LDN 2024 Patient Guide

The LDN Research Trust is a UK registered Charity, founded in 2004, with the primary purpose of promoting research into the unlicensed use of Naltrexone at a low dose to treat conditions and diseases. Naltrexone at a low dose is referred to as LDN.

Formal Disclaimer:

This pamphlet is designed to guide patients and enable them to make an informed choice about treatment. It does not replace the need for clinical involvement and the LDN Research Trust will not support patients who obtain LDN without a prescriber's order.

Naltrexone Background Information: Naltrexone has been commonly used at daily doses of 50-300mg since it was first licensed in 1984. Naltrexone has been used in lower doses to treat multiple diseases since 1988. Naltrexone is considered "standard dose" when given in daily amounts of 25mg or more and low dose when the daily dose is less than or equal to 10mg. When prescribed in standard dose, Naltrexone acts primarily to block opiate receptors and as such is used mainly in addictions. When used in low doses, it is now widely understood to act as an Immunomodulator and multiple Phase I and II trials have shown efficacy.

Mechanisms of Action:

When used in a lower dose Naltrexone has Immunomodulatory, opiate blocking and anti-tumor effects and multiple Phase I and II trials have shown efficacy.

Improves the immune system response

Creates an increase in the production of endorphins, which should result in a reduction of painful symptoms and an increased sense of wellbeing.

Increased levels of endorphins should be expected to stimulate the immune system, promoting an increase in the number of T lymphocytes. This effect was observed in Dr Bihari's research. This increase in T-cell numbers apparently restores a more normal balance of the T-cells such that the effects of the disease process are significantly reduced.

It may also act directly on these immune cells to stimulate or restore normal function.

Attenuate Toll-Like Receptors (TLRs), which directly interact with components of the immune system. TLRs (especially TLR-4) are bound by microbial pathogens such as bacteria and viruses (including COVID) to cause infection and severe illness.

Cancer

Intermittent Dosing with LDN causes increased cell death and increases cell sensitivity to chemotherapy agents.

Cells treated with LDN upregulate genes that are responsible for cell death (BAD and BIK1).

Tumor cells pre-treated with intermittent LDN dosing are far more likely to be killed by chemotherapy drugs.

LDN seems to have a direct cytotoxic effect on cancer cells, via a P13 kinase, cyclin P21 and downstream G-Protein coupled receptor routes.

Opiate Blockade for short period (4-6 hours)

Levo Naltrexone molecule binds to opiate receptors

Causes rebound increased endorphin release.

Increases sensitivity of existing opiate/endorphin receptors.

More Opiate receptors are formed to capture endorphins.

Which diseases are being treated with LDN?

This list is not exhaustive and patients are directed to the LDN Research Trust website for more

information www.ldnresearchtrust.org/conditions

Ankylosing Spondylitis
Anxiety and Depression
Asthma
Autoimmune Hepatitis
Breast Cancer
CFS/ME
Chronic Regional Pain Syndrome (CRPS)
Chronic Viral Conditions
Chronic Viral Infections
Colorectal Cancer
COVID/Long-Covid
Diabetes Type I
Duodenal and Stomach Cancer
Dysautonomia/POTS
Ehlers-Danlos Syndrome (EDS)
Esophageal and Oral Cancers
Glioblastoma
Graves' Disease
Hashimoto's Thyroiditis
Hepatic Cancer
Hypermobile Conditions
Infertility
Inflammatory Bowel Disease
Lyme Disease
Lymphoma
Mast Cell Activation Syndrome (MCAS)
Melanoma
Mixed Connective Tissue Diseases
Multiple Myeloma
Multiple Sclerosis
Nerve Pain (Neuropathic conditions)
Non-Small Cell Cancer
Ovarian Cancer
PANDAS
PANS
Parkinson's Disease
PCOS
PMDD
Pseudoseizures
Psoriasis
PTSD
Pulmonary Fibrosis
Recurrent Miscarriage
Renal Cell Cancer
Rheumatoid Arthritis
Scleroderma
Tourette's Syndrome
Trigeminal Neuralgia
Uterine Cancer
Vitiligo

