

PROVEN SYSTEM DEVELOPED BY PHYSICIANS

The NeuWave Medical® Intelligent Ablation System was developed by physicians and microwave scientists at the University of Wisconsin who were looking for a better solution for patients with soft tissue lesions.



SUPPORTED BY TRAINING AND EDUCATION

- Dedicated Clinical Specialists for case coverage
- Comprehensive physician and staff training with a formal competency evaluation and certification
- NeuWave Medical didactic and in-vivo animal training labs
- Regional case observation and hands-on learning labs
- Peer-to-peer collaboration for case review with key thought-leaders
- Reimbursement hotline: 800-400-7651

POSITIONED FOR THE FUTURE

NeuWave Medical is focused on meaningful clinical innovation and product differentiation to drive better patient outcomes and lower costs. Our computer-controlled platform, developed with an open architecture enables all systems to be easily upgraded with additional features and enhancements.

For more information on the NeuWave Medical® Intelligent Ablation System, contact us:

877-323-WAVE (9283)

info@NeuWave.com

NeuWave.com

BUILD YOUR ABLATION PROGRAM WITH THE FIRST INTELLIGENT ABLATION SYSTEM THAT HAS IT ALL

- **Versatile probe portfolio** for tailored treatments with 1, 2 or 3 probes
- **Synchronized energy delivery** for consistent multi-probe ablations
- **CO₂ cooling** for the smallest gauge probe and Tissu-Loc™ to reduce probe migration
- **Ablation Confirmation™** to show you if you got it all!



DISCLAIMER: The Certus 140 2.45 GHz Ablation System is a tool, not a treatment for any disease or condition. It is cleared for the ablation (coagulation) of soft tissue in percutaneous, open surgical and in conjunction with laparoscopic surgical settings in patients who present themselves to a treating physician with a wide variety of diseases or conditions. The Certus 140 2.45 GHz Ablation System is not indicated for use in cardiac procedures. The system is designed for facility use and should only be used under the orders of a physician.

MICROWAVE LEADS ABLATION MARKET GROWTH

The U.S. ablation market is growing rapidly due to the rising interest in minimally invasive options. Microwave ablation is currently the fastest growing modality in the ablation market, and will largely replace radiofrequency as the preferred ablation choice in the future.¹

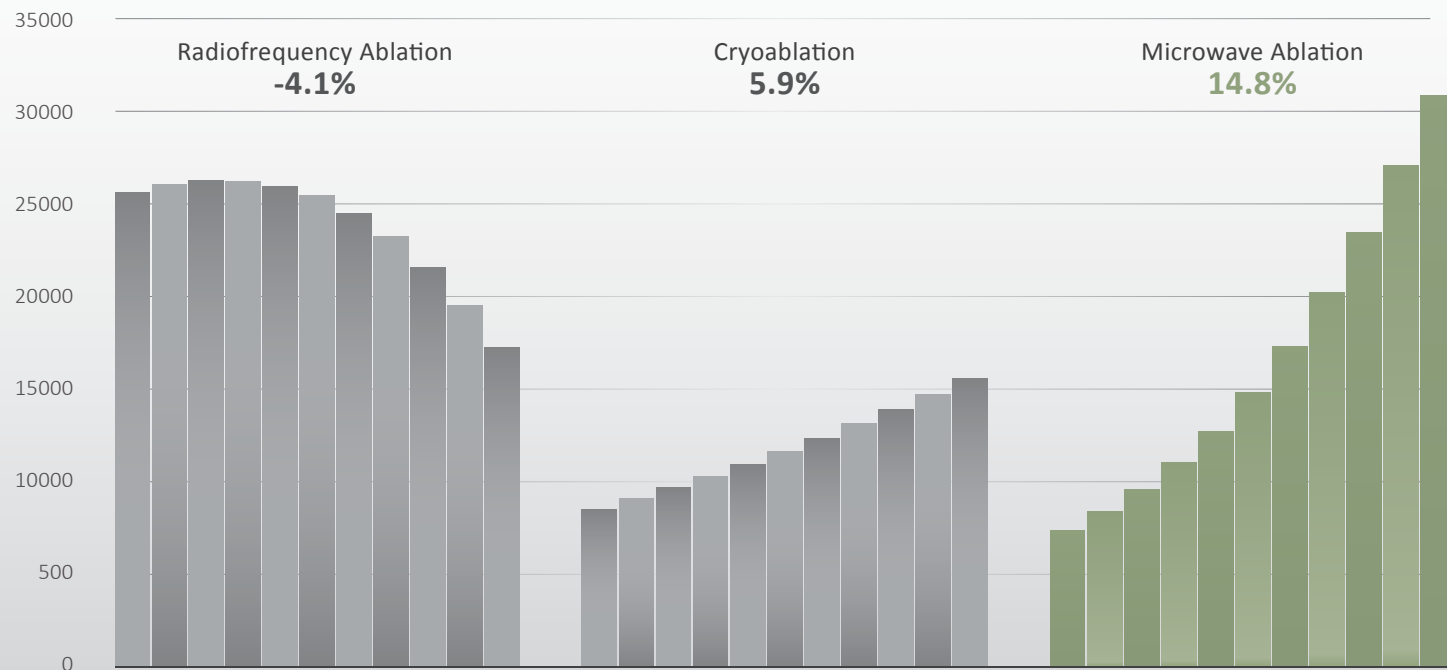
MICROWAVE ABLATION TO SURGE IN THE U.S.

