











Remedyfind.com

Remedyfind.com is an independent, unbiased site where patients rate the effectiveness of treatments for specific health problems.

Top 10 Remedies for Multiple Sclerosis

	Remedy Name	Weighted Rating (0 = poorest; 10 = best)	Num. of Ratings
RATE IT!	ReVia etc. (Naltrexone)	 9.1	(74)
RATE IT!	Marijuana (Cannabis Sativa / Indica)	 8.6	(48)
RATE IT!	Neurontin etc. (Gabapentin)	 7.3	(52)
RATE IT!	Provigil etc. (Modafinil)	 7.2	(78)
RATE IT!	Copaxone (Glatiramer acetate)	 7.1	(113)
RATE IT!	Symmetrel etc. (Amantadine)	 6.7	(39)
RATE IT!	Rebif (Interferon beta-1a)	 6.5	(63)
RATE IT!	Solu-Medrol etc. (I.V. Methylprednisolone)	 6.4	(38)
RATE IT!	Avonex (Interferon beta-1a)	 5.8	(77)
RATE IT!	Betaseron etc. (Interferon beta-1b)	 5.5	(83)

Naltrexone (brand names ReVia, Trexan)

Naltrexone is an opiate-receptor blocker medication that is FDA-approved for the treatment of alcohol dependence. Naltrexone is also used to block the effects of narcotics.

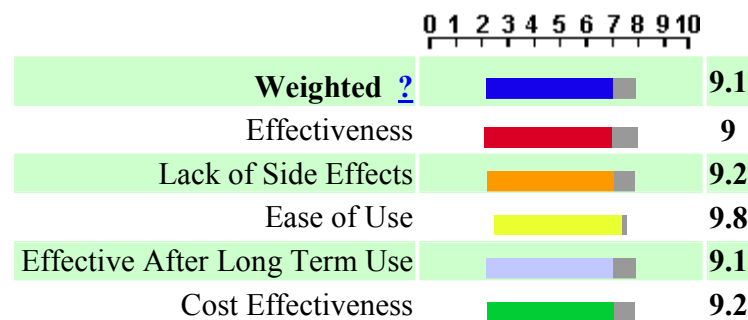
Although clinical studies are lacking, some physicians believe that low dose Naltrexone (LDN) may be helpful for individuals with auto-immune disorders. The theory is that LDN may stimulate the pituitary to increase the production and release of endorphins, which helps to regulate the immune system.

The therapeutic dosage range for LDN is from 1.5mg to 4.5mg every night. Dosages below this range are likely to have no effect at all, and dosages above this range are likely to block endorphins for too long a period of time and interfere with its effectiveness. (NOTE: Low dose Naltrexone must be acquired from a compounding pharmacy; they either grind up the 50mg tablets of naltrexone to prepare the LDN capsules, or use naltrexone, purchased as a powder, from a primary manufacturer.)

Patients rate LDN as a treatment for MS symptoms:

AVERAGE MEMBER RATINGS

based on 77 ratings (0 = poorest; 10 = best)



To read reviews by 77 MS patients who are taking LDN, go to:

<http://remedyfind.com/rem.asp?ID=4393>

Information about Low Dose Naltrexone (LDN)

What is Naltrexone?

Naltrexone is short for Naltrexone Hydrochloride (C₂₀H₂₃NO₄-HCl), an opiate antagonist prescribed for opiate drug addiction; it blocks the response to opiate drugs such as heroin or morphine. Doses for this usage are 50-150 mg. The idea of using Naltrexone at a lower dosage for treating MS is credited to Dr. Bernard Bihari, a practicing neurologist in New York, who began prescribing LDN for his MS patients in 1985.

How does Low Dose Naltrexone work?

LDN works by briefly obstructing the effects of brain endorphins (the brain's natural painkillers). This has an effect of stimulating the increased production of these same endorphins, which re-balances the immune system, thus reducing the activity of the MS. This effect lasts around 18 hours.

But how can this work? Isn't MS is caused by an overactive immune system?

Although there is a long-held theory that MS might be caused by an overactive immune system, it has never been proven. Recent clinical studies indicate that this theory might not be true at all. The October 2004 issue of *The Archives of Neurology* reports a clinical study by researchers who found that intravenous immunoglobulin therapy applied after the first signs of MS significantly reduced the probability of developing clinically definite multiple sclerosis. Patients receiving this immune-system boosting therapy also suffered fewer brain lesions.*

What MS symptoms does LDN help?

