

Biophoton Quantum Therapy Enabled Cancer Treatments to Reach their Utmost Goal of Cancer-Free

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Abstract

Background: The utmost goal for any cancer therapy is to enable cancer patients to become cancer free. However, cancer treatments often entail debilitating side effects that impede patients' ability to adhere to prescribed regimens, potentially compromising therapeutic success. Biophoton co-therapy has emerged as a solution aimed at mitigating these side effects, improving treatment tolerance and enhancing quality of life.

Case presentations: This report details four cases involving diverse cancer types and therapeutic regimens: [1] a 48-year-old Hispanic female with advanced breast and kidney cancers, [2] a 24-year-old Caucasian female with SDH-deficient gastrointestinal stromal tumor, [3] a 62-year-old Caucasian male with recurrent prostate cancer and [4] a 55-year-old Caucasian male with advanced esophageal carcinoma. Each patient integrated biophoton co-therapy with standard cancer treatments, such as chemotherapy, radiotherapy, or targeted therapies. Across all cases, biophoton therapy alleviated pancytopenia, fatigue, pain and other treatment-related side effects, enabling uninterrupted completion of cancer therapies. Remarkably, three of the four patients achieved cancer-free status with substantial improvements in their overall quality of life.

Conclusion: This case series highlights the potential of biophoton co-therapy as a valuable adjunctive treatment in oncology. By reducing side effects and enhancing treatment adherence, biophoton co-therapy contributes to improved clinical outcomes. These findings emphasize the importance of further research to validate its efficacy and evaluate its integration into standard cancer care protocols.

Keywords: Biophoton therapy; Cancer treatment tolerance; Cancer free; Adjunctive oncology care; Side effect management; Case report

Introduction

Cancer therapies, including radiotherapy, chemotherapy and targeted treatments, often pose significant challenges due to debilitating side effects such as pancytopenia, fatigue, pain, nausea and organ toxicity (1-3). These adverse effects can result in treatment interruptions, reduced dosing, or premature discontinuation, ultimately compromising therapeutic efficacy and limiting the likelihood of achieving long-term remission or a cancer-free outcome. Addressing these challenges is critical to ensure patients can adhere to and complete their prescribed cancer treatment regimens effectively. Therefore, multiple disciplinary approaches should be considered. Biophoton therapy has emerged as a promising complementary approach to enhance tolerance to cancer treatments. Utilizing the regenerative and supportive potential of biophotons emitted by Automatic Biophoton Generators (ABGs), this innovative therapy aims to alleviate treatment-related side effects, improve physiological resilience and restore energy balance within the body. Through these mechanisms, biophoton co-therapy supports patients in enduring cancer treatments more effectively, enabling uninterrupted completion of therapies and optimizing clinical outcomes in the pursuit of cancer-free success.

Treatment Device and Usage

The Automatic Biophoton Generator (ABG) was invented recently and is an innovative therapeutic device developed using proprietary technology to emit biophotons within the wavelength range of 500 to 1000 nm. These emissions occur at intensities at least one million times greater than those generated by a healthy adult. Each ABG undergoes rigorous characterization and analysis using four highly sensitive, specialized instruments, ensuring its capability to form a strong three-dimensional biophoton field for at least three years without reliance on external energy sources. As an Over-The-Counter (OTC) device, the ABG is remarkably user-friendly. Users simply place one or more devices near their

body, at any time of day or night, to benefit from its therapeutic effects, as illustrated in Figure 1. To date, over 40,000 individuals with various chronic health conditions have utilized ABGs for periods ranging from weeks to years, with no reported side effects. Comprehensive clinical studies have further validated the safety and efficacy of ABGs in addressing a wide range of chronic diseases. Positive findings from these studies have been submitted to leading scientific and medical journals for publication. This report examines the integration of biophoton co-therapy, facilitated by ABGs, into cancer treatment regimens. It highlights the role of the co-therapy in enhancing treatment tolerance, minimizing side effects and supporting patients on their journey to recovery.