The growth of microwave ablation continues to surge in the U.S. due to the limitations imposed by the alternative RF ablation technology.¹

“The use of microwave ablation will increase substantially in the liver and lung indications through 2023...Some companies, such as NeuWave Medical, provide devices that are specifically designed to effectively ablate tissue in delicate, aerated lung tissue.”

- Millennium Research Group 2015 ¹

ABLATION PROCEDURE GROWTH 2013 - 2023



CAGR 2013 - 2023

1. Interventional Oncology Devices / US/ 2015 Market Analysis Millennium Research Group, August 2014

HOW MICROWAVE ABLATION WORKS

Microwave ablation is a minimally invasive outpatient procedure that uses electromagnetic waves to generate soft tissue necrosis in the lung, liver and kidney.

- 1 Using CT or Ultrasound imaging, a **small probe** is inserted percutaneously into lesion.
- 2 Electromagnetic waves are delivered to the tissue, producing frictional heating to generate tissue necrosis at >60°C.
- 3 **Ablation Confirmation™ software, only from Neuwave Medical®**, is used to assess the technical success of the ablation procedure.

BENEFITS OF MICROWAVE ABLATION*

- Supported by **multiple Clinical Practice Guidelines**.
- Strong efficacy and low complication rate** versus other common treatment modalities.¹
- Most procedures completed with **5-10 minutes** of ablation time.
- Many patients **leave the hospital the same day**² as the procedure with only a bandage at the probe insertion point.

“From a patient’s perspective, this procedure is really wonderful because it’s very precise and the aftermath impacts are negligible. I didn’t have any discomfort, I was up the next day feeling fine and I was back in the classroom the day after.”

- Kevin McSweeney, patient**



* All medical procedures carry potential risks that should be discussed with patients prior to any microwave ablation procedure. See the Certus 140 User Manual for a full list of warnings and cautions.
 1. T. Ziemlewicz, et al, Percutaneous Microwave Ablation of Hepatocellular Carcinoma with Gas-Cooled System: Initial Clinical Results with 107 Tumors. Journal of Vascular Interventional Radiology 2015; 26: 62-68. A. Moreland, et al, High-Powered Microwave Ablation of T1a Renal Cell Carcinoma: Safety and Initial Clinical Evaluation. Journal Of Endourology Sept. 2014; Volume 28, Number 9. B.T. March, et al, Microwave ablation for lung neoplasms: a retrospective analysis of long term results. Journal of Vascular and Interventional Radiology 2014, Volume 25, Issue 3, S97.
 2. J. Horn, et al, Percutaneous Microwave Ablation of Renal Tumors Using a Gas-Cooled 2.4-GHz Probe: Technique and Initial Results. Journal of Vascular Interventional Radiology 2014; 25: 448 - 453

THE NEUWAVE MEDICAL® INTELLIGENT ABLATION SYSTEM

When it comes to ablating lesions, achieving the best outcomes for each individual patient is paramount. The totality of the NeuWave Medical Intelligent Ablation System allows you to tailor treatments to each patients' clinical need and offers the only integrated in-procedure confirmation of your ablation.

