The New Generation of Interstitial Microwave probes for tissue thermoablation
HS AMICA, “Future made Present”!
Our technology overcomes all drawbacks of conventional microwave applicators for thermoablation:

- Small gauge applicators: 14G and 17G already available, 18G coming up soon!
- Elimination of back heating effects: thanks to the combined action of the probe cooling system and of our patented reflections trapping system, the coagulation pattern size and shape are never out of control!
- Safe generation and proper handling of microwave energy: our programmable solid state source warrants altogether maximum electrical safety, full control over microwave generation and delivery to patients and extreme versatility!

Solid state, programmable microwave generator

- Microwave Output: up to 100W
- Continuous Wave at 2450 MHz
- Maximum electrical safety: microwave amplifier fed at 12VDC, low dispersed currents.
- Optimized microwaves delivery monitoring: continuous measurement of forward and reflected microwave power; automatic microwaves inhibition in case of exceeding probe temperature or reflection coefficient; self-diagnosis of microwave module
- Essential and intuitive user interface: just an LCD touchscreen for menu browsing and a rotary knob for parameters selection!
- “Open” digital architecture: any customization is as easy as a software upgrade!
- Unlimited interfaceability: AMICA-GEN is designed for networking with any number of peripheral devices daisy chained to AMICA-PUMP (including PCs…).

Microwaves, the future of thermoablation!
With respect to existing technologies for electromagnetic thermoablation, microwaves are:

- Faster: microwaves heat biological tissues very rapidly and allow complete coagulative treatments even in proximity of large blood vessels;
- More effective: bigger lesions in a shorter time;
- Safer: no currents dispersed through the patient’s body, true confinement of the irradiated volume, no grounding pads
- More versatile: the same microwave applicator may be successfully used for ablative therapies on almost any type of target tissue
- More reliable: homogeneous and repeatable necrosis for a given set of working parameters, little dependence on local variations in the tissue physical properties.

Fully automated peristaltic pump for probe cooling through water circulation

- Fed and driven by AMICA-GEN: requires no manual intervention by the operator!
- Compact and lightweight (only 500 g !)
- Built-in status LED
- Pre-cooling of water to be pumped into the probe is not necessary: ambient temperature water will perfectly do.

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