Integrated Medicine
Dr Saskia Kloppenburg Vieth

Newsletter

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The Mistletoe Therapy - Helixor®

This plant extract continues to be one of the most important complementary therapies. Both, research and my clinical experience lead me to continue recommending it to my patients. Since I'm always searching for the most cost-effective option, I want to introduce you to HELIXOR®

In April 2018, when the RLHIM stopped funding the Mistletoe Therapy and some of my patients couldn't afford it, I started my search for less expensive options. Helixor@ is a German brand with which I was already familiar before starting to work at the RLHIM, however, at that time, my search for a pharmacy that would supply Helixor® in the UK remained unsolved until recently.

Helixor@ is based in Germany and has been manufacturing this precious liquid for more then 40 years. Their manufacturing process is standardised and complies with the guidelines of the European Union for "Good Manufacturing Practice" (EU GMP Guidelines) and their ampoules are free from preservatives (with the exception of sodium chloride for isotonization and sodium hydroxide for adjusting the pH value).

The Mistletoe's active substances (see tables below) do have well known anti-cancer properties.

Overview of the pharmacological effects of Helixor®

Effects	Clinical Relevance
Immunomodulation	Reduced susceptibility to infections, indirect immune-mediated tumor inhibition
Immunoprotection (DNA stabilization)	Better tolerability of chemotherapy, less immunosuppression by chemotherapy
Neuroendocrine effects	Improved quality of life (especially fatigue)
Tumor inhibition (apoptosis ↑, angiogenesis ↓)	Prolongation of survival time, tumor regression in specific cases

Ingredients of mistletoe extracts

Structural types	Classes of substances	Effects on tumor cells	Effects on immune cells
Glycoproteins	Mistletoe lectins I, II and III (RIP II)	Cytotoxicity through inhibition of ribosomal protein synthesis + induction of apoptosis (intrinsic pathway)	Macrophage activation, release of TNF-α, IL-1, IL-2, IL-6, eosinophilia
	VisalbCBL = cbML	Weak cytotoxicity	Adjuvant increase in immune response
Polypeptides	Viscotoxins A_{1-3}, B, 1-PS, U-PS	Cytotoxicity through cell membrane leakage	Macrophage activation, increased phagocytosis activity of granulocytes
Oligo- and polysaccharides	Arabinogalactans, galacturonans	Indirect, immune-mediated tumor inhibition	Stimulation of T helper cells (TH1 ↑, IFN-γ ↑), increased NK cell activity
Flavonoids	Quercetin derivatives	Induction of apoptosis	Antioxidant, anti-inflammatory + antinociceptive effects
Phenylpropane glycosides	Syringin	–	Stress protection and immunoprotection (adaptogenic), antioxidant
Triterpenes	Oleanolic, ursolic, betulinic acid	Induction of apoptosis and cell differentiation, antiangiogenesis	Anti-inflammatory + antioxidant effects, immunoprotection

Clinical benefits

Mistletoe extract acts on many levels: On the one hand, it boosts the immune system by multiplying and activating the immune cells. On the other, mistletoe extract can induce apoptosis – the process of natural cell death – which can inhibit tumor growth.

Healthy tissue is not adversely affected by this. On the contrary: Mistletoe extract protects the DNA of immune cells and other healthy cells against damage caused by cytostatic drugs. As a result, side effects of chemotherapy can be reduced.

Mistletoe therapy results in significant improvements in patients' quality of life:

* It activates the immune system and the production of defence cells.
* It stimulates "programmed cell death" (apoptosis), particularly in tumor cells, which have lost this ability and thus multiply uncontrollably.
* It protects the DNA of healthy cells against damage caused by cytostatic drugs, so the side effects of chemotherapy are reduced.
* Patients' general well-being improves, as the immune system remains active and infections are prevented.
* Fatigue, particularly during and after chemotherapy, is less severe.
* Nausea during chemotherapy is reduced.
* It stimulates the appetite, the body gains new energy.
* Sleep improves.
* Energy increases.
* Mistletoe products raise the patient's body temperature slightly, warming their body through. Many cancer patients have a low average body temperature and easily feel cold.
* Less sensitivity to pain, so fewer painkillers and sedatives are needed.
* Patients often report a more positive outlook, more courage and initiative, and less fear.

