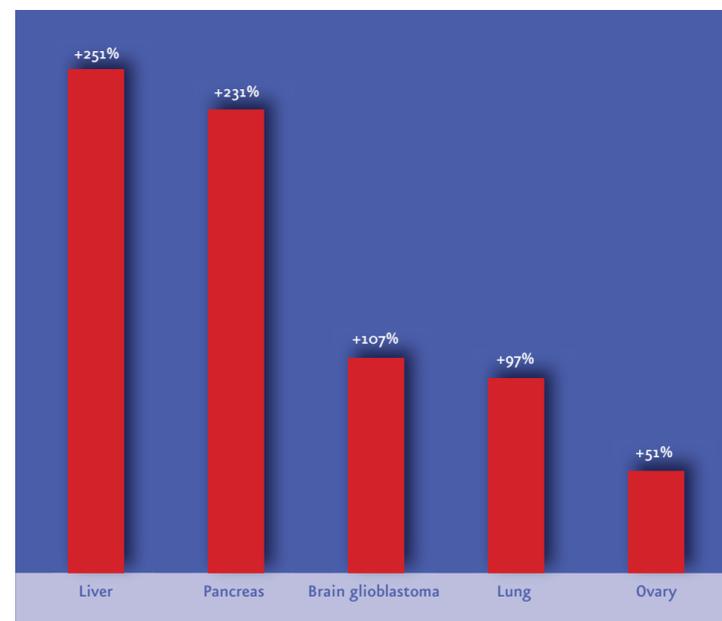


Medical and therapeutic benefits

In general, Oncothermia can be used with all stages of cancer, although its current main use is with advanced solid tumors that are hardly operable or inoperable, as well as with recurrent tumors and metastases.

Where conventional therapy approaches (surgery, chemotherapy, radiation therapy) are not very likely to be successful, or have proven to be inadequate, Oncothermia may also be the choice for tumors not listed at the right, especially if the aim of therapy is palliation.

Additional average survival time after Oncothermia treatment, compared to SEER database



Results and numbers of cases from a large-scale retrospective study on the use of Oncothermia on different tumor entities. For all tumor entities studies, patients showed a higher survival rate in the first year after cancer diagnosis.

Oncothermia has already been successfully used with the following tumors, including their metastases in different organs:

- Astrocytomas and glioblastomas
- Bronchial carcinomas
- Cervix carcinomas
- Colorectal carcinomas
- Carcinomas of the urethra
- Hepatocellular carcinomas
- Stomach carcinomas
- Malignant melanomas
- Mamma carcinomas
- Renal cell carcinomas
- Esophagus carcinomas
- Ovarian carcinomas
- Pancreatic carcinomas
- Squamous epithelium carcinomas at head and throat

Product range

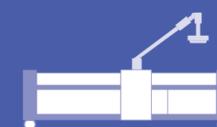
EHY-1020

The EHY-1020 is specifically designed to treat prostate diseases. Both malignant and benign tumors (BPH) can be treated using this system. It uses a catheter with built-in electronics and counter electrode. The EHY-1020 system is compact and easy to use. The method has been successfully used by our customers since 2010 with high success rates and minimal side effect.



EHY-2000plus

The EHY-2000plus is a widely accepted system for loco-regional deep mEHT applications. This model has been used for treatment worldwide for more than 20 years. Popular, versatile device, applicable for a range of solid tumors and improved over the years through feedback from our doctors, experts, the requirements of patients and the people treating them. The EHY-2000plus is an easy to use and highly reliable device.



EHY-2030

The EHY-2030 is our latest development in the treatment of loco-regional (including deep seated and surface) tumors. The newly designed device includes the Smart Electrode System (SES), the plug-in Patient Management System (PMS-100) and a user-friendly touch screen display with full system control. The new RF generator with increased power has been developed with a new intelligently controlled step motor tuning system for rapid impedance matching to achieve faster tuning times.



EHY-2000 series

Oncothermia systems for loco-regional tumor treatment



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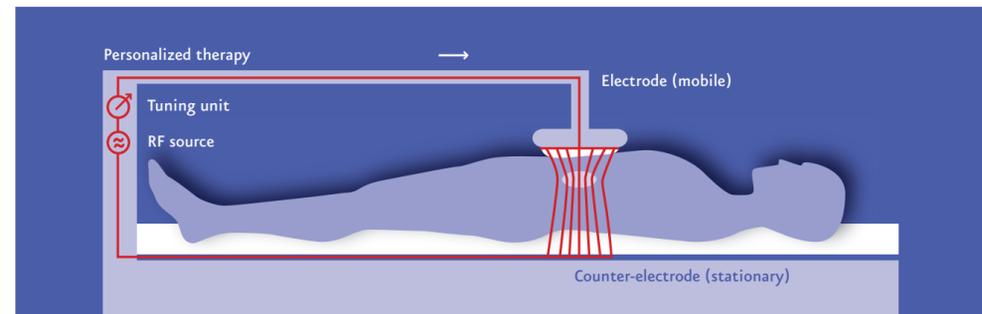
Oncotherm – About us

Oncotherm develops, manufactures and markets cancer treatment systems that utilize Oncothermia to treat tumors. Oncothermia is a further development of the classical method of Hyperthermia, one of the oldest cancer treatment methods, and it allows a personalized, non-toxic therapy using an electric field and promoting the body's natural regulatory processes. In accordance with its corporate philosophy, Oncotherm's mission is to heal cancer, to increase cancer patients' life expectancies and to improve patients' quality of life.