Primarily neuromuscular spasm and fatigue, although patients have also reported improvements of numerous other symptoms. In addition, patients who are in the middle of an acute relapse when they start LDN have generally shown rapid resolution of the attack.

How fast does it work?

Around two-thirds of MS patients have some symptomatic improvement within the first few days.

* Intravenous Immunoglobulin Treatment Following the First Demyelinating Event Suggestive of Multiple Sclerosis; A Randomized, Double-Blind, Placebo-Controlled Trial; *Arch Neurol.* Oct 2004;61:1515-1520.

What dosage and frequency should be prescribed?

The usual adult dosage of LDN for the treatment of MS is 4.5mg taken once daily at bedtime. Because of the rhythms of the body's hormone production, LDN is best taken between 9pm and 3am.

The therapeutic dosage range for LDN is from 1.75mg to 4.5mg every night. Dosages below this range are likely to have no effect at all, and dosages above this range are likely to block endorphins for too long a period of time and interfere with its effectiveness.

It is generally recommended that the patient begin on 4.5mg per day, and adjust the dosage if necessary. Prescribing 1.5mg capsules allows easy adjustment of dosage. (For example, the patient can take either 2 capsules for 3mg, or 3 capsules for a 4.5mg dose.)

How is LDN prepared?

LDN is prepared by a compounding pharmacy, who will make capsules by either grinding up 50mg tablets of Naltrexone, or using Naltrexone powder purchased from a primary manufacturer. The most popular source of Naltrexone is the 50mg "ReVia" Naltrexone tablet (DuPont), usually prescribed for treatment of drug and alcohol addictions.

Naltrexone may also be taken as a solution (in distilled water) with 1mg per ml dispensed with a 5ml medicine dropper. If LDN is used in a liquid form, it is important to keep it refrigerated.

IMPORTANT: Make sure to specify that you do NOT want LDN in a slow-release form.

Are there any side effects?

All sources indicate that LDN has virtually no side effects. Occasionally, during the first week of use, patients may complain of difficulty sleeping. (Reports indicate that sleep disturbance is rare, occurring in less than 2% of users.) If this persists after the first week, dosage can be reduced from 4.5mg to 3mg.

Full-dose Naltrexone (50mg 3x day) carries a cautionary warning for patients with liver disease. (This warning was placed because adverse liver effects were noted in early experiments involving 300mg daily.) The 50mg dose does not apparently produce impairment of liver function nor, of course, does the much smaller 3mg - 4.5mg dose.

LDN, in the low doses used for MS therapy, is virtually non-toxic, simple to administer, and, compared with other MS drug therapy, very inexpensive.

What about cautionary warnings?

Because LDN blocks opioid receptors throughout the body for three or four hours, people using narcotic medication such as Ultram, morphine, Percocet, Tramadol, Duragesic patch or codeine should not take LDN until such medicine is completely out of the

system. Steroids would counteract the effects of LDN, and so should not be combined. LDN should probably not be taken during pregnancy.

LDN cannot be used by people already receiving beta interferon. Because LDN stimulates the immune system and beta interferon suppresses it, the two therapies are incompatible.

What does it feel like to be on LDN?

At both high and low dosages, patients taking Naltrexone usually say they are largely unaware of being on medication. Naltrexone usually has no psychological effects and patients (at both high and low dosages) don't feel either "high" or "down" while they are on naltrexone. It is not addicting.

Why isn't LDN routinely prescribed for MS?

Many physicians simply have not yet learned about the positive effects of LDN on MS symptoms. Others may be hesitant to prescribe LDN because it hasn't yet been approved as an MS treatment by the FDA.

Why hasn't LDN been approved by the FDA?

Although Naltrexone (in the higher 50mg dosage) was approved by the FDA in 1984, Low Dose Naltrexone (in the 3mg or 4.5mg dosage) has not yet been submitted for FDA approval. LDN cannot be officially approved by the FDA as an MS therapy until it undergoes specific clinical trials required by the FDA.

Why hasn't LDN gone through a clinical trial as an MS therapy?

Clinical trials are usually initiated and funded by pharmaceutical companies, and these companies are not interested in promoting or marketing LDN.

Why aren't pharmaceutical companies interested in exploring the possibility of LDN as an MS therapy?

Naltrexone was developed so long ago, no one holds a patent, so generic versions of the drug can be created and sold very inexpensively. LDN can't make anyone any money, so pharmaceutical companies are not willing to fund a clinical trial for a drug that will make them so little profit. Also, if LDN were certified by the FDA and became a preferred treatment for MS, the pharmaceutical companies who make the expensive ABCR drugs could lose millions of dollars.

