consequently, Sativex is prescribed for a trial period, usually four weeks, in the first instance. If there is no clear improvement in spasticity-related symptoms, Sativex will be stopped.

Treatment with Sativex must be started and supervised by a specialist doctor with experience of treating people with MS spasticity such as a neurologist, consultant rehabilitation specialist or consultant pain specialist. In some areas, GPs can write prescriptions for Sativex but only when instructed to do so by the specialist.

The specialist doctor will conduct a full assessment of the severity of the spasticity and an evaluation of the response to standard spasticity treatments before considering if the person might benefit from Sativex.

## **5. How effective is Sativex in treating MS spasticity?**

A phase III trial investigating the effects of Sativex showed that 42% of participants had improvements in their spasticity. Amongst those who responded, about three quarters had an improvement of greater than 30% in their spasticity score<sup>3,4</sup> within four weeks when compared with those taking a placebo. Combined analysis of three clinical trials confirmed the effectiveness of Sativex<sup>5</sup>.

## **6. How often is Sativex taken?**

Sativex is sprayed into the mouth either on the inside of the cheek or under the tongue. The severity of spasticity symptoms varies from one person to another so the number of sprays needed depends on the individual. At the start of treatment, the prescribing doctor will advise on frequency and timing of mouth sprays and may suggest a gradual increase until the most effective dose is found.

The maximum dose of Sativex is 12 sprays per day. A gap of at least 15 minutes should be left between sprays. The doses can be spread over the day in a way that suits you. The effectiveness of treatment should be assessed from time to time to see if you should carry on taking it.

## **7. What are the side effects?**

You must not drive or use machinery when you first start Sativex and until you are on a regular daily dose.

The most common side effects are feeling sleepy or dizzy. These tend to occur in the first four weeks of treatment and wear off over time. Side effects can also be reduced by taking fewer sprays or waiting longer between sprays. People who experience any significant side effects should not drive, operate machinery or take part in any activity that could prove hazardous.

Studies into long-term use of Sativex in people with MS showed that sudden discontinuation of treatment did not result in any significant withdrawal-like symptoms. Some people reported temporary changes in their sleeping patterns, mood or appetite following discontinuation. The lack of withdrawal symptoms suggest that dependence on the treatment is highly unlikely<sup>6,7</sup>. Sativex did not affect cognition or induce any psychopathological symptoms<sup>8</sup>.

## **8. Does Sativex interact with other medicines?**

The prescribing doctor should be made aware of all other medications that the person is taking including over the counter and herbal medicines. Particular care should be taken if this includes any sleeping pills, sedatives or other drugs with sedative effects as combining these medicines with Sativex may cause increased sleepiness.

Care should be taken as a reduction in muscle tone and power can occur with Sativex and may lead to a greater risk of falls.

Sativex may interact with alcohol and can affect coordination, concentration and the ability to respond quickly.

## **9. Who should not be prescribed Sativex?**

People should not be prescribed Sativex if they:

- Have an allergy to cannabinoids or the other ingredients of Sativex – propylene glycol, ethanol and peppermint oil
- Have a known or suspected personal history or family history of schizophrenia, psychosis or other significant psychiatric disorder. This does not include depression which is part of the person's MS symptoms.
- Are breastfeeding.

People should check with their doctor or pharmacist if they:

- Are under 18 years of age
- Have epilepsy or regular fits (seizures)
- Have liver, kidney or heart problems
- Are elderly, due to the increased risk of falls
- Have previously abused any drug or substance
- Are pregnant or plan to become pregnant. Sativex should not be used unless the doctor believes the benefits of treatment outweigh the potential risks posed to the baby.
- Both men and women receiving Sativex should use effective contraception during treatment and for three months after stopping.

## **10. Funding of Sativex**

Sativex has not yet been assessed by NICE (the National Institute for Health and Clinical Excellence) but is being included in the review of Clinical Guideline 8, *Multiple sclerosis: management of multiple sclerosis in primary and secondary care*. A decision is expected in 2014.

Until then, funding decisions are made locally by the relevant NHS authorities according to local priorities and budgets. This means that funding is not always available.

In areas where Sativex is not routinely funded, specialists may submit an individual funding request (IFR) if they can make the case that the individual will benefit. IFRs are not always granted, meaning that some people opt to pay for Sativex themselves. The cost of fulfilling a private prescription varies widely depending on the pharmacy so it is worth calling around for the best price.

In April 2011, the Scottish Medicines Consortium (SMC), which plays the equivalent role to NICE for the NHS in Scotland, announced that it was unable to recommend Sativex within the NHS in Scotland as it had not received a submission from the holder of the marketing authorisation. However, an individual patient treatment request (IPTTR) can be made.

## **11. Travelling abroad with Sativex?**

Sativex is a controlled drug and its legal status varies between countries. People taking Sativex should check its legal status in the countries to which they are travelling by contacting the Embassy, Consulate or High Commission of each country for information about the rules on carrying controlled drugs.

Driving while taking Sativex may be illegal in some countries.

People leaving the UK will not need a Home Office license if they are travelling for less than three months or carrying less than three months supply of medicine. However, they will need a letter from their prescribing doctor that includes:

- Name, address, date of birth
- outward and return dates of travel

- the countries being visited
- the name, total amount and strength of the medicine being carried.

## **12. Clinical trials of Sativex**

Sativex has been studied for its effects on a number of MS-related symptoms including spasticity and spasms, pain, bladder symptoms<sup>9</sup>, tremor, and sleep disturbance.

Sativex is still in development as a possible treatment for cancer pain and neuropathic pain, including in MS.

## **13. Legal position of cannabis**

Sativex was the first cannabis-based medicine to be licensed in the UK so the legal arrangements for prescribing and using this particular form of cannabis are exceptional.

In contrast, 'street' cannabis is an illegal drug and is not currently recognised in law as having any medicinal value. The penalties for possessing or using cannabis are significant. Recent legal cases have indicated that the law makes no exception for people using or supplying cannabis to help relieve medical symptoms.

Cannabis and its derivatives are being tested in ongoing clinical trials. More information is available on the MS Trust website in the 'cannabis' entry of the A to Z of MS.

For further information on spasticity see the MS Trust's Spasticity and Spasms factsheet.

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