

DOES **MEBENDAZOLE** HAVE A ROLE IN CANCER?

“Cancer” is among the most frightening of words for anyone to hear. Cancer is the second most common cause of death in the United States, surpassed only by heart disease. Worldwide, it takes nearly 10 million lives each year.

With the continual addition of cancer-promoting chemicals and toxins introduced into our environment, food, and water supplies, and the development of “turbo cancers” following the 2020 pandemic, cancer diagnoses are on the rise.

Understanding Cancer

Important contributors to the dysregulation leading to cancer development and metastasis include inflammation, apoptosis, angiogenesis, cell proliferation, glucose metabolism at a cellular level, an evolving tumor microenvironment, stem cell activity, and genetic response.

One of the most overlooked of these areas, from both the fundamental understanding of cancer development as well as the conventional approach to treatment, is the metabolic reprogramming of cancer cells.

Normal cells primarily generate energy in the mitochondria in a process called oxidative phosphorylation. Most cancer cells rely instead on a different process: aerobic glycolysis, also referred to as the “Warburg effect.” This shift in metabolism, which enables cancer

cells to produce a constant supply of energy to promote growth and proliferation, is where conventional cancer approaches frequently miss the mark.

Current Cancer Treatments

Current cancer treatments are complex, expensive, highly toxic, and of limited benefit in terms of patient quality of life and five-year survival rate. Standard chemotherapy, for example, targets rapidly dividing cancer cells, but often adversely affects the tumor microenvironment in a way that could actually promote the proliferation of cancer stem cells, possibly increasing the potential for metastases.

It is obviously important to impact the tumor microenvironment—the complex collection of immune cells, inflammatory compounds, tumor stem cells, blood vessels, and other cells and molecules that surround and support tumor cells. Enter mebendazole.

Mebendazole, a Different Approach for Cancer Patients

Mebendazole (brand name EMVERM[®]) is a drug originally developed for treating parasites such as hookworms, roundworms, pinworms, and whipworms.

Interestingly, parasites, cancer, and viruses all share some interesting commonalities: They replicate, they cause inflammation, and they rely on a host. This is crucial to understanding the role of mebendazole in patients affected by parasites, viruses, cancer, and, in many cases, all three.

Studies have shown that a wide variety of cancers are responsive to mebendazole. They include non-small cell

HOW TO ORDER

You may place refills:

📞 281.828.9088

👉 physicianspreferencrx.com

TAKE A VIRTUAL TOUR

👉 [Click here to view an inside look at our compounding labs.](#)



ACCREDITED

Physicians Preference Pharmacy standards are more stringent than those of the United States Pharmacopeia (USP). In addition to onsite weight testing, we send multiple samples per week to an outside laboratory for potency testing. Physicians Preference Pharmacy ranks first in Houston for the number of samples sent for potency testing and in the top 8% of pharmacies nationwide.

Physicians Preference Pharmacy is a Houston-based, PCAB-accredited compounding pharmacy serving physicians and patients since 2001. We are licensed to work with doctors and ship to patients in 48 states (excludes AL & NV).

lung cancer, adrenocortical carcinoma, colorectal cancer, chemo-resistant melanoma, glioblastoma multiforme, colon cancer, leukemia, osteosarcoma/soft tissue sarcoma, acute myeloid sarcoma, and breast (ER+ invasive ductal), kidney, and ovarian carcinoma. Research is ongoing to explore mebendazole's use in all types of cancer.

Compounded Mebendazole at Physicians Preference Pharmacy

The cost of the commercially available mebendazole product EMVERM® has skyrocketed, with prices exceeding \$4,000 for just six tablets. Due to cost, many patients have been purchasing mebendazole on the internet for lower prices, generally without proof of quality or potency. Additionally, limits have been placed on the quantity available for purchase, which is causing an interruption in treatment.

At Physicians Preference Pharmacy, we compound mebendazole (polymorph C) in oral capsules. Polymorph C, one of three crystalline forms of mebendazole, is the preferred form because it has a low side-effect profile and can cross the blood-brain barrier to reach cancers in the brain. Our compounded mebendazole (polymorph C) is a lactose- and dye-free formulation, available as 100 mg, 200 mg, and 250 mg oral capsules. Dosing varies, depending on the type of cancer and severity of disease.

Our Commitment to You

Cancer requires a multifaceted approach to attack the root causes and treat the many symptoms that accompany this complex disease. This includes not only metabolic and lifestyle interventions but also supplements and medications that address the many components of cancer development and progression. The approaches mentioned in this article are intended to support and complement cancer patient treatment.

Dealing with cancer is difficult, and every patient is unique. We believe patients deserve to be educated about all available options so they can make the most informed decisions possible. We are committed to providing that information and to making clean and pure medications such as mebendazole available to patients and physicians.

Please share this information about mebendazole and its recent availability at Physicians Preference Pharmacy with your healthcare providers. We encourage you or your doctor to call the pharmacy at **(281) 828-9088** to speak with a pharmacist about compounded mebendazole. It would be our pleasure to serve you!



REFERENCES

Dr. Paul Marik's *Cancer Care: The Role of Repurposed Drugs and Metabolic Interventions in Treating Cancer* is an excellent resource. It can be downloaded for free at <https://covid19criticalcare.com/wp-content/uploads/2023/06/Cancer-Care-2024-03-29-v1.pdf>.



WHAT BENEFITS MAY MEBENDAZOLE SHOW IN CANCER?

Research reveals that mebendazole may have a variety of therapeutic effects with promising benefits for the treatment of cancer:

- May fatally disrupt cell division in abnormal cancer cells
- May inhibit many factors involved in tumor progression and inhibit cancer stem cells, thereby hindering metastasis
- May decrease activity of signaling pathways that many cancers depend upon for intracellular communication
- May promote apoptosis (programmed cell death) in malignant cells
- May interfere with cancer cells' glycolysis-dependent metabolism and energy production
- May sensitize cancer cells to conventional therapy (i.e., chemo, radiation)
- Crosses the blood-brain barrier