Oncothermia: how the method works and how it is used

A modulated electric field with a carrier frequency of 13,56 MHz is generated by two active electrodes. Since malignant tissue has higher conductivity than healthy human tissue, the electric field tends to flow predominantly through the malignant tumor tissue. The combination of deep-layer heating and the electric field leads to stimulation of malignant tumor cells. This, in turn, triggers increased apoptotic activity in the tumor region and as a result, promotes cell death.

Oncothermia: the method



Schematic illustration of Oncothermia treatment. The illustration shows how the electric field, produced by the two active electrodes, passes through the patient's body. As shown schematically, the electric field tends to move through the pathways with the lowest impedance, i.e. through the malignant tissue (tumor).

Compared with classic Hyperthermia, which can result in burns, Oncothermia works at a significantly lower temperature. While classic Hyperthermia works at a temperature of 42°C, Oncothermia achieves a greater effect at just 38°C. Thanks to the selection at cellular level, the radiation only has an effect in the region of the tumor; the healthy regions remain as good as untouched. Of course, all electromagnetic radiation devices used for tumor treatment must fulfill stringent safety requirements. We meet such safety requirements via our own high standards and solid scientific findings, and via the low levels of radiation that our devices produce. Oncotherm systems are fitted with special 120 dB attenuation of the carrier frequency (i.e. the surrounding radiation is a million times lower than in the patient him/herself), so at an output of 150 W the radiation is less than 2 mW. All Oncotherm systems are classified according to the guidelines on electromagnetic compatibility.

EHY-2000 plus

Oncothermia selectively heats the tumor tissue in the region to be treated. For this reason, Oncothermia is particularly indicated for the treatment of localized solid tumors. It does not matter whether the tumor is located on the surface or deep down. The principle of self-focusing also allows moving regions of the body to be treated, such as the lungs, or thermo-sensitive regions such as the brain. Oncothermia is effective both in areas with high blood flow, such as the liver, and in regions with high air circulation, such as the lungs. During treatment with the EHY-2000 plus the patient lies on the waterbed. The electric field is set up between two electrodes: the bolus electrode positioned at the site where the patient is to be treated and the counter electrode positioned under the mattress of the waterbed. During the treatment, thanks to the interaction between the electric field and the heat, selection at cellular level takes place, the system self-focuses on the tumor and apoptosis is increased.

The EHY-2000 plus is based on its predecessor model, the EHY-2000. It has been improved by taking into account the experiences of our doctors and experts, and the requirements of patients and the people treating them. The treatment is carried out at a frequency of 13,56 MHz. The EHY-2000 plus is easy to use and is made up of very clear component parts. During treatment the patient lies on the waterbed and becomes part of the electric field via the bolus electrode. The system's electronics are housed in the generator unit. A mobile computer unit allows the doctor to view and save the treatment data. If necessary, this system can also be equipped with accessories such as a printer.

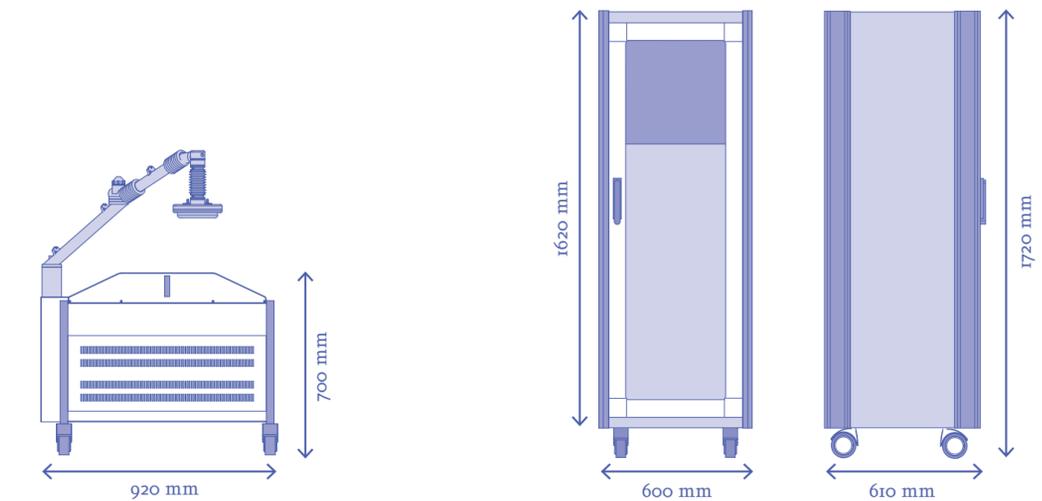
The EHY-2000 plus with large bolus electrode and generator unit housing the electronic equipment.



The classic system

The EHY-2000 series is the classic Oncothermia system. The system has been produced since 1995 and has been continuously developed to the latest technical standard and to meet our customers' needs. The EHY-2000 plus is also one of the current systems of the EHY-2000 series. It is made up of three components: a therapy bed with built-in waterbed mattress, the generator unit and a web box system.

This tried and tested, further developed, reliable system is popular with customers worldwide. And not just because of the attractive price. The EHY-2000 plus boasts stable electronics and leaves enough storage space both under the bed and in the PC unit compartments for any accessories and consumables, such as disinfection spray, cloths, bolster or similar.



Technical data

Mains voltage	AC 230V/50Hz
Power input	1600 VA
Maximum power output	max. 150 W
Nominal load	50 Ohm
Output carrier frequency	13,56 MHz
Modulated output frequency	Fractal noise
Weight	Tower: approx. 175 kg Waterbed: 150 kg (without water)
Dimensions (Height x Length x Width)	Tower: 1720 x 600 x 610 mm Waterbed: 585 x 2062 x 920 mm
Temperature	+10°C - +30°C
Relative humidity	20% - 60% (non-condensing)
Air pressure	700 hPa - 1060 hPa