Intratumoral Chlorine Dioxide Ablation

Technology – 200-Patient Clinical Study

(Hainan, China)

Study Summary (10 Key Points)

- We are preparing to launch a 200-patient clinical research study on Intratumoral Chlorine Dioxide Ablation Technology in collaboration with Hainan Boao Evergrande International Hospital.
- 2. The study requires **Ethics Committee approval** from the hospital and **academic + ethical filing** with the Hainan Provincial Health Commission.

Estimated approval time: 1-3 months.

3. The 200 participants will include 100 Chinese patients and 100 international patients.

International participants must have basic English communication ability.

4. Eligible for this study are solid tumors only.

Exclusion: patients with >10 tumors and those with brain tumors (initial phase).

- 5. The treatment course consists of **four intratumoral injection** sessions within 30 days, injecting every measurable tumor at each session.
- 6. Participation in this clinical study is free of charge.

Required PET-CT scans (before & after treatment) cost **USD 6,000** in total.

- 7. After signing informed consent, any active tumor appearing within 1 year will receive free additional injections at the hospital.
- 8. The primary objective is that after 4 sessions over one month,
 95% of patients will achieve complete necrosis of all tumors.
- 9. The project operates under Hainan's Real-World Data (RWD) and Biomedical New Technology pilot framework, enabling accelerated translation and regulatory pathways.
- 10. Most foreign citizens enjoy 30-day visa-free entry to Hainan, greatly simplifying international participation.

Hainan Boao Evergrande International Hospital – Brief Introduction



Hainan Boao Evergrande International Hospital is a modern, international oncology hospital located inside the Boao Lecheng International Medical Tourism Pilot Zone, China's national medical innovation district.

The hospital is built according to **international JCI standards** and approved as a **Class III Oncology Specialty Hospital** (the highest level for specialized hospitals in China).

• Total area: 110,000 m²

• Medical tower: 223 single inpatient rooms

• Rehabilitation tower: 190 high-quality apartments

From its planning stage, the hospital received guidance from **Brigham** and **Women's Hospital**, a major teaching hospital of **Harvard Medical School**, bringing advanced medical processes, management systems, and clinical pathways to Hainan.

The hospital integrates international medical resources, experts, and technologies, providing comprehensive services for cancer screening, diagnosis, treatment, and rehabilitation.

Located in the Boao Lecheng Pilot Zone, the hospital benefits from unique national policies that allow accelerated access to new technologies, new drugs, and new medical equipment approved internationally.

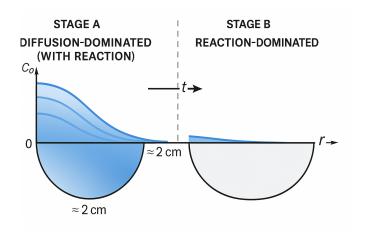
Intratumoral Chlorine Dioxide Ablation System – Brief Introduction

The Intratumoral Chlorine Dioxide (ClO₂) Ablation System is a novel, image-guided local therapy for solid tumors. It relies on a controlled diffusion - reaction mechanism, producing predictable and self-limited tumor destruction without systemic toxicity.

1. Self-Limited Diffusion - Reaction Mechanism

 ${\rm C10_2}$ acts within a 1-2 cm effective radius, with its concentration decreasing exponentially with distance.

The chemical reaction naturally terminates within a fixed range, preventing uncontrolled spread and ensuring predictable safety.

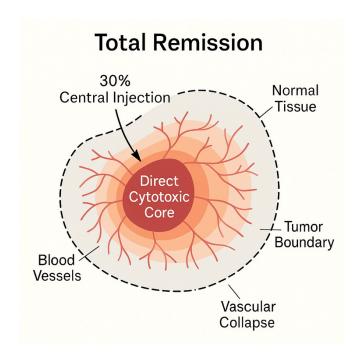


2. Dual-Mechanism Tumor Ablation

The therapy produces a stable 2-4 cm ablation zone through two synergistic effects:

- Chemical Oxidation of tumor tissue
- Microvascular Collapse, leading to ischemic necrosis

This combination destroys tumor structure locally while avoiding systemic toxicity.



3. Repeatable and Resistance-Free

Each injection creates a **precise spherical ablation zone**. Under image guidance, repeated or multi-point injections can progressively remove all visible tumor tissue.

- No drug resistance
- No cumulative toxicity
- Any residual tumor can simply be treated again

4. Universal and Controllable Local Therapy

Any solid tumor reachable with CT, MRI, or ultrasound-guided needle placement can be:

- accurately mapped
- safely punctured
- completely ablated through planned sequential injections

Deep lesions, complex anatomical regions, and areas traditionally considered "inoperable" can be accessed and treated predictably.

5. Multi-Lesion and Multi-Region Capability

All measurable lesions—primary and metastatic—can be ablated **one by one**:

- Each lesion is injected directly
- Each lesion undergoes controlled destruction
- Multi-focal stage IV disease can be brought back to a manageable, reversible state

