CLINICAL PERFORMANCE OF AMICA-PROBE

The following tables summarize clinical data published on peer-reviewed scientific journals related to the use of AMICA-PROBE in the percutaneous MWA treatment of liver, lung and kidney tumors.

In all tables:

- data refer to the use of a single probe operated in CONTINUOUS MODE at pre-defined power (P) and time (t) settings; overlapping ablations, multi-probe ablations or combined treatments (e.g. MWA following TAE or TACE in the same region) were not considered
- the ablations observed on immediate (<72 hours) or early (1-month) post-MWA CT scans are represented in terms of their longitudinal (L, along the MW probe axis) and transversal (D, perpendicular to the MW probe) dimensions
- each table entry stems from averages on several treatments performed under equal P x t settings.

See the original publications for all the details and limitations of these data.

N.B. Do not use the following tables as the only or prioritary reference when planning a treatment with AMICA-PROBE: the actual treatment outcome depends on a number of factors which vary significantly from case to case (such as, though not limited to, tumor biology, location, size and vascularization, prior treatments, etc.).

COAGULATION CHART FOR MW ABLATION TREATMENTS WITH AMICA-PROBE ON HEPATOCELLULAR CARCINOMAS		
MWA SETTINGS (P x t)	ABLATION SIZE (L x D)	
40W x 3min*	32.1 mm x 22.2 mm	
40W x 5min*	35.6 mm x 22.9 mm	
60W x 5min*	43.6 mm x 28.2 mm	
60W x 10min**	52 mm x 37 mm	

COAGULATION CHART FOR MW ABLATION TREATMENTS WITH AMICA-PROBE ON LIVER METASTASES		
MWA SETTINGS (P x t)	ABLATION SIZE (L x D)	
60W x 5min**	55 mm x 40 mm	
60W x 10min**	65 mm x 41 mm	

Data excerpted from:

- * Crocetti L, Amabile C, Scalise P, Tosoratti N, Bozzi E, Rossi P, Cervelli R, Cassarino S, Cioni R. Predicting the coagulation volume induced by microwave ablation of hepatocellular carcinoma: the role of deposited energy, ex-vivo bovine liver charts and central hyperdense area on post-treatment CT. Int J Hyperthermia. 2021;38(1):1486-1494. doi: 10.1080/02656736.2021.1986642. PMID: 34927518. Ablation measures were taken 1-month post-MWA.
- ** Amabile C, Ahmed M, Solbiati L, Meloni MF, Solbiati M, Cassarino S, Tosoratti N, Nissenbaum Y, Ierace T, Goldberg SN. Microwave ablation of primary and secondary liver tumours: ex vivo, in vivo, and clinical characterisation. Int J Hyperthermia. 2017 Feb;33(1):34-42. doi: 10.1080/02656736.2016.1196830. Epub 2016 Jul 25. PMID: 27443519. Ablation measures were taken 24 hours post-MWA.



COAGULATION CHART FOR MW ABLATION TREATMENTS WITH AMICA-PROBE ON LUNG METASTASES		
MWA SETTINGS (P x t)	ABLATION SIZE (L x D)	
30W x 10min	32.4 mm x 20.2 mm	
50W x 10min	38.8 mm x 27.5 mm	
70W x 10min	40.1 mm x 32.0 mm	

COAGULATION CHART FOR MW ABLATION TREATMENTS WITH AMICA-PROBE ON PRIMARY LUNG TUMORS		
MWA SETTINGS (P x t)	ABLATION SIZE (L x D)	
40W x 10min	32.7 mm x 26.8 mm	
60W x 10min	48.6 mm x 35.1 mm	
80W x 10min	49.1 mm x 36.1 mm	

Data excerpted from:

lezzi R, Cioni R, Basile D, Tosoratti N, Posa A, Busso M, Cappelli C, Margaritora S, Ambrogi MC, Cassano A, Scandiffio R, Calandri M, Crocetti L, Valentini V, Manfredi R, Veltri A. Standardizing percutaneous Microwave Ablation in the treatment of Lung Tumors: a prospective multicenter trial (MALT study). Eur Radiol. 2021 Apr;31(4):2173-2182. doi: 10.1007/s00330-020-07299-2. Epub 2020 Sep 30. PMID: 32997180. Ablation measures were taken within 48 hours post-MWA.



KIDNEY ABLATION

COAGULATION CHART FOR MW ABLATION TREATMENTS WITH AMICA-PROBE ON RENAL TUMORS		
MWA SETTINGS (P x t)	ABLATION SIZE (L x D)	
40W x 5min	50 mm x 33 mm	
40W x 10min	61 mm x 37 mm	
40W x 15min	73 mm x 43 mm	
60W x 5min	61 mm x 38 mm	
60W x 10min	64 mm x 42 mm	
60W x 15min	78 mm x 55 mm	

Data excerpted from:

Noventa A, Herpe G, Vesselle G, Guibal A, Velasco S, Chan P, Ingrand P, Boucebci S, Tasu JP. Chart for renal tumor microwave ablation from human study. Diagn Interv Imaging. 2018 Oct;99(10):609-614. doi: 10.1016/j.diii.2018.05.005. Epub 2018 Jun 15. Erratum in: Diagn Interv Imaging. 2020 May;101(5):327. PMID: 29914815. Ablation measures were taken 1-month post-MWA.