Are any clinical trials of LDN scheduled?

Responding to the rapidly-growing, patient-driven publicity about the success of LDN, the MS center at University of Texas recently announced plans for a full clinical trial of LDN as an MS therapy.

Are there any other plans to underwrite a clinical study of LDN and MS?

In August 2004, the LDN Research Trust was created in the UK. Conceived by a group of MS patients who have been helped by LDN, the Trust's mission is to raise funds for the initiation of clinical trials for LDN. Their website, www.ldnresearchtrust.org, encourages contributions and participation. In conjunction with the Trust, Dr Alasdair Coles, a neurologist and MS specialist from Cambridge University, and Dr Robert Lawrence of Wales, himself an MS patient, are currently working on a proposal for a clinical trial of LDN for the treatment of MS.

Has LDN been reported in any of the major medical journals?

Medical journals are not usually interested in reviewing any drug therapy that has not yet had a clinical trial. However, the peer-reviewed medical journal *Medical Hypothesis* recently accepted an LDN/MS hypothesis for publication; it will be published in the next few months.

Can a doctor legally prescribe LDN?

Yes. While it is illegal for a pharmaceutical company to market or promote a drug for a use other than that approved by the FDA, it is NOT illegal for a physician to prescribe an FDA-approved drug for a non-FDA-approved use. (Neurontin, for example, was approved by the FDA in 1993 for the treatment of epilepsy; yet it is routinely prescribed for the off-label treatment of MS symptoms.) All physicians understand that the responsible off-label use of an already FDA-approved medication such as Naltrexone is perfectly ethical and legal.

How many MS patients are taking LDN for Multiple Sclerosis?

No one is sure of the exact number, but it is known that thousands of MS patients worldwide are now using LDN, and this number is growing. Without the financial support of the pharmaceutical industry, the reputation of LDN has been driven solely by the patients themselves.

Are MS patients getting positive results from LDN?

A review of the anecdotal evidence indicates that most MS patients taking LDN have experienced considerable improvement, often within days or weeks of beginning the treatment.

NOTE: The first annual LDN Conference has been scheduled for June 2005 in New York City.

More information about LDN and its use as a treatment for Multiple Sclerosis:

<http://www.ldners.org/index.htm> [This link contains a survey of 267 MS patients who use LDN.]

<http://remedyfind.com/rem.asp?ID=4393> [This link contains ratings from 77 MS patients who use LDN, with descriptions of their personal experiences.]

<http://www.mwt.net/~drbrewer/lownaltrex.htm> [This is an article printed in the *New Horizons* newsletter, published by the Brewer Science Library.]

http://www.lowdosenaltrexone.org/ldn_and_ms.htm [A detailed outline of LDN/MS therapy.]

<http://www.msrc.co.uk/index.cfm?fuseaction=show&pageid=651> [LDN information from the British site, *The Multiple Sclerosis Resource Center*.]

http://www.friendswithms.com/low_dose_naltrexone.htm [Friends With MS website.]

<http://www.mult-sclerosis.org/news/Jun2004/MSSonLowDoseNaltrexone.html>

<http://www.positifs.org/traduc/naltrexone.htm>

<http://archives.tcm.ie/businesspost/2003/10/05/story940101972.asp>

Pharmaceutical Information about Low Dose Naltrexone:

The protocol is 1.5 to 4.5mg at bedtime. It must not be a timed-release preparation and should be given at bedtime. Up until recently, Dr. Bihari had routinely used 3 mg, reducing it down to as low as 1.5 mg in the rare patient who experienced a mild sleep disturbance. (Many patients report improved sleeping.) However, recently, he has noted that some patients who did not respond to 3 mg did respond to 4.5mg and has begun to use this dose more frequently. No more than 4.5mg must be used. Occasionally, lower doses are necessary.

The usual, commercial oral preparation of naltrexone is 50 mg; so, the 1.5 to 4.5 mg dose must be made up by a compounding pharmacy. A month's supply should run about \$30. Although there are no known significant side effects to the treatment, in about 1 out of 50 patients, the patient will experience a sleep disturbance. In this case, Dr. Bihari recommends that the pharmacy make up a 100-ml. solution containing naltrexone in distilled water at a concentration of 1 mg/ml. The patient is told to take 1 to 1 ½ ml. at bedtime—possibly working up to 2 ml. or 2 mg.

Protocol for Low-Dose Naltrexone

Michael B. Schachter, M.D., CNS, F.A.C.A.