COMPUTER CONTROLLED SYSTEM DELIVERING HIGH POWERED, FAST ABLATIONS



Touchscreen interface



Procedure data stored and easily accessible



Daily call home system for performance monitoring



Independent power and time control on each channel during procedure



Highest power output = faster ablation (195W)



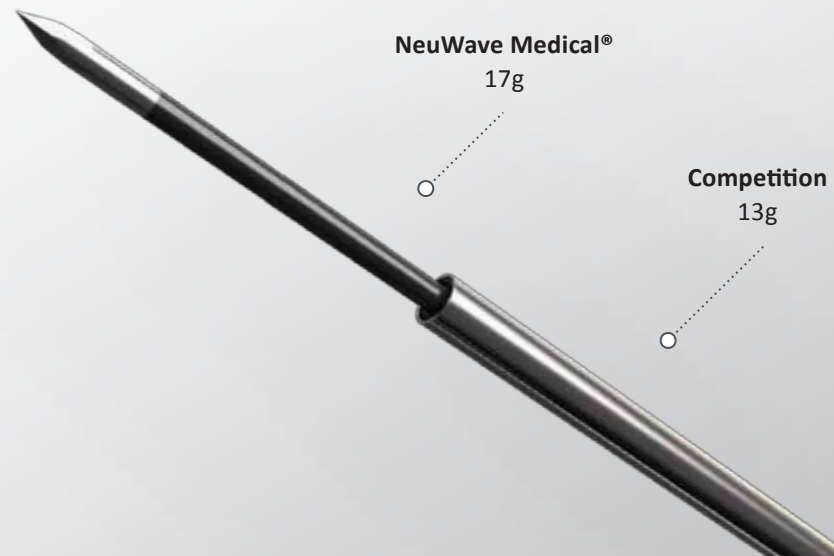
CO₂ COOLED SYSTEM FOR THE SMALLEST GAUGE PROBE AND TISSU-LOC™ TO REDUCE PROBE MIGRATION



17 gauge probe = Less invasive procedures



Reduces probe migration
Tissu-Loc™ technology "sticks" the probe in place, minimizing probe migration during imaging and additional probe placement



VERSATILE PROBE PORTFOLIO WITH MULTI-PROBE SYNCHRONY FOR TAILORED TREATMENTS WITH 1, 2 OR 3 PROBES

PRECISION™ PR PROBE

For ≤ 4 cm, single probe tissue sparing ablations¹

4 ≤ 4 cm single probe ablations in any soft tissue¹



The only probe available with limited ablation length to limit necrosis of adjacent tissue, including critical structures



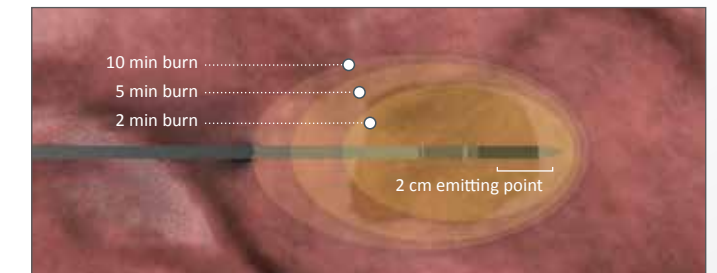
PR PROBE BURN PATTERN: Tip-weighted probe with emitting point 1 cm from tip. Ablation encompasses tip and then burns proximally (away).