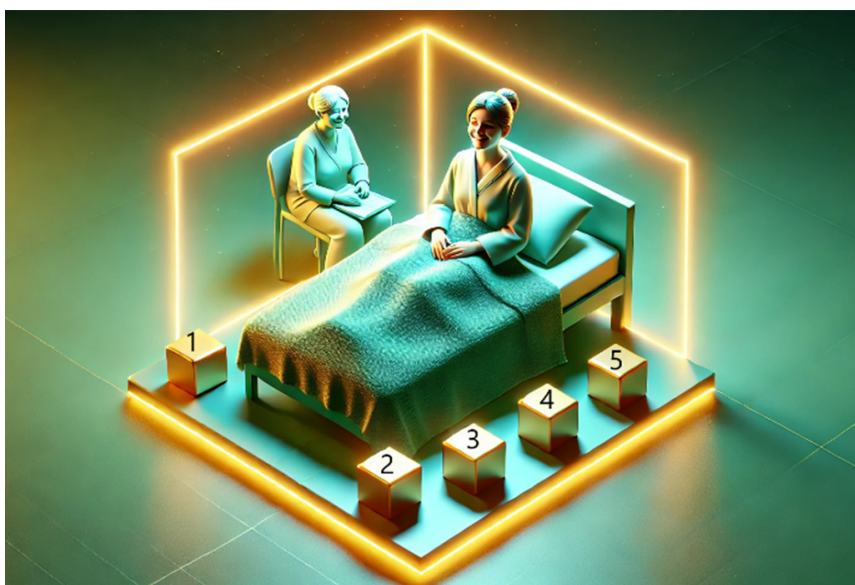


Figure 1: An illustration of one or more of the automatic biophoton generators are placed around the bed for the patient (and a caregiver) to receive biophotons easily.

Case 1 presentation

A. Patient information: A 48-year-old female with a history of advanced breast cancer was treated at Cobre Valley Regional Medical Center in Globe, Arizona. Her treatment regimen included a lumpectomy, radiotherapy, chemotherapy and a partial nephrectomy to address renal cancer. During her cancer treatments, the patient experienced multiple severe symptoms, including pancytopenia, hip and flank pain, joint pain, severe fatigue, hair loss, weight loss, acute pyelonephritis, recurrent infections and treatment-related neuropathy. Biophoton Co-Therapy Introduction. In October 2021, after the patient consulted with her family, she initiated the use of four ABGs. The four ABGs were strategically placed around her bed

to ensure nightly exposure to biophoton energy during her ongoing cancer therapies.

Clinical Timeline:

a) November-December 2021: Following the initiation of biophoton therapy, the patient began experiencing notable improvements in less side effects, including reduced fatigue and pain. Weekly Complete Blood Count (CBC) tests, conducted to monitor her cancer treatment, showed a return to normal levels by December 23, 2021. These results remained stable throughout the course of her intensive cancer treatment for five months (Refer to Table 1) for CBC test results from December 2021 to April 2022).

Table 1: CBC Test Results from December 2021 to April 2022 during Cancer Treatments.

	Normal Range	12/23 /2021	12/30 /2021	01/07 /2022	01/14 /2022	01/21 /2022	01/28 /2022	02/04 /2022	02/17 /2022	04/05 /2022
WBC (K/mm ³)	3.4-10.9	7.2	6.79	6.56	6.58	5.98	5.24	5.68	6.97	7.65
RBC (M/mm ³)	3.2-5.5	4.03	4.04	4.31	4.35	4.38	4.21	4.32	4.54	4.43
HGB (g/dl)	9.7-16.6	11.7	11.9	12.6	12.7	12.9	12.3	12.3	13.2	12.5

