What is UVBI?

UVBI - Immunotherapy is designed to deliver a significant amount of wide spectrum photonic energy over a prolonged period of time via an energetic photonic infusion of the blood.

This benefits any patient who is trying to get rid of a chronic or acute infection - bacterial or viral. Those with cancer especially benefit as the UV radiation denatures proteins only cancer cells can make.

The U-Vet utilizes multiple light sources and is equipped with both a high-power dual wavelength UVA light source and a high output UVC source along with 60 Watts of multiple, visible wavelengths. The combined UV sources deactivate the DNA of bacteria, viruses and other pathogens and thus destroy their ability to multiply and cause disease. Specifically, UVC light causes damage to the nucleic acid of microorganisms.

UV lights improve the energy production of mitochondria. The UV lights have peak energy absorption specific to NAD+ and NADH. These are involved in redox reactions in the cells and are a key component of energy production in cells.

UVBI, in particular the U-Vet machine I utilize, operates on the principle of photobiology. It harnesses specific wavelengths of light to modulate biological processes. The device employs photobiomodulation (PBM) which utilizes light to influence cellular activity.
PBM reduces inflammation and oxidative stress, promotes tissue repair, and modulates immune responses.

UVBI (U-vet) amplifies oxidative stress within targeted cells, especially malignant cells. By utilizing a controlled delivery of light-activated compounds the device produces reactive oxygen species (ROS) within these cells. This controlled oxidative stress leads to cellular apoptosis (programmed cell death), effectively reducing tumor viability. Such a mechanism has been explored in recent studies, where innovative nanomaterials were synthesized to enhance oxidative stress, thereby improving the efficacy of tumor photoimmunotherapy.

Traditional Photodynamic Therapy (PDT) faces challenges, including limited tissue penetration and non-specific targeting. The U-vet addresses these limitation through several innovative features:

1. Enhanced Photosensitizers which produce ROS more efficiently upon activation by specific light wavelengths. These agents have been optimized for better tumor targeting and reduced side effects.
2. Precision Light Delivery - ensures precise light delivery to affected tissues, maximizing therapeutic effects while sparing healthy cells. This precision is crucial for effective treatment outcomes
3. Integration with Nanotechnology - leverages nonmaterial-based carriers to deliver photosensitizes directly to tumor sites, which enhances the accumulation of therapeutic agents in malignant cells, thereby increasing treatment efficacy.

Conditions commonly treated with U-Vet

Infectious and Immune conditions:

Bacterial infections (pyoderma, abscesses, cellulitis, otitis externa/media)
Viral infections (papilloma virus, herpesvirus, calicivirus, parvovirus)

Fungal infections (dermatophytosis, yeast dermatitis, Malassezia)
Tick-borne diseases (Lyme, Ehrlichia, Anaplasma - immune support)
Sepsis and systemic inflammation (supportive therapy)
Immune-modulated diseases (autoimmune skin or joint inflammation - low dose PBM only)

Wound Healing and Surgical Recovery

Post-surgical incision healing
Chronic non-healing wounds and ulcers
Burns or radiation dermatitis
Pressure sores, bite wounds, lacerations
Graft or flap oxygenation support

Musculoskeletal and Pain Management

Arthritis and degenerative joint disease
Tendon and ligament injuries (tendinitis, cruciate support)
Back pain, IVDD
Muscle soreness or strain (equine and canine athletes)
Myofascial trigger point therapy

Neurological and Circulatory Disorders

Peripheral neuropathy and nerve regeneration
Spinal trauma recovery (adjunct therapy)
Poor microcirculation or ischemic tissue
Lymphedema and vascular insufficiency
Peripheral vasculitis (non-autoimmune)

Inflammatory and Allergic Skin Disease

Atopic dermatitis and allergic skin irritation
Chronic otitis with secondary infection
Hot spots (acute moist dermatitis)
Pododermatitis and interdigital cysts
Anal gland inflammation

Oncology Support (Adjunctive Use)

Immune modulation in patients undergoing chemotherapy
Improving tissue oxygenation and detoxification
Post-surgical wound healing in tumor excision
Local photonic therapy to reduce inflammation and pain

