



**ANDROMEDIC** Srl  
IPERTERMIA ONCOLOGICA



**HY-DEEP**  
600WM



## ANDROMEDIC S.R.L.

In 2012, the entrepreneurial initiative of a group of experts from companies operating in the healthcare sector at the request of numerous oncology specialists, a passionate team of doctors and engineers to promote the practice of hyperthermia oncology as a therapy to fight cancer.

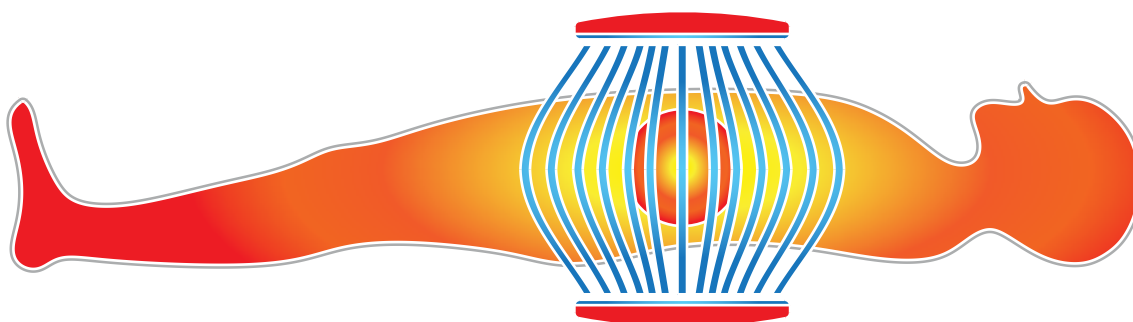
The team has direct experience with oncological hyperthermia as a treatment for cancer and has gained on-the-field awareness of the promising results of the therapy. The ultimate goal of the Andromedic team is to disseminate the use of hyperthermia as an adjuvant/neo-adjuvant to classical treatments (Surgery, Chemotherapy, Radiotherapy) for cancer treatment and to consolidate hyperthermia as a **fourth pillar for cancer treatment**.

The team firmly believes in the effectiveness of the therapy, which can increase survival, improve general well-being and provide relief in controlling painful symptoms to patients suffering from oncological diseases.

## A SPECIALISED COMPANY

Andromedic Srl is present in the electromedical market with a team composed of personnel with heterogeneous skills and specialised according to the organisation and technological context.

It combines quality, solidity and professionalism with flexibility and speed in responding to the customers' needs; fundamental characteristics of specialised companies.



 **HY-DEEP**  
600WM

Oncological  
Hyperthermia

## DEVICE FOR DEEP ONCOLOGICAL HYPERTHERMIA

The new SW of the HY-DEEP 600WM fully manages the device and can be configured to manage the medical record on a server PC via a WIFI connection or locally. The SW allows the operator to retrieve the patient's therapy data, a function that reduces the preparation time for the therapy session.



The operator can also select the therapy in automatic mode so that the equipment will increase the power in Watts according to a matrix of values preset by the operator. The above allows the HY-DEEP 600WM to be operated with a considerable reduction in professional resources.



### DEDICATED SOFTWARE

With protocols for individual disease oncology through specific algorithms that use ASK modulation (Amplitude Shift Keying) to deliver targeted therapy.

### SECURITY

The location that is to host the equipment does not require any specific particulars. The therapy is delivered safely and in maximum comfort for the patient.