HEMATOCRIT (%)	32.8-46.7	36.7	36.7	38.6	39.4	39.6	38.6	39.4	39.3	38
MCV (fl)	79.8-100.7	91.1	90.8	90.3	90.6	90.4	91.7	91.2	86.6	85.8
MCH (pg)	27.1-34.0	29	29.5	29.2	29.2	29.5	29.2	28.5	29.1	28.2
MCHC (g/dl)	31.7-36.0	31.9	32.4	32.4	32.2	32.6	31.9	31.2	33.6	32.9
RDW (%)	11.9-15.7	14.9	14.4	13.5	13.2	13.2	13.1	13.2	13.2	13.9
PLT:Ct (K/mm ³)	128-361	294	295	281	247	222	244	239	263	250
MPV (fl)	8.9-12.2	9.6	9.5	9.1	9.2	8.8	8.9	9.1	9.2	9.1
NEUTR (%)	41.7-80.1	62	ND*	ND	ND	ND	ND	ND	64.2	74.8
LYMPH (%)	11.5-42.6	22.5	ND	ND	ND	ND	ND	ND	18.4	9.5
MONO (%)	4.6-12.9	5.3	ND	ND	ND	ND	ND	ND	9	7.3
EOSIN (%)	0.0-5.7	9.3	ND	ND	ND	ND	ND	ND	6.9	7.2
BASOPHIL (%)	0.0-1.4	0.6	ND	ND	ND	ND	ND	ND	0.9	0.7

b) April 2022-June 2023: The patient continued her cancer therapies without interruptions, as side effects were significantly minimized. Hair regrowth became evident during this period. Her oncologist, impressed by her progress, inquired about her recovery process. She disclosed her nightly use of four Tesla BioHealing® ABGs. In June 2023, after a detailed histological examination, a pathologist found no evidence of cancerous cells, indicating a negative result for cancer in the examined tissues.

c) June 2024: A routine mammogram and laboratory tests confirmed no evidence of malignancy. The patient was declared cancer-free for one year. She is healthy now.

d) Overall treatment outcome Biophoton therapy significantly alleviated the side effects of chemotherapy and radiotherapy, enabling the patient to complete her cancer treatments without interruptions and ultimately achieve a cancer-free status. The patient's quality of life markedly improved, as evidenced by hair regrowth, stable weight, normal daytime energy levels, resolution of anemia and enhanced immunity. During the cold season, the patient demonstrated a notably higher resistance to common viral infections compared to her family members.

Case 2 Presentation

A. Patient information: A 24-year-old Caucasian female was diagnosed with succinate dehydrogenase (SDH)-deficient Gastrointestinal Stromal Tumor (GIST) in February 2020 by a team of oncologists at Mayo Clinic. She presented with a two-year history of gastrointestinal symptoms, including diarrhea and bloating, prompting an extensive diagnostic workup. Imaging studies revealed massive hepatomegaly with multiple liver lesions, along with a primary gastric mass. Subsequent endoscopy and biopsy confirmed the diagnosis of SDH-deficient GIST.

B. Oncologic and genetic evaluation: pathology findings showed diffuse positivity for KIT and DOG1, along with loss of SDHB expression. Genetic testing revealed no germline SDH mutations or other pathogenic variants. Tumor genomic sequencing identified several Variants of Uncertain Significance (VUS), including SETD2, BAP1, IKBKE and BRAF (non-V600E).

C. Initial treatment and progression: The patient was initially treated with VEGF-targeted therapy using sunitinib starting February 28, 2020, which resulted in stable disease after two months. However, by August 2020, imaging revealed progressive enlargement of liver lesions. As a result, her treatment regimen was switched to regorafenib, starting on September 18, 2020, with a dose escalation to 160mg daily. Imaging in December 2020 indicated stable disease.

D. Clinical course: On March 17, 2021, while undergoing treatment with regorafenib, the patient was evaluated by her oncologist. Side effects of the cancer therapy included fatigue, anemia, mild headaches and occasional nausea. Notably, there was no evidence of hand-foot syndrome, mucositis, or other toxicities necessitating dose adjustments. The patient was clinically diagnosed with five concurrent conditions: (1) Paraganglioma (HCC), (2) Secondary malignant neoplasm of the liver (HCC), (3) Gastrointestinal stromal tumor of the stomach (HCC), (4) Hypomagnesemia, (5) Paratracheal mass, possibly aorticopulmonary paraganglioma. Other clinical observations included: Constitutional: Positive for fatigue. Cardiovascular: Positive for rapid or fluttering heartbeat. Gastrointestinal: Positive for abdominal pain, cramping, diarrhea and heartburn. Neurological: Positive for headaches. Psychiatric/Behavioral: Positive for nervousness, anxiety, or feeling on edge within the past two weeks.

