microtherapy.world newsletter - 2026-08

Sent 2026-08-27

CT-Guided Ablation Cuts VT Ablation Time in Randomized Trial

Welcome to the first issue of the microtherapy.world newsletter. Each month we round up new developments in minimally invasive, image-guided therapy - with a primary focus on interventional CT- and MRI-guided procedures - alongside newly evaluated products and upcoming conferences. This inaugural issue covers everything relevant published between June 1 and August 15, 2026, curated from PubMed and other credible sources.

Image-guided therapies

Analgosedation in interventional radiology

RoFo - 2026-06-17

A CIRSE-linked position paper argues interventional radiologists should build their own formal, guideline-backed sedation/analgesia competency rather than relying on anesthesiology capacity, citing CT-guided brachytherapy and percutaneous tumor ablation as procedures where non-anesthesiologist-administered sedation is already shown safe.

https://pubmed.ncbi.nlm.nih.gov/42309123/

Paramaxillary (Transfacial) Approach for CT-Guided Head and Neck Biopsies

AJNR - 2026-07-01

A technique paper detailing a CT-guided transfacial pathway for biopsying deep head-and-neck lesions (parapharyngeal space, carotid space, skull base) that are otherwise hard to reach safely.

https://pubmed.ncbi.nlm.nih.gov/42014171/

Histopathological outcomes of CT-guided high-dose-rate interstitial brachytherapy for HCC and predictive accuracy of the LI-RADS Radiation Treatment Response Algorithm v2024

European Radiology - 2026-06-10

In 19 liver-transplant patients with 29 HCC lesions treated by CT-guided HDR brachytherapy, 65.5% of lesions showed complete pathological necrosis on explant, and the LI-RADS Radiation Treatment Response Algorithm (v2024) reliably predicted which lesions were fully necrotic.

https://pubmed.ncbi.nlm.nih.gov/42268301/

New on the webpage

EmeryGlide Guidewire - trackr. Platform (Nano4Imaging)

Initial score: 43/60 - GOOD

https://microtherapy.world/products/emeryglide-guidewire-nano4imaging

New clinical studies

Computed tomography-guided vs conventional catheter ablation for ventricular tachycardia: the InEurHeart trial

European Heart Journal - 2026-06-16

A 14-center randomized trial (n=113) found CT-guided ventricular tachycardia ablation cut procedure time by 19-28% versus conventional ablation, with comparable safety and a non-significant trend toward better 1-year VT-free survival (76.8% vs 67.3%).

https://pubmed.ncbi.nlm.nih.gov/41667137/

MRI-guided adaptive radiotherapy for high grade glioma (UNITED): a single-centre, single-arm, non-inferiority, phase 2 trial

The Lancet Oncology - 2026-06

A phase 2 trial (n=98) of small-margin, MRI-guided adaptive radiotherapy for glioblastoma on a 1.5T MR-Linac found only a 4% marginal-failure rate, supporting margin de-escalation without an apparent safety cost.
https://pubmed.ncbi.nlm.nih.gov/42134380/

Efficacy of saline tract sealing after CT-Guided lung biopsy: a systematic review and meta-analysis

Clinical Radiology - 2026-08
Pooling 7 studies (1,455 patients), sealing the needle tract with saline after CT-guided lung biopsy roughly halved the rate of pneumothorax and cut chest-tube placement by about 75% versus usual care.
https://pubmed.ncbi.nlm.nih.gov/42322811/

Micro-ultrasound guided versus multiparametric MRI-guided prostate biopsy: a systematic review and meta-analysis

International Urology and Nephrology - 2026-06-15
Across 12 studies (4,318 patients), micro-ultrasound-guided biopsy detected clinically significant prostate cancer at rates statistically indistinguishable from MRI-guided biopsy - a cheaper, more available modality performing comparably.
https://pubmed.ncbi.nlm.nih.gov/42295630/

Robotic-assisted surgeries

Ion Robotic Bronchoscopy-Guided Microwave Ablation Under Augmented Fluoroscopy: An Initial Case Series and Comparative Procedural Workflow Analysis

Cardiovascular and Interventional Radiology - 2026-08-13
In a 21-patient prospective cohort, Ion robotic-bronchoscopy-guided microwave ablation of lung lesions matched or beat a historical electromagnetic-navigation cohort on technical success (100% vs 92.9%) while cutting navigation time from 28.5 to 2 minutes and radiation dose nearly in half.
https://pubmed.ncbi.nlm.nih.gov/42595799/

Robotic-Assisted Computed Tomography-Guided Percutaneous Bone Procedures: A Prospective Multicenter Pilot Study

Cardiovascular and Interventional Radiology - 2026-07-29
A prospective multicenter pilot (34 patients, 90 needle insertions for spine/pelvis bone consolidation or ablation, using the Epione platform) found robotic insertion feasible in 98.9% of cases with sub-3mm targeting accuracy and no device-related adverse events. Disclosed conflict of interest: the study was institutionally funded by Quantum Surgical, the platform's manufacturer.
https://pubmed.ncbi.nlm.nih.gov/42527616/

First-in-human pilot study of a robotic-assisted system for image-guided trans-thoracic lung biopsy: Clinical feasibility and exploratory post-hoc AI trajectory analysis

European Journal of Radiology - 2026-07-16
In 30 evaluable patients, a patient-mounted robotic needle-guidance platform (ANT-C) achieved 100% clinical success, with procedure time roughly halving (61 to 31 minutes) as operators gained experience.
https://pubmed.ncbi.nlm.nih.gov/42492116/

Do robotic needle systems improve precision and efficiency? Evidence from a systematic review and meta-analysis of clinical and preclinical studies

Journal of Robotic Surgery - 2026-08-14
Pooling 40 studies (14 clinical, 834 patients), robotic needle guidance modestly improved placement accuracy but showed no statistically significant advantage in procedure time, success rate, or complications versus manual technique - a useful check on the assumption that robotic automatically means better outcomes.
https://pubmed.ncbi.nlm.nih.gov/42599611/

Flexible intervention workflow for MRI guided robotic prostate seed brachytherapy

Journal of Applied Clinical Medical Physics - 2026-08
A phantom study (not yet clinical) repurposing an existing MRI-compatible robotic biopsy guide for seed brachytherapy achieved sub-millimeter robotic targeting precision, though seed-release and MRI-only localization errors still measurably affected dose coverage.

https://pubmed.ncbi.nlm.nih.gov/42605022/

Upcoming conferences

CIRSE 2026

September 5-9, 2026, Copenhagen, Denmark - Theme: "Breaking barriers, expanding care."
https://cirsecongress.cirse.org/

RSNA 2026

November 29 - December 3, 2026, Chicago, USA - Further out, flagged early for planning.
https://www.rsna.org/annual-meeting

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