December 6, 2001

Filler used in LDN capsules –

Lactose filler is the original formula filler and the one that Dr. Bihari recommends, unless the patient is lactose intolerant. [Note: If your compounder grinds down the "Revia" tablets, then there is already Lactose (among other fillers) in the tablets.]

Avicel (*microcrystalline cellulose*) can be used, unless patient is allergic to cellulose, in which case it may cause nausea.

Calcium Carbonate is often used because it is inexpensive to manufacture, and causes few sensitivity issues. However, it can compact tightly in the capsule, causing the medication to become sustained or slow-release. Some patients roll the capsules in their fingers before ingesting to loosen the powder inside.

The best (purest) form is the Naltrexone Powder, combined with one of these fast-release fillers.

Always make sure your Pharmacist uses a FAST-RELEASE FILLER.

Pharmacies Recommended for Compounding LDN -

Belvidere Pharmacy, 349 Somerset Ave., Plainfield, NJ 908-756-6695.
Fax 908-756-2890.

Irmat Pharmacy, 2 Park Ave New York, New York 10016, 212-685-0500

Village Apothecary, 346 Bleecker Street, New York, NY, (212) 807-7566

Bigelow's Pharmacy, 414 6th Avenue, NYC, between 8th and 9th Streets:
Phone: 212-533-2700.

Skip's Pharmacy, 21000 Boca Rio Rd., Suite A-11, Boca Raton, FL 33433,
561-218-0111, 800-553-7429, Fax 561-218-8873

Apothecary Options, Chico, CA

The Compounder Pharmacy, Aurora, IL

The Medicine Shoppe, Canandaigua, NY

The Medicine Shoppe, Arlington, TX

Smith's Pharmacy, Toronto, Ontario, Canada

Canadian Apothecary, London, Ontario, Canada

The Medicine Shoppe, Toronto, Ontario

Most Compounding Pharmacies have experience with LDN, because LDN is now an effective part of the treatment for AIDS, cancer and various other immune disorders.

Patient-Initiated Research

The attached charts are from <http://www.ldners.org/index.htm>, an online survey of MS patients who use LDN.

This site was created by an MS patient who has experienced remarkable recovery since starting Low Dose Naltrexone.

This survey of 267 MS patients who use LDN shows:

- A relapse rate of 0.2, or 1 in 5 years
- 70% of patients report symptom improvement
- 45% think progression has stopped
- 76% say LDN is working for them, & will continue therapy

The survey is comprised of a representative sampling of all types of MS (RRMS, SPMS, PPMS).

Overall Analysis of 267 Responses to the LDN Survey: Duration of Treatment and Relapse Rate as of 7/12/2004

Months of LDN	Subjects	Yrs Of LDN	Yrs Avg	Relapses On LDN	Relapse Rate / Yr	Years Diagnosed
0-3 Mo	133 50%	17.82	0.13	3	0.168	1150.35
4-6 Mo	45 17%	18.50	0.41	7	0.378	467.05
7-11 Mo	25 9%	17.25	0.69	3	0.174	227.50
> 12 Mo	64 24%	131.92	2.06	29	0.220	806.25
Total	267	185.49	0.69	42	0.226	2651.15

Breakdown by Type of MS: Duration of LDN Treatment and Relapse Rate

Months of LDN	Subjects	Yrs Of LDN	Relapses On LDN	Relapse Rate / Yr	Years Diagnosed
0-3 Mo	15 44%	2.61	1	0.383	139.50
4-6 Mo	4 12%	1.58	0	0.000	63.00
7-11 Mo	7 21%	4.92	0	0.000	112.50
> 12 Mo	8 24%	18.58	1	0.054	76.00
Total (PPMS)	34	27.69	2	0.072	391.00
0-3 Mo	5 42%	0.58	0	0.000	44.00
4-6 Mo	2 17%	0.75	0	0.000	13.00
7-11 Mo	1 8%	0.67	1	1.500	9.00
> 12 Mo	4 33%	11.00	2	0.182	64.00
Total (PRMS)	12	13.00	3	0.231	130.00
0-3 Mo	63 54%	7.60	1	0.132	391.85
4-6 Mo	17 15%	6.71	4	0.596	120.05
7-11 Mo	11 9%	7.58	1	0.132	65.50
> 12 Mo	25 22%	46.25	12	0.259	228.75
Total (RRMS)	116	68.15	18	0.264	806.15
0-3 Mo	50 48%	7.03	1	0.142	575.00
4-6 Mo	22 21%	9.46	3	0.317	271.00
7-11 Mo	6 6%	4.08	1	0.245	40.50
> 12 Mo	27 26%	56.08	14	0.250	437.50
Total (SPMS)	105	76.65	19	0.248	1324.00
Total	267	185.49	42	0.226	2651.15

Breakdown by Type of MS: LDN Patient's Subjective Symptom Observations

as of 7/12/2004

Primary Progressive (PPMS)

Female 17
Male 17

Have Symptoms Improved After LDN?