### PATENTED ANTENNAS

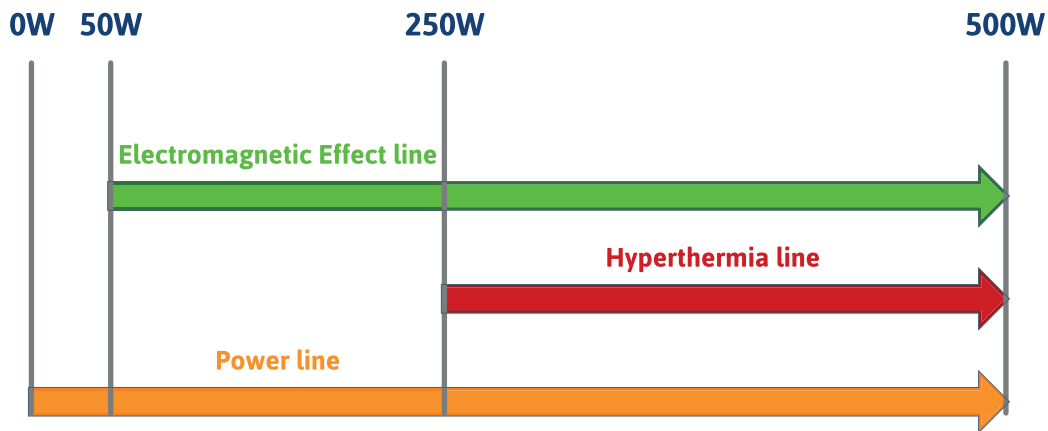
Radio frequency transmitter with innovative cooling system to avoid burns. Innovative algorithm for determining the thermal dose delivered.

### ALL IN ONE DEVICE:

- Hyperthermia
- Electromagnetic effect
- Cellular bioresonance treatment
- Homogeneous heat diffusion

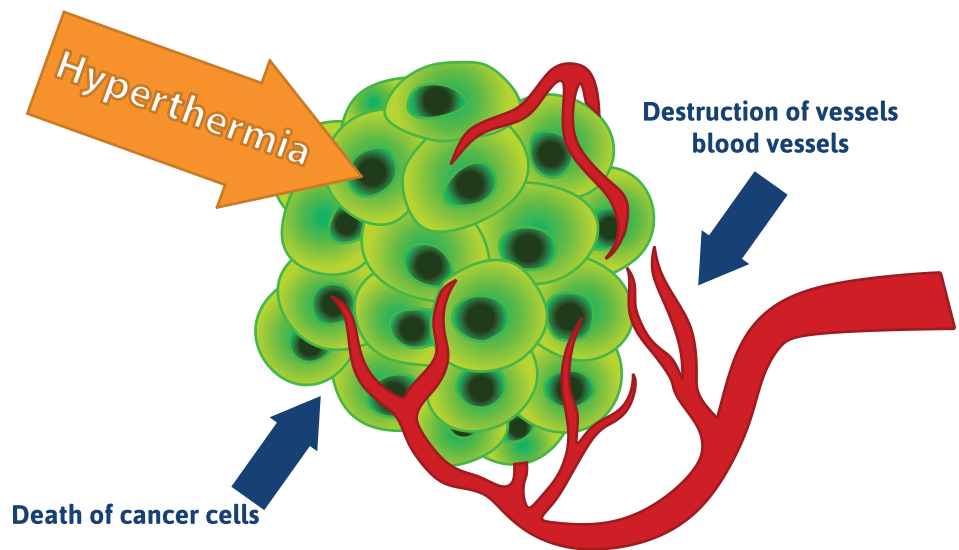


## Hyperthermic and Electromagnetic Effect.



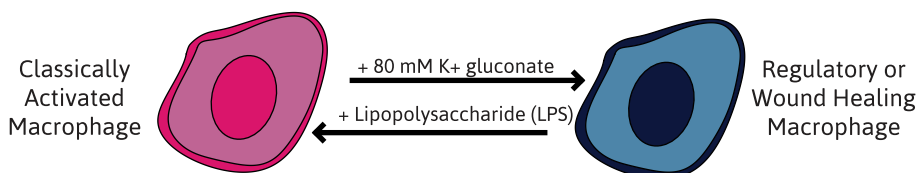
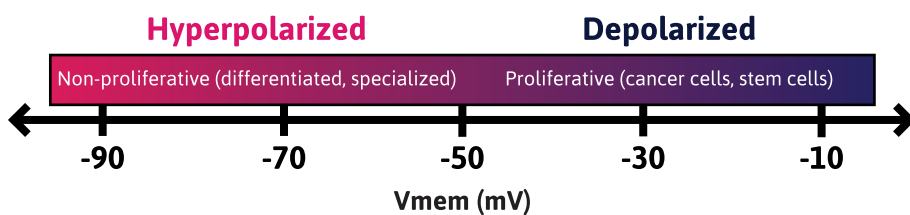
### Hyperthermic effect.