MAX™ LK AND LN PROBES

Tissue-tuned for large, single probe ablations²

7,6 MAX LK single probe ablations²
≤ 7 cm = liver, ≤ 6 cm = kidney

6 MAX LN single probe ablation²
≤ 6 cm = lung



LK & LN PROBE BURN PATTERNS: Ablation progresses uniformly both distally and proximally from the emitting point 2 cm from tip.

MULTI-PROBE SYNCHRONY

Multiple synchronized probes create larger and more spherical ablation zones than a single repositioned probe³



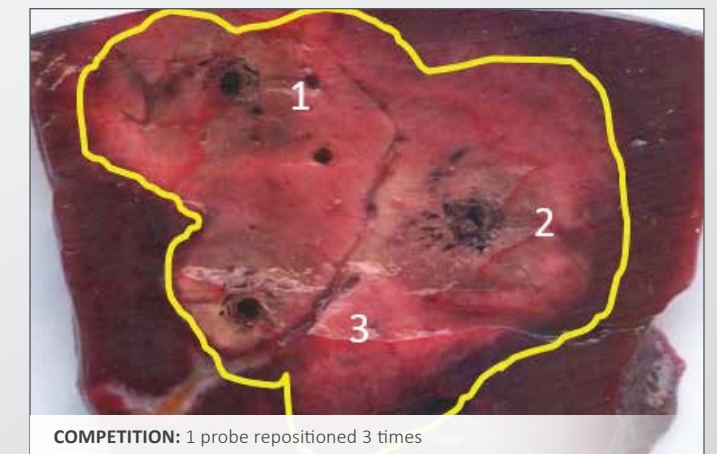
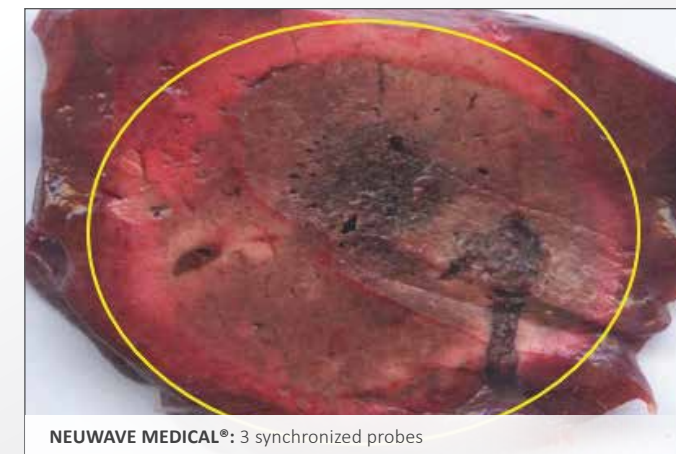
Rounder ablations with no clefting



Increased confidence in covering target with less reliance on precise probe placement



Consistent, predictable ablations as waves work in synchrony



1. Bovine liver ex-vivo: 65W, 5 minutes = 4.14 cm x 2.64 cm, 65W, 10 minutes = 4.65 cm x 3.06 cm, Bovine kidney ex-vivo: 65W, 5 minutes = 3.28 cm x 2.30 cm, 65W, 10 minutes = 3.82 cm x 2.60 cm, Bovine lung ex-vivo: 65W, 5 minutes = 2.80 cm x 1.74 cm, 65W, 10 minutes = 4.08 cm x 3.22 cm
2. Bovine liver ex-vivo: 140W, 5 minutes = 6.0 cm x 3.7cm, 140W, 10 minutes = 7.0 cm x 4.0 cm, Bovine kidney ex-vivo: 140W, 5 minutes = 4.4 cm x 2.5 cm, 140W, 10 minutes = 6.4 cm x 3.4 cm, Bovine lung ex-vivo: 140W, 5 minutes = 6.0 cm x 3.3 cm, 140W, 10 minutes = 6.0 cm x 3.9 cm
3. Laeseke et al. Multiple-Antenna Microwave Ablation: Spatially Distributing Power Improves Thermal Profiles and Reduces Invasiveness. Journal of Interventional Oncology. 2009; 2(2):105-112. Brace et al. Simultaneous Activation of Multiple Microwave Antennas Improves Circularity and Ablation Zone Volume Compared to Sequentially Overlapping Ablations. Presented at conference with accompanying poster, WCIO 2014.