Symptoms have improved	18	53%
Symptoms have stayed the same	14	41%
Symptoms are worse	2	6%
Total (PPMS)	34	

What about disease progression?

I think progression has stopped	17	50%
I think progression has worsened	4	12%
Too soon to tell	13	38%
Total (PPMS)	34	

Is LDN working for you?

Yes, it is helping and will continue	26	76%
Not sure at this time	5	15%
No, I don't think it is helping	3	9%
Total (PPMS)	34	

	Months on LDN	Relapses since starting LDN	.072 / yr	Mg Dosage LDN	# Years Diagnosed
Sum	332.30	2.00			391.00
Avg	9.77	0.06		3.88	11.50
Min	0.30	0.00		3.00	1.00
Max	43.00	1.00		6.00	27.00

Primary Progressive (PPMS) Total: 34 Percent of total responses 12.73%

Progressive Relapsing (PRMS)

Female 9
Male 3

Have Symptoms Improved After LDN?

Symptoms have improved	9	75%
Symptoms have stayed the same	2	17%
Symptoms are worse	1	8%
Total (PRMS)	12	

What about disease progression?

I think progression has stopped	7	58%
I think progression has worsened	1	8%
Too soon to tell	4	33%
Total (PRMS)	12	

Is LDN working for you?

Yes, it is helping and will continue	10	83%
Not sure at this time	1	8%
No, I don't think it is helping	1	8%
Total (PRMS)	12	

	Months on LDN	Relapses since starting LDN	.231 / yr	Mg Dosage LDN	# Years Diagnosed
Sum	156.00	3.00			130.00
Avg	13.00	0.25		4.33	10.83
Min	1.00	0.00		3.00	1.00
Max	48.00	1.00		4.50	21.00

Progressive Relapsing(PRMS) Total: 12 Percent of total responses 4.49%

Breakdown by Type of MS: LDN Patient's Subjective Symptom Observations

as of 7/12/2004

Relapsing/Remitting (RRMS)

Female 75
Male 41

Have Symptoms Improved After LDN?

Symptoms have improved	95	82%
Symptoms have stayed the same	17	15%
Symptoms are worse	4	3%

Total (RRMS) 116

What about disease progression?

I think progression has stopped	40	34%
I think progression has worsened	4	3%
Too soon to tell	72	62%

Total (RRMS) 116

Is LDN working for you?

Yes, it is helping and will continue	87	75%
Not sure at this time	27	23%
No, I don't think it is helping	2	2%

Total (RRMS) 116

	Months on LDN	Relapses since starting LDN	.264 / yr	Mg Dosage LDN	# Years Diagnosed
Sum	817.75	18.00			806.15
Avg	7.05	0.16		4.05	6.95
Min	0.00	0.00		2.00	0.25
Max	48.00	5.00		30.00	28.00

Relapsing/Remitting (RRMS) Total: 116 Percent of total responses 43.45%

Secondary Progressive (SPMS)

Female 73
Male 32

Have Symptoms Improved After LDN?

Symptoms have improved	60	57%
Symptoms have stayed the same	34	32%
Symptoms are worse	11	10%

Total (SPMS) 105

What about disease progression?

I think progression has stopped	45	43%
I think progression has worsened	11	10%
Too soon to tell	49	47%

Total (SPMS) 105

Is LDN working for you?

Yes, it is helping and will continue	73	70%
Not sure at this time	24	23%
No, I don't think it is helping	8	8%

Total (SPMS) 105

	Months on LDN	Relapses since starting LDN	.248 / yr	Mg Dosage LDN	# Years Diagnosed
Sum	919.80	19.00			1324.00
Avg	8.76	0.18		3.73	12.61
Min	0.00	0.00		1.50	1.00
Max	54.00	4.00		6.00	35.00

Secondary Progressive (SPMS) Total: 105 Percent of total responses 39.33%

	Months on LDN	Relapses since starting	Mg Dosage LDN	# Years Diagnosed
Grand Total	2225.85	42.00		2651.15

Notes: 28 individual users out of 267 reported a total of 42 relapses.