- Cell apoptosis
- RF-induced heating
- Reaching a temperature of 39° C to 43° C
- Irreparable cell damage to the cancer cell



### Electromagnetic Effect.

- Electrical action on the cell membrane induced by RF
- The electromagnetic field restores the membrane potential reactivating intra - and extracellular activities



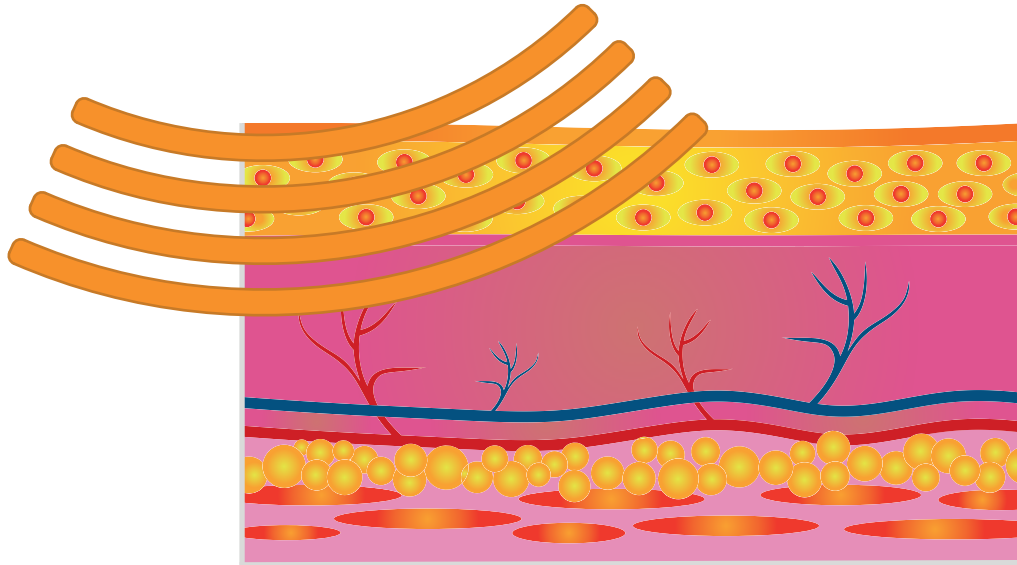
Vmem may regulate macrophage phenotype/activation.

Number line with a range of membrane potentials depicting cell types associated with hyperpolarized or depolarized Vmem.