Organ System and Metabolic Support

Liver detoxification and oxidative stress reduction
Chronic renal insufficiency (to support microcirculation)

Endocrine disorders with poor tissue oxygenation (Cushing's, hypothyroid)
Systemic fatigue, immune suppression

Preventative and Wellness Applications

Immune maintenance for aging animals
Recovery support for working or performance animals
Microcirculatory enhancement in geriatrics
General vitality and oxidative balance support

Contraindications/Use with caution:

Photosensitive autoimmune diseases (lupus, dermatomyositis)
Active ocular disease (protect eyes)
Pregnancy (avoid direct abdominal exposure)
Recent radiation therapy
In conclusion, this approach modulates oxidative stress and immune responses and heralds a new era in targeted, non-invasive medical treatments.

Integrating nutritional supplementation enhances light filtration, metabolism, and mitochondrial function which can significantly amplify U-Vet's photodynamic therapy effects. Strategic supplementation ensures cells are primed for optimal light absorption and conversion, allowing for enhanced bioenergetics, immune function and detoxification.

Additionally, the U-Vet incorporates t**herapeutic frequencies/pulse rates (Rife frequencies)** which provide precise bioelectric modulation, which allows customizing treatments for a range of conditions. The synergy between light therapy, nutrition and frequency medicine positions the U-vet as one of the most advanced tools in modern integrative veterinary medicine for optimizing cellular repair and function, resilience, and longevity.

Pulsed Light Therapy combined with other modalities:

1. Improved tissue penetration (reaches pathogens in the bloodstream)
2. Minimizes therapy damage (delivers energy in short bursts, unlike continuous wave light which generates heat)
3. Increased biological stimulation (enhance cellular responses, such as resonance effects where certain pathogens absorb energy at specific frequencies, potentially disrupting them- this is similar to how resonant frequencies can destroy microorganisms through mechanical oscillation).
4. More effective pathogen disruption (pathogens are more sensitive to pulsed energy which interferes with their metabolism and replication cycle; some studies suggest pulsed light can cause oxidate stress in pathogens)
5. Improved cellular uptake and immune response (pulsed light stimulates mitochondrial function and ATP production, boost immune system function and aid in detoxification - helps the body clear pathogens more efficiently than continuous exposure)
6. Avoiding adaptation by pathogens (continuous wave may allow pathogens to adapt over time, pulsed light disrupts this adaption, making the treatment more effective)
7. Synergy with other therapies (synchronize with electromagnetic fields, sound therapy, medical ozone therapy - enhancing overall effectiveness)
8. Rife Frequencies for Blood Borne pathogens

WAVELENGTHS UTILIZED:

LEDs (RED) increases mitochondrial energy via delivery of activated blood throughout the body

LEDs (GREEN) affects physical and chemical properties of blood cells, which is helpful in preserving blood and revitalizing the physically and chemically stressed erythrocyte membrane and decreases blood viscosity, increasing erythrocytes' electrophoretic mobility

LEDs (VIOLET) promotes vasodilation while reducing inflammation, improving blood flow and delivering oxygen and nutrients to cells.

UVA - stimulates NADH and NAD+

UVC - stimulates NAD and facilitates global germicidal and viral inactivation.

LED (AMBER) supports production and release of NO, and stimulates NEW NO synthesis and does not merely release nitric oxide from pre-existing tissue stores. This NO can be utilized both inside the cells where it functions in hypoxic signaling, and outside the cells where it functions in vasodilation and other signaling pathways. Combining Amber with St John's Wort helps promote wellbeing and reverse depression (in humans).

ULTRAVIOLET BLOOD RADIATION (UVBI)

Combines medical-grade ozone and ozonated saline with the patient's pre-drawn blood, then transferred through a crystal cuvette, which is passed over an ultraviolet light and reintroduced back into the patient's system intravenously. It enhances treatment by incorporating PBM with red, amber, blue and green light, optimizing therapeutic benefits. This technique is classified as immunotherapy.