E. Self-Observational study. In June 2021, the patient participated in a self-observational study to evaluate the effects of biophoton co-therapy as a complementary treatment. Over an eight-week period, she used four Tesla Bio Healers nightly. The therapy resulted in significant weekly improvements in her overall quality of life. She reported reduced fatigue, anxiety and gastrointestinal symptoms. Additionally, her laboratory results, including hemoglobin levels and liver function markers, normalized during this period (refer to Figure 2). The improvements were attributed to the supportive effects of biophoton co-therapy in enhancing her energy levels and tolerance to ongoing cancer treatments. The therapy also contributed to her ability to delay liver transplant surgery while maintaining her quality of life.

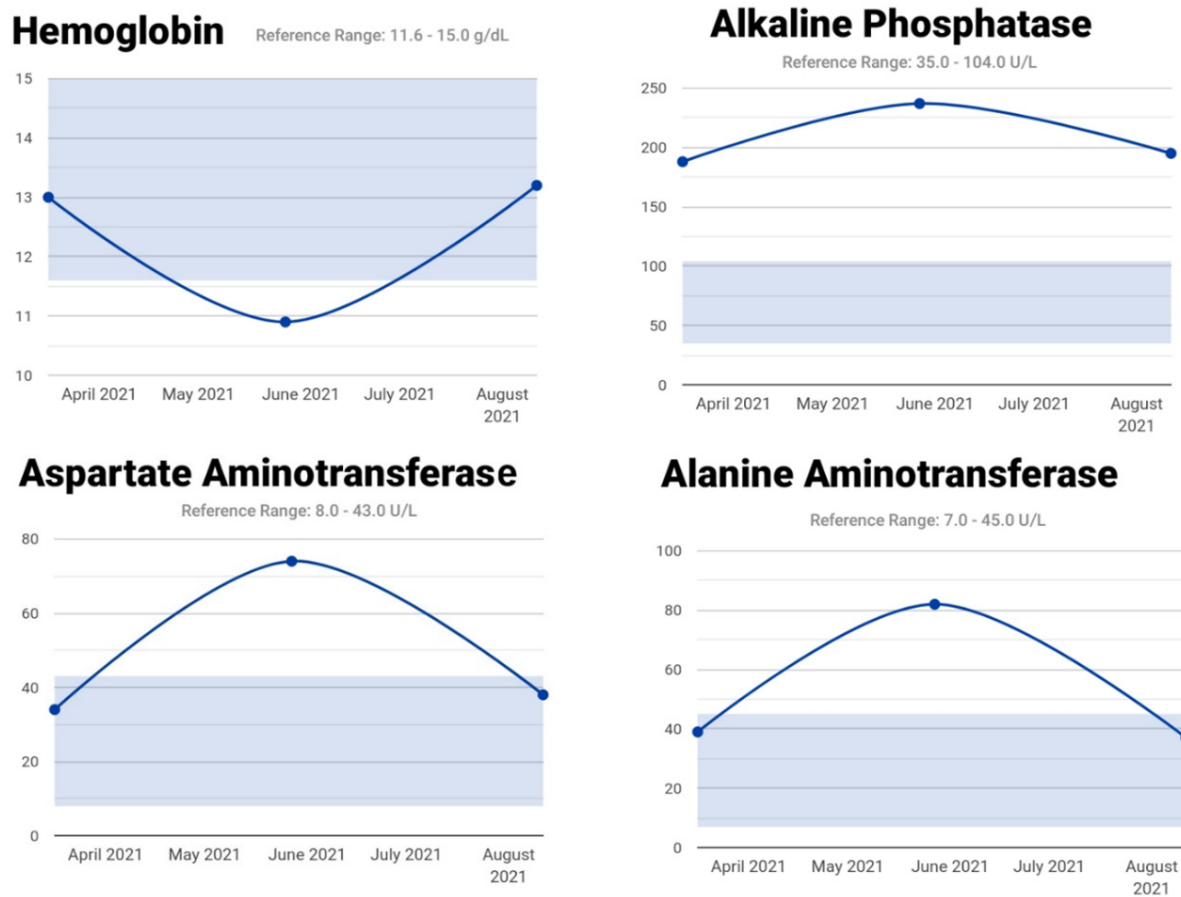


Figure 2: Changes of the indicators of the common laboratory tests during cancer treatment.

Case 3 Presentation

a) Patient information. A 62-year-old male had a medical history of prostate cancer removal in 2017. In mid-2019, rising PSA levels indicated recurrent prostate cancer, prompting a referral for follow-up and subsequent treatment. The patient underwent 33 sessions of radiation therapy as prescribed by an oncologist at Johns Hopkins University Medical Center.

b) Introduction of a biophoton generator. In 2021, the patient visited the Tesla BioHealing Office and decided to participate in a pilot observational program. He began using one Tesla BioHealer nightly, incorporating it into his daily routine at the start of his radiation treatments.

Observations and Patient Experience:

A. Energy levels: Before starting radiation therapy, the patient experienced significant fatigue, requiring breaks of 30 minutes to 2 hours to complete tasks like mowing his three-quarter-acre lawn. By the midpoint of his radiation treatment, he reported a significant improvement in energy levels, completing the same task, including trimming, in about one hour without breaks.

B. Physical activity: Despite undergoing radiation therapy, the patient maintained a rigorous daily routine, including seven-mile walks, without interruption.

C. Work and lifestyle: The patient continued to work full-time throughout the treatment period, with no decline in productivity or energy levels.

D. Side effects and tolerance: The patient reported no common side effects of radiation therapy, such as fatigue, nausea, or skin irritation. Medical staff, including oncologists and nurses, expressed surprise at his resilience and energy, as they had initially predicted a significant decline in his condition.