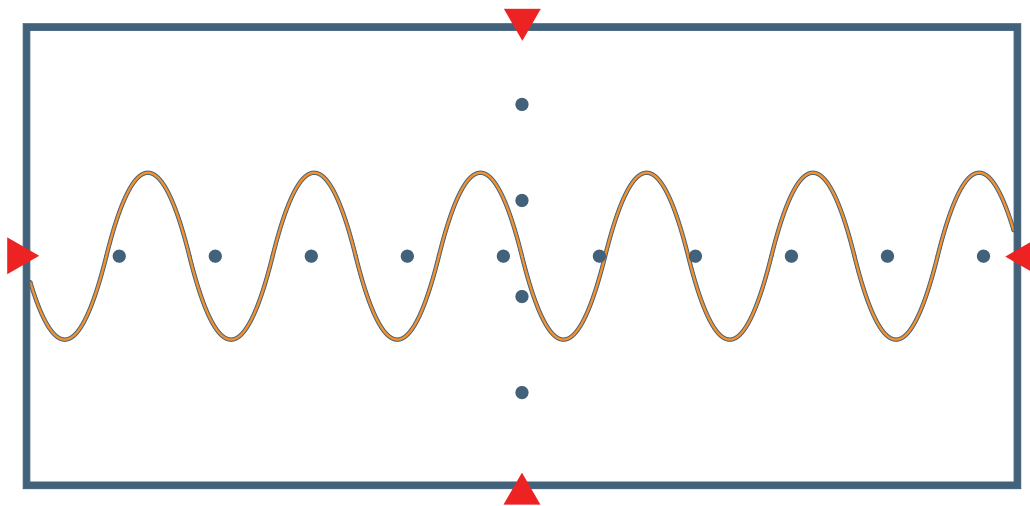
We hypothesize that classically activated macrophages will have a hyperpolarized membrane potential and will transition to a regulatory or wound healing phenotype when depolarized with K+ ions.

## Homogeneous heat diffusion through OOK (On-Off Keying modulation)

*New system to ensure temperature uniformity in all tissues*

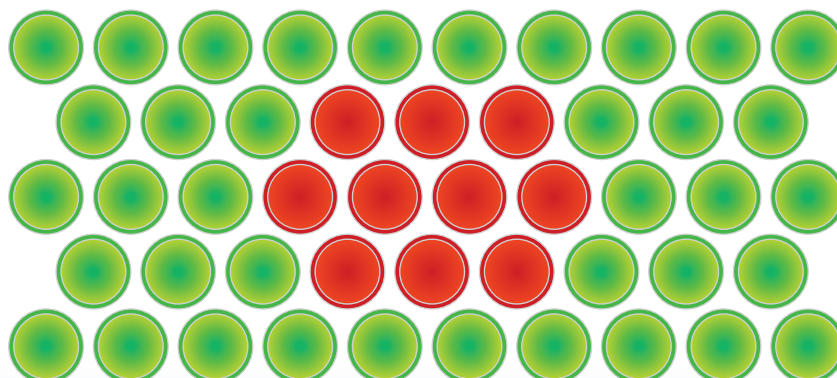


**HY-DEEP uses the 13.56MHz carrier frequency modulated by bioresonance frequencies through OOK of ASK digital modulation.**



## HY-DEEP 600WM and bioresonance

*Cellular bioresonance modulating frequencies amplify therapeutic effects by generating selective and permanent cellular damage to the neoplastic cell.*





## GENERAL LAYOUT



### Surface tumours

- Melanomas
- Epitheliomas
- Skin metastases
- Lymph node packets
- Surface relapses

### Deep tumours

- Sarcomas
- Lung
- Pleura
- Pancreas
- Pelvis
- Liver
- Bone
- Colon
- Kidneys
- Stomach
- Bladder
- Brain
- Tongue pharynx
- Head – neck
- Larynx
- Prostate
- Maxillofacial
- Jaw
- Cheek
- Female genital organs
- Male genital organs

## Technical information HY-Deep 600WM

Power distribution: 230 V single-phase, 8,7 A

Mains fuses: 10A 500V (CH10 Standard)

Mains power frequency: 50 Hz

Emission frequency: 13,56 MHz

Maximum pulse power: 600 W in ASK modulation

Speed adaptation: 3 ms

Standard maintenance: 600 treatments

Compatibility: EN 60601-1

Class: II B 93/42/EEC

Insulation class: I

Attachment parts: B

Model of refrigerated antennas: 170 mm, 270 mm

Cooling system: adjustable water temperature 6° ÷ 28° C

Weight of machine: 150 kg

Overall dimensions of machine LxPxH: 60x80x118 cm

## PATIENT MANAGEMENT SYSTEM





**VIDEO DESCRIPTION**



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