ABLATION CONFIRMATION™ OFFERING THE ONLY INTEGRATED IN-PROCEDURE CONFIRMATION TO SHOW YOU IF YOU GOT IT ALL!

Ablation Confirmation (AC) is a CT image processing software that resides on a second, dedicated monitor attached to the NeuWave Medical Intelligent Ablation System. AC takes the uncertainty out of procedures by assisting physicians in identifying ablation probe placement and confirming ablation zones without having to leave the procedure room.

BENEFITS OF ABLATION CONFIRMATION

Confident Probe Placement
See the exact proximity of the probe to the lesion so you can ablate with greater confidence

Confirm Complete Ablation
Verify technical success of the procedure by viewing combined target and ablation zone scans

Collaborate with Colleagues Remotely
Remote access allows colleagues to support ablation cases in real-time

Demonstrate Your Success
Clear 2D and 3D procedure images are stored to PACS and can be shared among patients, referrers and peers to showcase your procedure success

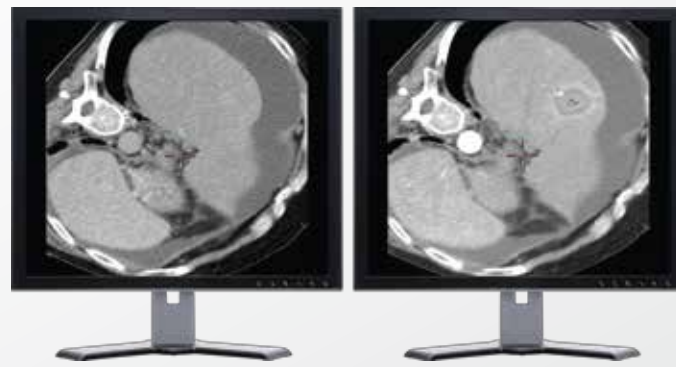
WITH ABLATION CONFIRMATION



Target Ablation Zone

Pre-procedure and post-procedure scans registered (overlaid) into one image to confirm technical success of procedure.

WITHOUT ABLATION CONFIRMATION



Pre-Procedure Scan

Post-Procedure Scan

Pre-procedure and post-procedure scans are on separate monitors. Physician must "imagine" scans overlaid in attempt to confirm technical success of procedure.

ABLATION CONFIRMATION™ IN 3 EASY STEPS

1 DEFINE YOUR TARGET

2D View

- Pull set-up CT scan into software
- Segment lesion
- Define margin



Segmented lesion and margin defined

2 PLACE PROBES AND VERIFY

Periscope and Needle View

- Place probes, perform CT scan and pull scan into software
- Register scans to assess probe placement in relationship to identified target

Available Views:
2D, 3D, Periscope and Needle



Probe missed lesion



Probe placed in lesion

3 ABLATE AND CONFIRM

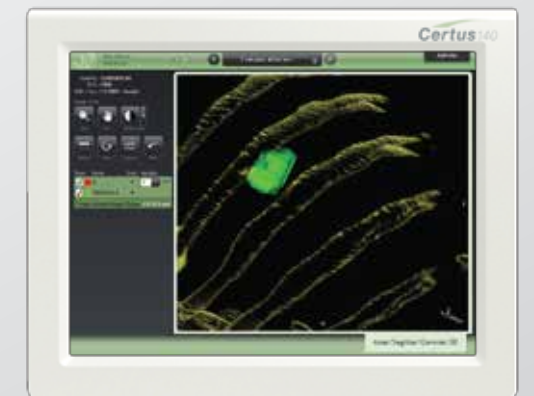
3D View

- Perform ablation, take post-procedure CT scan and pull scan into software
- Segment ablation zone
- Register ablation scans to assess and/or confirm technical success of procedure

Available Views:
2D, 3D



Ablation doesn't cover lesion and margin



Ablation covers lesion and margin