E. Sleep quality: The patient reported consistently sound sleep during the treatment process, which he attributed to the nightly use of the Tesla BioHealer.

F. Overall outcome. Upon completing 33 radiation treatments, the patient's oncologist confirmed the therapy's success in treating both the primary prostate cancer and metastatic lesions in the pelvic region. The patient completed the treatment without complications or adverse effects, attributing his enhanced energy and resilience to the continued use of the Tesla BioHealing device.

Case 4 Presentation

a) Patient information. A 55-year-old male was diagnosed with advanced squamous cell carcinoma of the esophagus. After achieving partial remission through chemotherapy, he was referred for radiotherapy (RT) at the University of Pittsburgh Medical Center

(UPMC) Cancer Center as the next phase of treatment. Within two weeks of RT, the patient experienced escalating side effects, including severe fatigue, nausea and localized pain in the irradiated area. His physical and psychological well-being were significantly impaired, putting his compliance with the RT protocol at risk. At the time of his participation in a pilot clinical study, the patient had extreme fatigue, could only consume liquid food and exhibited a marked decline in energy levels.

b) Introduction of biophoton co-therapy. To support recovery and mitigate the adverse effects of RT, the patient, a medical professional himself, opted to incorporate biophoton co-therapy. Fourteen Tesla BioHealing® Automatic Biophoton Generators (ABGs) were positioned under his bed for extended periods, up to 24 hours daily. The biophoton sessions were

administered concurrently with RT, aiming to leverage biophotons' proposed cellular healing and immunomodulatory properties to enhance RT tolerance and reduce the overall cancer burden.

c) Follow-Up and outcomes. Within the first week of biophoton co-therapy, the patient reported reduced fatigue and an improved sense of energy. He gradually regained his appetite and transitioned to better nutritional intake, which allowed him to endure RT sessions more effectively. Additionally, pain levels decreased, reducing the need for pharmacological interventions. Improvements in overall quality of life, as measured by the SF-36 Score, were documented during the initial four-week study period (see Figure 3). Clearly, the patient's life quality was gradually improved during the 4-week study period.

