Oncothermia
Loco-regional hyperthermia with
Medical Results
high tech medicine

First year survival
Median survival
Efficacy and safety
**First year survival comparison**

**Challenge** — Oncothermia is taken only in a small fraction of the overall survival. Its effect on the long overall survival could be negligible, even if it is very effective. The aggressive disease with short survival is a chance to indicate the efficacy. In this sense oncothermia is indicated as a feasible, effective method.


Studies are single arm, open label, observational for intention-to-treat (ITT) population, dominantly for the patients in late/advanced stages, where the conventional methods have fallen.

A comparison with large databases* was done. The survival rate was the studied endpoint. Inclusion criteria were the inoperable and/or in progression after chemo- and/or radio-therapy. Exclusions were the well known contraindications of oncothermia. The possible negative biases were connected to the missing randomization and the historical arm comparison and the voluntary basis (ITT population). Positive bias is the selected advanced patient-population, the missing “trial attention” and the entirely regular treatment conditions (no extra care is given). The treatment had minor number of erythema (<8%), and rarely subcutaneous fibrosis was observed; no other toxicity was observed except the usual toxic reactions of the complementarily applied conventional treatments (radio- and/or chemo-therapies). Patients reported (subjective) decrease of adverse effect of parallel conventional therapies, decrease of pain and other subjective symptoms. Most patients reported improvement of their general well-being.

Oncothermia is applied for liver metastases from colorectal cancer primarily together with chemotherapy \((n=30)\) and as monotherapy, after the failure of the conventional therapies \((n=50)\).

The median survival rate was increased remarkably compared to the historical control. (Hager ED, Dziambor H, Hohmann D, Gallenbeck D, Stephan M, Popa C.et al.: Deep hyperthermia with radiofrequencies in patients with liver metastases from colorectal cancer. Anticancer Res 2007; 27: 154-160)

Definite and impressive results were achieved for brain glioma patients. The median survival was increased by more than 75%, while in the case of the most advanced cohort (Glioblastoma multiforme, WHO IV) the results shows also excellent (more than 50%) gain. (Szasz A, Sahinbas H: Presentation on the Annual Congress of Hungarian Oncologists, Budapest, 2004)

The retrospective data could be convincingly controlled by comparison of independent clinics, having the same device and treatment protocols for brain gliomas.

Definite and impressive results were achieved for brain glioma patients. The median survival was increased by more than 75%, while in the case of the most advanced cohort (Glioblastoma multiforme, WHO IV) the results shows also excellent (more than 50%) gain. (Szasz A, Sahinbas H: Presentation on the Annual Congress of Hungarian Oncologists, Budapest, 2004)
Efficacy and safety

The **3E+3S** philosophy of oncotherm together with the scientific and technical solutions is also present in the medical studies. The **3E** efficacy is well shown on the Kaplan-Meyer plots for advanced pancreatic and advanced non-small-cell lung cancer results. (The control arms are the historical data form the same physician.)


The **3S** safety is well demonstrated on the combination of oncothermia with platinum derivatives and applying it second line with great success, without remarkable toxicity.

(Florentini G, deGiorgi U, Turrisi G, Rossi S, Dentice P, Bernardeschi P: Deep electro-hyperthermia with radiofrequencies combined with thermoactive drugs in patients with liver metastases from colorectal cancer (CRC): a Phase II clinical study, ICACT 17th, Jan30-Feb2, Paris, France) and (Panagiotou P, Sosada M, Schering S, Kirchner H,: Siloah Clinic, Hannover, Irinotecan plus capecitabine with regional electroyperthermia of the liver as second line therapy in patients with metastatic Colorectal Cancer; European Society for Hyperthermic Oncology, June 8-11, 2005 Graz, Austria)

Our principle, the **3E+3S**, makes values for the patients and for their doctors, keep the oncothermia method an **excellent weapon against cancer**.