Mistletoe
A Beneficial Supplement in Integrative Cancer Therapy

An Overview for Patients
Integrative Cancer Therapy

Integrative cancer therapy takes a holistic approach to treating cancer patients, bringing together conventional medicine and the best of complementary medicine.

Integrative Cancer Therapy

<table>
<thead>
<tr>
<th>Complementary Medicine</th>
<th>Conventional Medicine</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Mistletoe therapy</td>
<td>• Surgery</td>
</tr>
<tr>
<td>• Sports, exercise</td>
<td>• Chemotherapy</td>
</tr>
<tr>
<td>• Nutrition</td>
<td>• Radiation therapy</td>
</tr>
<tr>
<td>• etc.</td>
<td>• Targeted therapy</td>
</tr>
</tbody>
</table>

Integrative cancer therapy includes:

- Mistletoe therapy
- Sports, exercise
- Nutrition
- etc.
Mistletoe Therapy – a Key Part of Complementary Cancer Therapy

Complementary cancer therapy encompasses measures that accompany and supplement standard oncological therapies (such as surgery, radiation therapy, chemotherapy, and hormonal therapy).

Complementary measures do not aim to replace standard therapies, but rather to reduce their side effects and to improve the patient’s quality of life.

Mistletoe therapy is at the heart of complementary cancer therapy – it is the measure most frequently used.

The mistletoe has been used as a medicinal plant since ancient times: externally for wounds, ulcers, and diseases of the spleen, and internally for gynecological disorders and seizures (epilepsy).

Since 1917, mistletoe products in the form of injections have also been used in complementary cancer therapy. Over the years, the special manufacturing process has developed further, thus progressively increasing therapeutic efficiency.

Mistletoe therapy has a positive effect on the patient’s immune system and quality of life, and has been shown to improve tolerance of standard therapies rendering it more relevant today than ever before.
The White-Berry Mistletoe – Botany

Mistletoe is most visible in the winter months, when deciduous trees have lost their leaves and you can see spheres of evergreen leaves on the bare branches.

Mistletoe (*Viscum album*) is a semi-parasite that lives on trees. In the plant kingdom, it stands apart:

It has no roots, only a so-called “sinker” that connects the mistletoe to the host tree and supplies it with water, salts, and some nutrients.

Unlike all other plants, the mistletoe reproduces in winter, blooming in February/March and bearing ripe, white berries in November/December.

The mistletoe does not orient itself to the sun, so both sides of its leaves are identical and its branches grow out into all directions – giving it its spherical shape.

In Europe, there are three subspecies of white-berry mistletoe: deciduous tree, pine and fir mistletoe.
The Mistletoe – What It Contains

The mistletoe contains over 1,000 different constituents. The effects of its proteins – lectins (glycoproteins) and viscotoxins (polypeptides) – and complex carbohydrates (polysaccharides) have been researched most extensively.

Additional constituents like arginine (an amino acid), flavonoids (secondary plant metabolites), and a high level of vitamin C contribute to immunomodulation and tumor inhibition.

With the mistletoe, as with most medicinal plants, the whole extract should be considered the “active substance”. In scientific investigations, the extract was shown to have a broader effect spectrum than the isolated constituents.
Mistletoe Therapy – Mode of Action

Mistletoe therapy acts on many levels: On the one hand, it boosts the immune system by multiplying and activating the immune cells. On the other, mistletoe therapy can induce apoptosis (the process of natural cell death) in tumor cells which results in the inhibition of tumor growth.

Healthy tissue is not adversely affected by this. On the contrary: Immune cells and other healthy cells are protected against further injury, e.g. damage caused by cytostatic drugs.

Patients report that mistletoe therapy significantly improves their quality of life. For example:

- Improved general well-being
- Less fatigue, especially during and after chemotherapy
- Less nausea
- Improved appetite
- Less pain sensation, so fewer painkillers and sedatives are needed
- Less frequent depressive moods

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

The mistletoe products are obtained from fresh mistletoe herb and are named according to the mistletoe’s host tree: apple tree, fir or pine.

This makes it possible to select and administer the products individually. Doctors can select the mistletoe product or sort best suited to a specific patient.

In therapy, it has been observed that mistletoe products from different host trees have different focuses in their activity.

The products come in so-called series packs, each with gradually increasing dosages. Original packs and large packs with ampoules of identical dosage are also available. A broad range of possible dosages enable individual therapy.

Storage

Mistletoe ampoules must always be stored in a cool place, protected from heat and light.

Please also follow the instructions and information provided by your doctor or pharmacist; some products have slightly different storage requirements.
Mistletoe Therapy – Practical Aspects

Before starting the therapy, please discuss it with your doctor in detail. Mistletoe therapy should always be an individual therapy.

Mistletoe products for cancer therapy are manufactured exclusively as ampoules and are usually injected subcutaneously (under the skin).

You will normally inject the product three times a week at various sites, e.g. abdomen, upper thighs, or upper arms, but not into radiation fields or near infected areas.

The first injection must be done by your doctor, or under professional supervision. After you are familiar with the process, you can give the injection yourself, or ask a relative or caregiver to do it.

The most common immediate effects are reddening and swelling at the injection site, approx. 1 to 5 cm in diameter (0.4 to 2 in), and a slight increase in body temperature.

However, these reactions are not considered adverse side effects – they are desired responses. The immune system responds to the mistletoe injection, it is activated. This is exactly what we want to achieve.

Desired local reaction diameter up to 5 cm (2 in)
In all of these cases, you should wait until the reaction has subsided before giving the next injection.

The lymph nodes near the injection site may also swell slightly. Depending on the intensity of your reaction, your dosage may need to be adjusted. If the skin reaction is larger than 5 cm (2 in) or if you have a fever above 38 °C (100.4 °F), you need to temporarily stop taking injections and have your dosage reduced afterwards. Be sure to inform your treating doctor about this.

During the course of therapy, you may also experience no skin reaction at all. You should tell your doctor about this, too.

Depending on your overall condition and your reactions to mistletoe therapy, your dosage may be adjusted or a different product may be used.

If the tumor is still detectable, or if you are receiving chemotherapy or radiation therapy, the mistletoe therapy is continued without a break. In other cases, therapy breaks of increasing length are recommended, to avoid habituation. Mistletoe therapy is usually administered for several years.
When Can Mistletoe Therapy Be Started?

In general, mistletoe therapy can be started at any time. The best time would be right after the tumor is diagnosed. Mistletoe therapy can support patients going through surgery, chemotherapy, and radiation therapy – it can help reduce, or even prevent, possible adverse reactions.

How Can I Find Out More?

If you have other general questions about mistletoe therapy, feel free to contact us. We will be happy to discuss medical questions about Helixor mistletoe products with your doctor.
Bringing Life to Life.

The Fischermühle in Rosenfeld, Germany, is home to Helixor Heilmittel GmbH & Co. KG, a medium-sized pharmaceutical company that specializes in the production of anthroposophic medicinal products made of mistletoe and Christmas rose.

Helixor was founded in 1975. The company is owned by a not-for-profit foundation. Surplus funds are used for research and for promoting scientific and educational activities.

In integrative medicine, holistic mistletoe therapy from Helixor makes a decisive contribution to supporting the general well-being of patients. It stimulates self-healing and relieves symptoms in all phases of the disease.