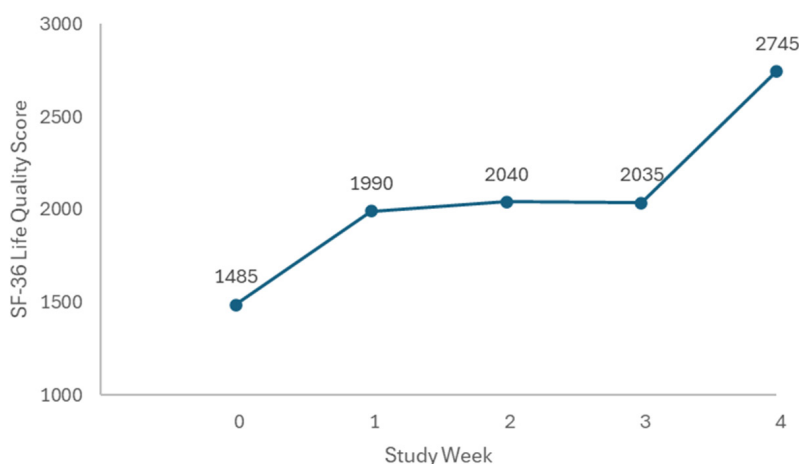


Figure 3: The improvement of life quality during the 4-week study period.

d) Overall treatment outcome. By the end of the 6-month treatment, the imaging studies confirmed complete remission, with no detectable signs of malignancy. A biopsy confirmed a cancer-free status. He then participated in several fishing competition events. The patient was monitored over the following 12 months with periodic imaging and physical exams. No cancer recurrence was observed and the patient reported sustained energy levels and absence of the RT-related adverse effects. These findings suggest that biophoton co-therapy aided in the post-RT treatment and

recovery phase and potentially contributed to sustained remission.

Multiple Cases Presentation

Tesla BioHealing products, ABGs, have been available as Over-The-Counter (OTC) medical devices since September 2020. By the end of 2024, over 40,000 individuals with a wide range of health conditions had utilized the devices to address their needs. Notably, no side effects were observed by the manufacturer or reported by users after using the devices for periods ranging from a few weeks to several years.

Table 2: Benefits of Biophoton Co-Therapy Reported by 44 Cancer Patients.

Benefit	Benefit Description	Percentage
Pain Relief	A significant number of patients reported reduced pain, particularly those suffering from cancer-related discomfort or chronic conditions.	84%
Enhanced Energy Levels	Improved energy and vitality were frequently highlighted, suggesting that biophoton co-therapy may help patients combat fatigue and regain activity levels.	47%
Healing and Recovery	Healing benefits were noted, indicating improvements in recovery processes, symptom management, and overall health stabilization.	25%
Improved Quality of Life	Positive feedback regarding improved quality of life was reflected in testimonials about better sleep, reduced stress, and normalization of health parameters (e.g., easy to go to work and able to help the family).	100%
Symptom Management	Other aspects, such as fatigue alleviation, relief from aches and arthritis, and better emotional well-being, showing broad applicability in supportive care.	60%

Among these users, 44 cancer patients voluntarily provided feedback on their experiences with ABGs. Table 2 summarizes the reported improvements among these patients, highlighting the potential benefits of biophoton therapy in addressing cancer-related challenges and enhancing overall quality of life.

Key Implications

Biophoton therapy demonstrates promising complementary benefits to traditional cancer treatments by enhancing patients' overall quality of life, alleviating specific symptoms and supporting physiological recovery. Consistent themes, including significant pain relief, improved energy levels and accelerated healing, underscore its potential value as a non-invasive and supportive therapy. These findings suggest that biophoton therapy could serve as an adjunctive approach to improve treatment tolerance and outcomes in cancer care.

