

European Mistletoe / Iscador® FAQ

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What is Iscador®?

Iscador® is a specially prepared extract of white-berried mistletoe (*Viscum album*). It is produced in Europe by the Hiscia Institute and is distributed by Weleda, Inc. The manufacture and quality assurance of Iscador® is regulated by European law. For over 70 years medicinal extracts of mistletoe have been incorporated into the care of cancer patients in Europe. European mistletoe therapy is thought to be the most commonly used complementary cancer treatment in Europe today.

What does Iscador® do?

Mistletoe has been studied in cell cultures, in animals with tumors, and in humans. A 2003 review of clinical trials was published in the European Journal of Medical Research¹: Twenty-three clinical studies in cancer patients were identified: 16 randomized, 2 quasi-randomized and 5 non-randomized. Cancer sites included breast, lung, stomach, colon, rectum, head and neck, kidney, bladder, melanoma, glioma, and genital. Among these studies, statistically significant positive outcomes were reported for survival (n=8), tumor remission (n=1), overall quality of life (QOL) (n=3), and QOL in relation to side effects during cytoreductive therapy (n=3). Further, positive trends were reported for survival (n=8), disease-free-survival (n=1), and tumor remission (n=2). Several studies reported no effect on survival (n=4), disease-free-survival (n=1), recurrence (n=2), remission (n=3), and QOL (n=1). One study showed a negative trend for disease-free-survival. Mistletoe therapy was well tolerated, and no major side effects were noted. Methodological quality of the studies was often below the standard that is today regarded as optimal or necessary. (A copy of this review is available from our office.)

Earlier reviews of European mistletoe are available on-line by the University of Texas Center for Alternative Medicine Research in Cancer (<http://www.sph.uth.tmc.edu/utcam/therapies/mistletoe.htm>) and the National Cancer Institute (<http://cancer.net.nci.nih.gov/cam/mistletoe.htm#0>).

It is also important to understand that not all mistletoe preparations are similar; some are made from whole plant extract (Iscador®, Helixor) while others contain only Mistletoe Lectin I, a single chemical from the mistletoe plant (Eurixor).

¹ Kienle GS, Berrino F, Bussing A, Portalupi E, Rosenzweig S, Kiene H. Mistletoe in cancer: A systematic review on controlled clinical trials. *Eur J Med Res*, 2003, 8:109-119.

Mistletoe therapy appears to have a number of effects. It seems to bolster the immune system, which is important for cancer patients for several reasons. First, conventional cancer therapies—chemotherapy, radiation therapy, and surgery—suppress immune activity. Second, cancer itself may inhibit normal immune function. Third, the immune system plays an important role in checking tumor growth at various stages of tumor development. Mistletoe may have non-immunological effects as well.

Again, it is important to emphasize that while data are strongly suggestive that mistletoe therapy is beneficial when added to conventional treatment, it cannot be considered a proven treatment. Mistletoe has not yet been approved for use by the FDA. However, FDA guidelines allow cancer patients to import ≤ 3 month supply of mistletoe products for personal use.

How is Iscador[®] administered?

Iscador[®] is administered as an injection, just below the skin (subcutaneous). It can be injected anywhere on the body, and most patients prefer to self-inject over the abdomen or thigh. It is typically injected 2-3 times per week, but the schedule may vary from patient to patient.

Iscador[®] is available in a range of dosages. Your physician would determine the appropriate dose for you based upon your response to treatment.

Is Iscador[®] safe?

While hundreds of thousands of patients safely utilize mistletoe preparations each year, certain side effects can occur:

- (1) Local inflammation at the injection site. Redness and swelling may occur. Such a reaction is harmless, and indicates that the patient's immune system is actually responding to the injection. If the area of redness is larger than 2 inches across, your physician may adjust the dose or schedule of injections.
- (2) Rise in body temperature. Iscador[®] may cause a slight rise in body temperature, which indicates stimulation of the immune system. In fact, your physician may ask you to keep a daily log of your morning and evening body temperatures, in order to document a temperature response. If your body temperature rises above 100.4°F. you would discontinue injections and contact your physician. This degree of fever may indicate a new infection unrelated to the use of Iscador[®].
- (3) Allergic reactions. Systemic allergic reactions have been reported but are rare. If you develop any itching, rash, or swelling you need to contact your physician immediately. Iscador[®] therapy always begins with a very low dose, and we recommend that the first injection be done in the physician's office.

Is Iscador[®] therapy compatible with chemotherapy and radiation therapy?

Yes. As mentioned above, patients appear to benefit from mistletoe therapy while receiving conventional treatment. It can also be administered pre- and post-surgery.