



LDN and OGF Frequently Asked Questions

What are LDN and OGF?

LDN stands for “Low Dose Naltrexone” and OGF stands for “Opioid Growth Factor” which is also called met-enkephalin.

Naltrexone is a drug that blocks the effects of drugs called opioids. Codeine, morphine, heroin, hydromorphone, oxycodone and methadone are examples of opioids. Naltrexone has been used as a treatment for addiction to opioids and also to alcohol.

Naltrexone comes in a 50mg tablet, but it has been used in low doses of 3-4mg a day by Dr. Bernard Bihari (a neurologist in New York) for treatment of various immune diseases as well as cancer. This is why it is referred to as “low dose” when it is used as a cancer treatment.

LDN works by boosting the levels of a natural chemical in the body called OGF. LDN blocks the OGF receptors (also called zeta receptors), and this triggers the body to make more OGF to counteract the blocking effect. It has been discovered that many cancers respond to the increased levels of OGF, and their growth can be stopped or slowed down.

OGF can be administered directly instead of LDN, but it must be given by injection, and is much more costly. This is an option for patients who cannot take LDN.

Do LDN and OGF really work?

Dr. Bihari has treated about 450 cancer patients with LDN, and he reports that:

- over 270 (60%) had significant benefits from LDN
- 86 of those (25%) “have shown objective signs of significant tumor shrinkage, at least a 75% reduction.”
- 125 patients (35%) “have stabilized and/or are moving toward remission.”

(Source: www.ldninfo.org)

Here is a list of the cancer types which have shown a response to LDN:

- Bladder Cancer
- Breast Cancer
- Carcinoid
- Colon & Rectal Cancer
- Glioblastoma
- Liver Cancer
- Lung Cancer (Non-Small Cell)
- Lymphocytic Leukemia (chronic)
- Lymphoma (Hodgkin's and NHL)
- Malignant Melanoma
- Multiple Myeloma
- Neuroblastoma
- Ovarian Cancer
- Pancreatic Cancer
- Prostate Cancer (untreated)
- Renal Cell Carcinoma
- Throat Cancer
- Uterine Cancer

(Source: www.ldninfo.org)

Dr. Ian Zagon and other researchers at Pennsylvania State University have conducted extensive research with OGF in cell cultures and rats implanted with human cancer cells. They have shown that many cancers including colon, pancreatic, squamous cell, neuroblastoma and renal cell respond to OGF treatment. They have also shown that OGF combined with chemotherapy (5-FU, gemcitabine, paclitaxel) appears to work better than chemo or OGF alone.

In a preliminary Phase I human study conducted by Dr. Zagon, OGF was used to treat 16 patients with advanced pancreatic cancer. Two patients had complete disappearance of liver metastases, and survival was roughly doubled when compared to patients who receive standard chemotherapy with 5-FU or gemcitabine (*Anti-Cancer Drugs 15:203-209 Lippincott Williams & Wilkins*).

In addition, patients treated with OGF were able to maintain good pain control without increasing their pain medications over several months.

Are they safe?

Naltrexone is FDA approved and Health Canada approved. It is not generally accepted as a cancer treatment due to the limited amount of human research. Use of LDN in cancer is considered "off-label". The safety profile of naltrexone is excellent when prescribed by an experienced physician. The main side effects from this drug are insomnia or vivid dreams. If it is used improperly in patients taking opioid medications, it can result in a serious withdrawal reaction (sweats, chills, anxiety, vomiting, body pains).

OGF is a safe naturally-occurring substance found in the body, and its use in cancer is also considered "off-label". In the human Phase I trial at Penn State University, the most serious side effect of OGF was a drop in blood pressure. This only occurred if OGF was administered i.v. and was preventable by changing the speed of infusion.

Why are these drugs not being used more?

Most doctors are not aware of the promising data on cancer treatment with LDN or OGF. It is also difficult to prescribe off-label medications (like LDN) for cancer due to the large number of regulations that must be followed. Since LDN is off patent, and OGF is not patentable, there is little motivation to conduct expensive Phase II and Phase III trials which would lead to their official approval as cancer drugs.

Are they available?

Yes. Patients seen at Medicor Cancer Centres may be prescribed LDN or OGF. Medicor has made available a liquid formulation of naltrexone and an injectable subcutaneous formulation of OGF. We only use pharmaceutical grade medications. We have clearance from all the relevant Federal and Provincial regulatory bodies to prescribe LDN and OGF off-label for cancer.

Do I qualify for LDN or OGF treatment?

We are accepting new patients with a documented diagnosis of cancer (any type) who:

- a. have failed conventional, scientifically proven treatments
- b. have been told by their doctor that there is no safe or effective treatment for their cancer
- c. are waiting to start conventional treatment, and would like to do something in the interim
- d. have been treated for cancer, and would like to prevent recurrence
- e. are presently receiving chemotherapy and would like to boost their immune function

What is the cost?

Naltrexone treatment at Medicor is about \$70 per week. OGF treatment is approximately \$300-\$600 per week depending on the dose. We are presently looking for ways to bring this cost down. During the course of treatment, all medically-necessary doctor's visits, blood tests and imaging are provided/arranged at no cost to the patient (refers to Canadian patients only).

What is the duration of treatment?

In order to determine if LDN or OGF are effective in treating your cancer, we recommend at least 2 months of treatment. If a patient responds to the drug, their therapy may continue indefinitely.

I thought LDN was cheaper than what Medicor is charging?

It may be possible to obtain inferior quality LDN for less cost. Medicor's LDN has a higher cost because:

- it is the most effective and pure liquid formulation (some pharmacies sell capsules, or inferior quality liquid formulations)
- it is certified pharmaceutical grade
- the costs of obtaining regulatory clearance to prescribe "off-label" are included
- the cost of formulation by a licensed pharmacist for safe, effective oral administration is included
- the costs of storage and dispensing are included

How do I become a Medicor patient?

Please obtain your pathology report (confirming the diagnosis of cancer), your latest CT scan or MRI (if applicable), and your latest blood test report. If you do not have a pathology report (you did not have a biopsy), we require your specialist's notes confirming the diagnosis of cancer.

You can call us at (416) 227-0037 to make an appointment to discuss your individual case. You can also contact us through our website at <http://www.medicorcancer.com>. A valid Health Card is required for a free consultation. Patients are only required to pay for the medication, as it is not covered by Ontario Drug Benefits. Private clinic services are available to maximize your care.