Discussion

The four cases and 44 real-world reports from cancer patients presented in this communication highlight the potential of biophoton quantum co-therapy as a much-needed adjunct in cancer care. The co-therapy consistently demonstrated benefits, including alleviation of side effects, enhanced energy levels, prevention of pancytopenia and significant improvements in overall quality of life [4]. These outcomes allowed patients to complete rigorous cancer treatments without interruptions, aligning with emerging evidence that supports the role of biophotons in mitigating the physiological challenges associated with cancer therapies. The exceptional tolerance observed in patients undergoing chemotherapy, radiotherapy and targeted therapies raises compelling questions about the mechanisms underlying biophoton therapy's effects. Although anecdotal, these findings strongly suggest that integrating biophoton therapy into oncology care could enhance patient resilience and adherence to treatment regimens, ultimately improving clinical outcomes.

Possible Mechanisms of Action

Biophotons are hypothesized to facilitate cellular repair and energy balance, potentially through the following mechanisms:

A. Boosting Mitochondrial Activity: By increasing energy availability, biophotons may support cellular repair and recovery from the damage caused by cancer treatments [5-6].

B. Modulating oxidative stress: Biophotons may reduce Reactive Oxygen Species (ROS) levels, thereby mitigating inflammation and oxidative damage—two major contributors to treatment-related side effects [6].

C. Immune regulation: Enhanced immune response facilitated by biophotons may improve systemic recovery and reduce fatigue, critical for maintaining patients' quality of life [7].

D. Tissue regeneration: By activating stem cells and improving microcirculation, biophotons may accelerate healing, alleviate neuropathy and address other treatment-related

symptoms. These regenerative effects could also enhance broader physiological recovery [7-12].

E. DNA repair. We observed that the sizes of the cancer masses on the body surface of animals reduced their size significantly within two weeks of biophoton therapy alone (not published). Previous non-clinical studies have highlighted the role of biophotons in cellular communication and DNA repair. For instance, Popp et al. [13] first proposed the role of biophotons in cellular signaling and maintaining homeostasis. More recent research has suggested that biophoton emissions play a role in regulating oxidative stress and stimulating DNA repair mechanisms [14-15].

Potential Thermal Effects. One could speculate that any modality involving energy transfer requires careful monitoring of thermal effects. However, strong biophoton generators used in our co-therapy operate within a non-ionizing, low-energy quantum emission range. Continuous thermographic monitoring in our clinical settings has not shown any pathological elevation in tissue temperature beyond physiological norms [16]. In fact, infrared thermography in several patients with chronic pain demonstrated reduced local inflammation and improved temperature symmetry post-treatment—supporting a normalization rather than accumulation of heat (to be reported during an international conference of Advanced Addiction Medicine in Berlin, Germany on June 24, 2025). Gene Modulation and SIRT1. SIRT1 gene plays a critical role in aging, metabolism and stress resistance and certain factors, such as nutritional therapy, can impact the anti-aging gene expressions [17-20]. Biophotons have been shown to promote SIRT1 expression and improve mitochondrial function in neurodegeneration models [21-23]. Preliminary studies from our research team and collaborators suggest that biophoton exposure may enhance mitochondrial function and stress resilience, potentially upregulating protective pathways like SIRT1, rather than inactivating them. While the exact gene expression effects remain an active area of research, current evidence from plasma biomarker panels in long-term users indicates no adverse downregulation of key survival genes. Nevertheless, we agree that tracking SIRT1 levels in future long-term studies could be a valuable addition to validating biophoton effects on genomic health. Clinical Safety and Efficacy Evidence. Based on our two published studies [24,25], biophoton therapy has been shown to increase cell production, reduce anemia and improve blood fluidity without any reported adverse effects. In a metabolic case series, biophoton co-therapy was associated with sustained improvement in serum iron, vitamin D and vitamin B12 levels in patients with autoimmune thyroiditis [24], indicating broad systemic benefit without thermal or genetic toxicity. In a separate study, strong biophotons reversed tissue glycation and cholesterol buildup—markers strongly linked to aging and chronic disease—again with no observed side effects [25]. The promising outcomes and hypothesized mechanisms underscore the need for further research to validate the efficacy of biophoton co-therapy and explore its integration into standard oncology care protocols.