How to obtain LDN:

Not all medical professionals are aware of LDN and its potential benefits and not all are prepared to prescribe LDN. It does help to have a knowledgeable LDN prescriber working with you. The LDN Research Trust has a list of LDN Prescribers in the US and across the world, which can be found here:

(www.ldnresearchtrust.org/LDN_Prescribers). The LDN Research Trust works hard to maintain a support network for prescribers in many countries through the regular conferences and media events.

LDN is not generally covered by insurance plans but is an affordable prescription through your local compounding pharmacy (https://www.ldnresearchtrust.org/ldn-pharmacists).

How To Use:

Read this leaflet before you use this medicine, it includes information that might be especially important for you.

- Keep this leaflet you may need it again
- Ask your pharmacist or doctor for more advice if you need it. LDN comes in several forms: tablets, capsules, liquid, sublingual drops, troches, lozenges, and as a cream.

Consult your doctor prior to using this medication if you are currently taking long-acting opiate medicines like codeine, tramadol, morphine, fentanyl or oxycodone. Do not use this medicine if you are pregnant, or breastfeeding without informing your doctor.

Dosing Options for LDN

For many conditions, your prescriber will usually start treatment at a low dose and increase gradually over a period of weeks until you are stable at your goal dose. Starting dose can vary from 0.5 mg to 1.5 mg and is often increased up

to 4.5 mg. You may have a lower OR higher dose goal with your prescribing clinician. You may be instructed to take multiple smaller doses on a daily basis for certain medical conditions, such as for mental health conditions. Higher, standard doses of 50mg or more may be required for TBI (Traumatic Brain Injury) patients until they are stabilized before transitioning to chronic daily low doses of naltrexone.

LDN dosing for patients with chronic pain conditions on concomitant opioid medications will start at an Ultra-Low Dose and you will take the medication twice daily, separating it by 4-6 hours from short acting opioid medications.

For cancer patients, the dose should get to 4.5mg, or the goal dose, although your provider may adjust as necessary. In cancer patients, combining a cannabinoid (CBD) or Sativex (THC/CBD), seems to enhance the anti-tumor effect. No chemotherapy agents are currently contraindicated assuming standard tests are done, however, LDN should not be taken during treatment with immune checkpoint inhibtors (e.g. Opdivo or Keytruda -- PD1 inhibitors) without clinician guidance.

Storing the Medicine - LDN Liquid should be stored in the fridge once opened and can last 30 days, or 12 months unopened. Capsules should be stored at room temperature in their original container for up to 6 months. All forms of LDN will be labeled with a specific expiration date by your compounding pharmacy.

Only obtain LDN via a doctor's prescription and a reputable pharmacy - LDN is extensively counterfeited all over the world so it is not safe to purchase it from websites willing to sell it to you without a prescription—it is likely to be fake, or even dangerous, and it is illegal.

Possible Side Effects:

LDN is well tolerated in most patients. However, care should be taken to titrate dose up slowly to avoid side effects.

Common:

Sleep disturbances
Mild headache
Mild agitation
Nausea/GI effects - consider switching to liquid sublingual LDN to bypass GI tract
Hyperthyroidism in Hashimoto's patients

Uncommon:

Flu-like symptoms (CFS/ME)
Rash
Herxheimer reactions (elevated temperature)
Dizziness
Increased fatigue or spasticity (Parkinson's)

These side effects are usually only present in the initial phase and can be stopped by halving the dose for 2-3 days and then continuing with titration again. The half-life of LDN is about 4-6 hours. Report any side effects to your prescriber.

For Up-to-Date Clinical Trials and References visit - https://www.ldnresearchtrust.org/ldn-clinical-trials

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