HPV PREVENTION & CONTROL BOARD | ANTWERP 2026

Pragmatic challenges in treatment

Scaling thermal ablation responsibly

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PROGRAMMATIC REALITY

The Programmatic Reality

90%

WHO 2030 treatment target driving rapid scale-up

Capacity-building gap

Countries asking WHO

Frequent requests for support to scale cervical pre-cancer treatment in LMICs

Guidance gap

Concerning

Programs are deploying thermal ablation without standardized protocols, training, or device-specific guidance

Equivalence gap

Handheld vs desktop

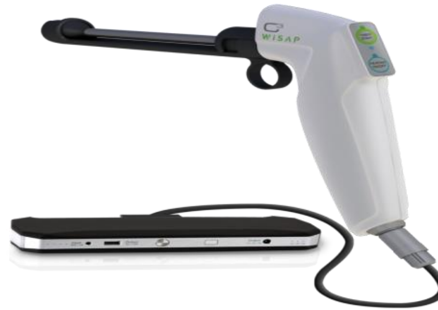
Portable handheld devices may not perform like the desktop systems they were modeled on

BACKGROUND

Thermal Ablation Devices

Desktop WiSAP

Mains-powered
Multiple interchangeable probes
Includes narrow os probe



Portable TA (Liger)

Battery-powered
Gas-free, highly scalable
Single flat probe only

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BACKGROUND

Probe Geometry

SINGLE PROBE

- Treats ectocervical surface only
- Cannot reach inside cervical os
- May miss proximal TZ and SCJ
- Standard in most portable devices

VS

MULTI-PROBE APPROACH

- Os probe + flat ectocervical probe
- Reaches into cervical os
- Covers proximal TZ and SCJ
- Replicates Scottish technique

RATIONALE

Why Probe Geometry Matters

1

CIN arises at the SCJ

The squamocolumnar junction is where high-grade lesions develop

2

CIN3 extends proximally

High-grade lesions may involve crypt and reserve cell compartments inside the cervical os

3

Flat probes miss disease

Treating only the ectocervical surface may leave proximal disease untreated

Key insight: The shape of the probe determines how much of the transformation zone is actually covered

STUDY OBJECTIVE

Test whether handheld thermal ablation (single or multi-probe) is non-inferior to CO_2 cryotherapy for biopsy-confirmed CIN2/3 cure at 12 months

METHODS

Trial Design

Phase 3 RCT

Multicentre, open-label

Randomized 1:1:1

Two Countries

China (42%)

El Salvador (58%)

Population

Women >=18 years

Biopsy-confirmed CIN2/3

Eligibility

Full SCJ visibility

WHO ablation criteria met

METHODS

Treatment Arms

1

Cryotherapy

CO_2 double-freeze technique

Standard comparator

2

Single-Probe TA

17mm conical probe

100 degrees C, 30 seconds

3

Multi-Probe TA

Os probe (20s) + flat probe (20s)

Replicates Scottish approach

RESULTS

Primary Results: CIN2/3 Cure at 12 Months

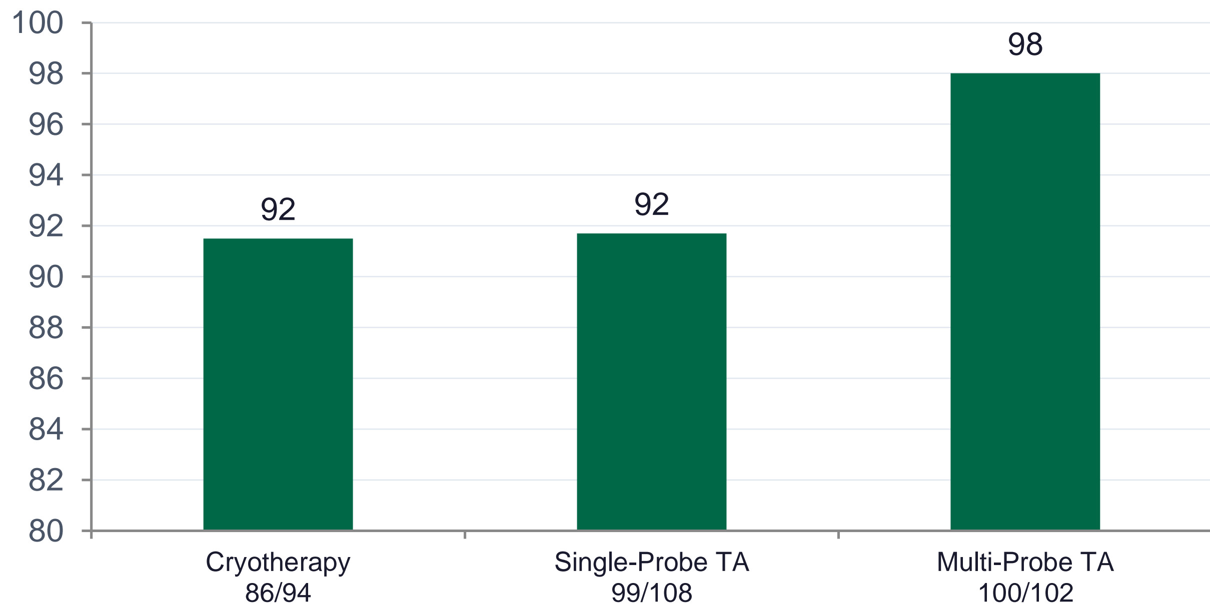
	Cryotherapy	Single-Probe TA	Multi-Probe TA
CIN2/3 cure at 12 months	94	95	95

Both TA arms met non-inferiority vs cryotherapy

KEY FINDING

Exploratory Analysis: CIN3 Cure at 12 Months

Prespecified subgroup analysis — QA pathology-confirmed



98%

Multi-probe CIN3 cure

~83%

Prior trial CIN3 cure
(single flat probe)

IMPLICATIONS

Global Implications

Cryotherapy is declining

Gas supply constraints make cryo unsustainable for global scale-up

TA is becoming the standard

Portable, battery-powered devices are being deployed across LMICs

Implementation gap is concerning

Many programs deploy TA without standardized training, protocols, or device-specific guidance

WHO leadership needed

Beyond procurement: countries need WHO-backed guidelines, training, and capacity building covering optimal device and probe configurations

WHAT GUIDELINES MUST ADDRESS

1

Determine who is eligible for ablation

Approximately 20% of women are not eligible and may have larger or deeper lesions with higher risk. This is a critical area for further research.

2

Decide which device to use

Portable handheld devices are the most practical option for scale-up in LMIC settings.

3

Decide which probe tips to use

The best data supports the endocervical probe, but it is not currently available commercially on handheld devices.

TAKE-HOME MESSAGES

1

Portable TA is non-inferior to cryotherapy for CIN2/3

Confirming its role as the treatment of choice for global scale-up

2

Multi-probe TA achieved 98% CIN3 cure

The narrow endocervical probe makes a clinically meaningful difference for high-grade disease

3

Scale-up needs guidelines, not just devices

Probe geometry, training, and protocols must accompany procurement; WHO leadership on capacity building is critical