Sometimes, mistletoe therapy can also help shrink a tumor and prolong survival.

This mode of action makes mistletoe therapy a key supplement to standard oncological therapies.

Types of Mistletoe

Helixor® does provide three different subtypes, depending on the host tree on which the mistletoe grows.

* Abietis (fir)
* Mali (apple)
* Pini (pine)

Their ampoules come in different strengths and doses range from 0.01mg up to 400mg.

Boxes contain either 7 ampoules (series boxes, with increasing doses) or 8 ampoules (pain doses). In addition they also have "Great Packs" with 50 ampoules.

Costs

Helixor® sends their products all around the world and their prices (in €) when converted into GBP (£) are cheaper than Iscador® or Abnoba Viscum®. For example, a 4-months supply of 20mg ampoules would cost:

Brand	Price /box	Number of amps
Iscador®	£546.00	49 amp (7 x7boxes)
Abnoba Viscum®	£433.00	48 amps (1 big box)
Helixor®	£412.90	50 amps (1 big box)

Unfortunately, they don't send needles or syringes, however, you can get these easily at your chemist (I can provide you with a prescription).

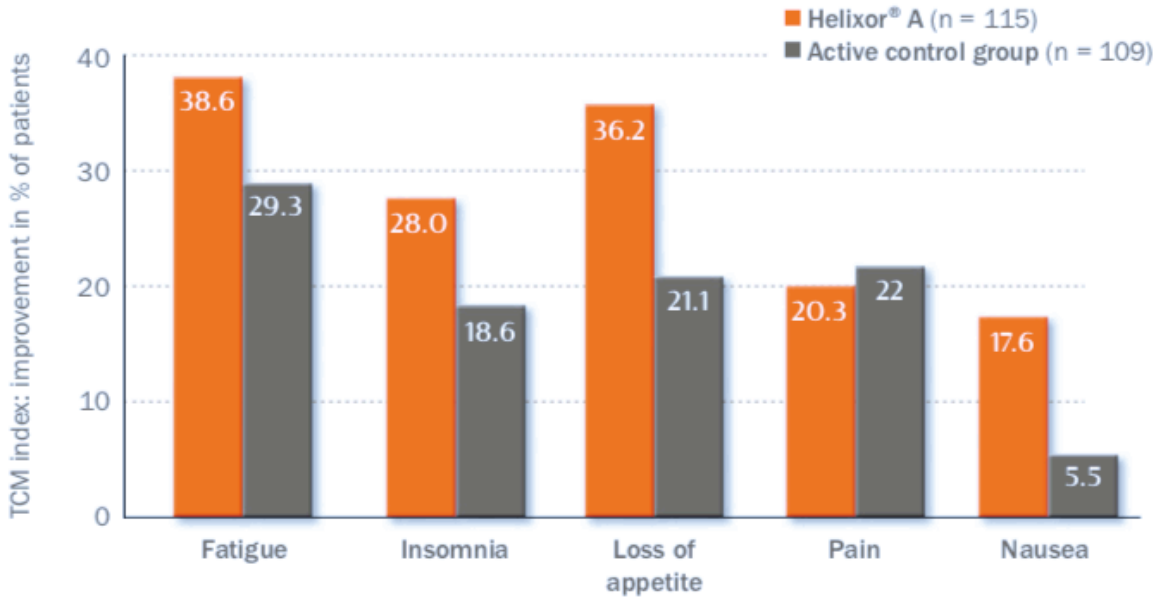
Local reaction

It is important to use the appropriate dose. The local reaction around the injection site is the best way to check if the immune system is responding well. This is harmless and even desired as it demonstrates that the skin's immune cells have been activated by the administered dose.

This presents as localised reddening, hyperthermia, swelling and induration (caused by the accumulation of macrophages and lymphocytes), and is occasionally accompanied by localised pruritus (itch) or mild pain.

Although I have initially learned that some patients may have no reaction at all despite using the highest dose, experience showed me that some patients respond better to a specific brand than to another. So, if you have no local skin reaction at all, you may consider trying a different brand.

Improvement in individual dimensions of quality of life in breast, ovarian and lung cancer patients[3]



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Dr Saskia Kloppenburg Vieth

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Email: info@integratedmedicine.co

Web: www.integratedmedicine.co