Conclusion

The integration of biophoton co-therapy as an adjunct to conventional cancer treatments shows significant promise in enhancing treatment tolerance, minimizing side effects and improving patients' overall quality of life. This case series demonstrates how biophoton therapy can alleviate the physical and emotional burdens of cancer therapies, allowing patients to adhere to prescribed regimens and achieve favorable clinical outcomes, including cancer-free status. Key benefits observed, such as reduced fatigue, pain relief, improved immunity, anemia avoidance and increased energy levels, highlight the potential of biophoton co-therapy to address the physiological challenges associated with chemotherapy, radiotherapy and other cancer treatments. These findings suggest a broader role for biophoton therapy in enhancing patient resilience during intense medical interventions. However, the preliminary nature of these results emphasizes the need for further rigorous clinical studies. Future research should aim to clarify the mechanisms of action, validate its efficacy across diverse patient populations and establish standardized guidelines for its application in oncology care. As a non-invasive and complementary modality, biophoton co-therapy represents a promising step forward in advancing holistic, patient-centered approaches to cancer treatment.

Patient perspective (from Case 1 only, the other cases shared her experience)

Receiving a cancer diagnosis was one of the most challenging moments of my life. As a mother and wife, I felt overwhelmed by the uncertainty and the journey ahead. I was diagnosed with advanced breast and kidney cancer and the physical toll of the disease and treatments was devastating. Initially, I suffered from debilitating hip pain, fever with flank pain, joint discomfort, unrelenting fatigue, anemia and severe weight loss. Each hospital visit brought new diagnoses: sciatica, acute kidney infections, anemia and even a suspicion of lupus. These issues compounded the emotional burden of battling cancer. The treatments themselves, including chemotherapy and radiotherapy, introduced a host of new challenges. I struggled with the side effects-nausea, fatigue and weakness-that made even daily activities feel insurmountable. At times, I wondered if I could continue the rigorous treatment plan necessary to fight cancers. Everything changed when I was introduced to biophoton co-therapy. Initially, I was skeptical, but as the therapy progressed, I noticed remarkable changes. The side effects of chemotherapy and radiotherapy, which once felt unbearable, began to fade. My energy levels improved and I experienced less pain and discomfort. For the first time in months, I felt like I had a fighting chance-not only to survive but to reclaim my life. The relief from side effects allowed me to continue my cancer treatments without interruption. As I moved through the process, I felt stronger, more resilient and more hopeful. Ultimately, I received the life-changing news that I was cancer-free. Looking back, I am deeply grateful for the multidisciplinary approach that included biophoton co-therapy. It not only eased my physical struggles but also gave me the strength to complete my treatment plan. I hope my

story inspires other patients and healthcare providers to explore innovative, complementary therapies that improve quality of life during the most difficult of battles.

Declarations

Ethics approval and consent to participate

The four patients provided written informed consent for the use of biophoton therapy and the publication of this case report, including relevant medical data. This study adheres to the ethical principles outlined in the Declaration of Helsinki. The additional 44 cancer patients voluntarily shared their feedback publicly after using Tesla BioHealing® automatic biophoton generators.

Availability of data and materials

The datasets generated and analyzed during this study are available from the corresponding author upon reasonable request.

Competing interests

Tesla BioHealing, Inc., provided the biophoton generators used in this case study but had no influence on the study design, data collection, analysis, or the use of original medical data in writing this manuscript. JZL and HYG are co-inventors and co-founders of Tesla BioHealing, Inc.

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Authors' contributions

JZL, AR, KO, LO, AA and HYG contributed to data collection. JZL and HYG performed data analysis, while all authors (JZL, AR, KO, LO, AA and HYG) contributed to the interpretation of data and manuscript writing. All authors read and approved the final manuscript.

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