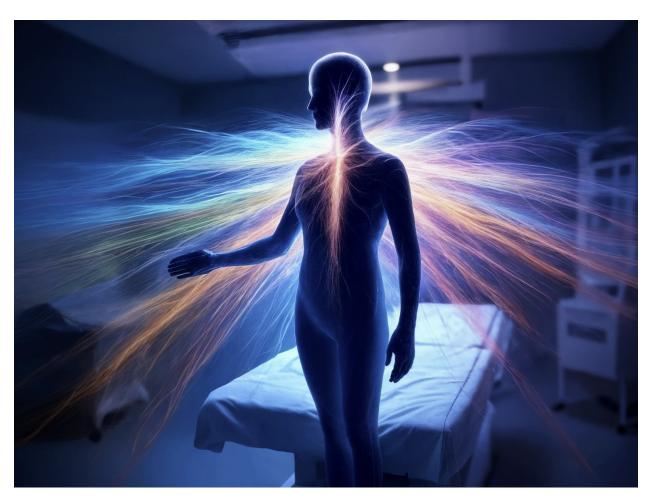
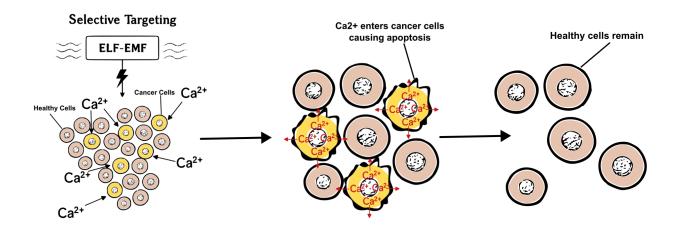
# Revolutionizing Cancer Treatment with ELF-EMF Smart Radiation Technology

Welcome to Cryonova's innovative approach to cancer care. Our Extremely Low-Frequency Electromagnetic Field (ELF-EMF) system is designed to offer a promising, non-invasive complement to traditional treatments. By harnessing low-energy electromagnetic fields, we aim to target cancer cells precisely while prioritizing patient safety and well-being. Please note: This technology is in the preclinical stage, it is not yet approved for clinical use and should not replace standard medical advice or therapies.



# **Understanding ELF-EMF Cancer Treatment**

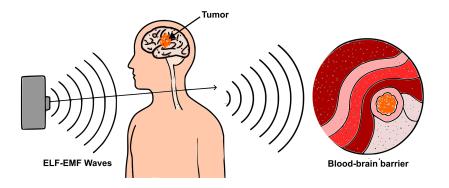
Extremely Low-Frequency Electromagnetic Fields (ELF-EMF) are electromagnetic waves operating below 300 Hz at very low energy levels. Unlike higher-frequency therapies such as radiation, ELF-EMF is non-ionizing and considered safe for biological applications. Cryonova's patent-pending technology (US Provisional Patent Application No. 63/531,645) utilizes carefully calibrated ELF-EMF to interact with cellular processes, potentially disrupting cancer cell growth without harming surrounding healthy tissue.



#### **Mechanism of Action**

Our system works by influencing key biological pathways in cancer cells:

- Larmor Precession and Ion Modulation: ELF-EMF induces precession in ions like calcium, altering cell signaling and potentially inhibiting proliferation.
- Calcium Channel Interference: It modulates L-type and T-type calcium channels, which can trigger apoptosis (programmed cell death) in malignant cells.
- **Selective Impact**: Research indicates that cancer cells, with their altered electromagnetic properties, are more susceptible to these fields than normal cells (e.g., Koziorowska et al., 2018 on differential effects in vitro).
- **Deep Penetration**: The fields can reach tumors in hard-to-access areas, including those protected by the blood-brain barrier, without invasive procedures.



Treatment involves a user-friendly device that emits controlled ELF waves. Sessions are short, energy-efficient (requiring only watts to kilowatts), and require minimal setup or maintenance.

#### **How It Differs from Traditional Therapies**

While chemotherapy and radiation are proven mainstays, they can cause side effects like fatigue, nausea, or long-term damage. ELF-EMF offers a potential adjunct that avoids drug resistance, metabolic burdens, or immune suppression. It may enhance the effectiveness of existing treatments by improving drug delivery or sensitizing cancer cells. However, ELF-EMF is not a standalone cure and must be integrated under medical supervision.

#### [VIDEO WILL GO HERE]

# Why Partner with Cryonova?

At Cryonova, we're committed to advancing cancer care through evidence-based innovation, seamless integration into healthcare systems, and a focus on patient-centered outcomes.

- **Promising Preclinical Results**: In vitro studies demonstrate potential remission timelines of 12-72 hours in various cancer cell lines, such as breast (e.g., MDA-MB-231 cells, with 95% confidence interval, p<0.05), leukemia (THP-1 cells, p<0.001), and lung cancer. These findings are preliminary and require clinical validation.
- Safety for All Patients: Ideal for sensitive groups like children, the elderly, or those with comorbidities, as it avoids harsh side effects associated with invasive treatments.
- Affordable Access: Estimated session costs range from AED 36.73 to 256.98, with device installations in the tens of thousands—significantly lower than advanced imaging or proton therapy equipment.
- Complementary Benefits: May improve chemotherapy absorption, optimize surgical precision, and augment radiation effects, all while preserving existing medical infrastructure.
- **Quality of Life Focus**: Easy-to-use design supports potential at-home applications (pending regulatory approval), reducing hospital visits and empowering patients.

### Supported by Rigorous Research

Our technology draws from over 400 peer-reviewed references in bioelectromagnetics, emphasizing transparency and scientific rigor. Key insights include:

- Efficacy in Lab Settings: Multiple studies show ELF-EMF reducing cell viability in cancers like melanoma, glioblastoma, and hepatocellular carcinoma, often with high statistical significance (e.g., p<0.05).
- Targeted Disruption: ELF-EMF affects calcium signaling and proliferation in cancer cells selectively, as evidenced by research on stress responses and channel modulation (Goodman & Blank, 2002; Koziorowska et al., 2018).
- **Overcoming Barriers**: Effective ELF-EMF penetration addresses challenges in tumor environments, supported by in vivo models showing tumor growth inhibition.
- Path to Clinical Use: Building on preclinical data, Phase I trials will evaluate safety and preliminary efficacy in humans. We adhere to ethical standards and collaborate with regulatory bodies.
- **Detailed Mechanisms**: Leveraging ion precession and channel-specific effects, as explored in studies on models like B16F10 melanoma.

For a full literature review, contact us.

# **Frequently Asked Questions**

To address common inquiries:

- Is this treatment available now? No, it's in development.
- What are the risks? Preclinical data suggests minimal side effects, but human trials will confirm.
- **How can I get involved?** Reach out for trial participation or partnerships.
- Where can I learn more? Visit our resources page or review cited studies on PubMed.

## **Transform Cancer Care Together**

We're excited to collaborate with researchers, clinicians, and patients to bring this technology forward. Contact Cryonova today to discuss opportunities, request detailed information, or express interest in trials. Let's make compassionate, effective cancer treatment a reality.

Contact Us | Learn More About Cryonova