Cryotherapy

Galil Medical’s ultra-thin 1.5 mm cryotherapy needles provide precise ablation for treating metastatic lung cancer\(^1\)

**Cryotherapy has unique radiographic visibility of the ablation zone\(^1–6\) that:**
- Provides real-time control over the extent of ablation\(^7\)
- Allows intra-procedural adjustment to minimize damage near critical structures\(^8\)
- Delivers iceball images that correlate with the pathologic zone of ablation\(^6,9\)

**Percutaneous cryotherapy for metastatic tumors provides:**
- Local control rate of 80% at a median 21 months\(^10\)
- One year survival of 89.4%\(^10\)

**Cryotherapy has an established safety profile\(^4,7,8\) with low rates of severe complications\(^12\) and self-limiting side effects\(^13\):**

### Complication Rates Following Percutaneous Cryoablation of Metastatic Lung Tumors

<table>
<thead>
<tr>
<th>Author</th>
<th>Severe Complications ≥ CTCAE 3</th>
<th>Pneumothorax (% requiring chest tube insertion)</th>
<th>Self-Limited Hemoptysis</th>
<th>Pleural Effusion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pusceddu et al.(^1)</td>
<td>0%</td>
<td>21% (0%)</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>Wang et al.(^13)</td>
<td>N/A</td>
<td>12% (12%)</td>
<td>62%</td>
<td>14%</td>
</tr>
<tr>
<td>Kawamura et al.(^10)</td>
<td>0%</td>
<td>50% (4.5%)</td>
<td>36.4%</td>
<td>27%</td>
</tr>
<tr>
<td>Inoue et al.(^4)</td>
<td>3%</td>
<td>61.7% (10.9%)</td>
<td>36.8%</td>
<td>70.5%</td>
</tr>
<tr>
<td>Bang et al.(^12)</td>
<td>8%</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
</tbody>
</table>
Cryotherapy is minimally invasive\(^1,14\) and:

- Is an alternative for nonsurgical candidates\(^4\)
- May result in a short hospital stay\(^1,15,16\)
- Demonstrates no loss of pulmonary function, measured at six month post ablation follow-up\(^15\)
- Offers improved quality of life, with an increased mean Karnofsky Performance Scale score\(^13\)

Cryotherapy offers multiple benefits:

- Allows use of multiple needles simultaneously\(^6\) for:
  - Optimized tumor coverage\(^8\)
  - Treating a range of tumor sizes\(^5,8,12,17\)
- Produces less procedural pain than RF ablation\(^5,8,17\)
- Does not require use of grounding pads\(^5\)
- Compared to RF, results in a higher rate of complete ablation for tumors ≤ 3 cm\(^18\)
- Can be performed under local anesthesia or conscious sedation\(^1,8,14\)

References


This application is not available in all markets

Indications for Use

The Galil Medical Cryoablation Systems are intended for cryoablative destruction of tissue during surgical procedures; various Galil Medical ancillary products are required to perform these procedures. Galil Medical Cryoablation Systems are indicated for use as a cryosurgical tool in the fields of general surgery, dermatology, neurology (including cryoanesthesia), thoracic surgery, ENT, gynecology, oncology, proctology and urology. These Systems are designed to destroy tissue (including prostate and kidney tissue, liver metastases, tumors, and skin lesions) by the application of extremely cold temperatures. A full list of specific indications can be found in the Galil Medical Cryoablation System User Manuals.

Contraindications There are no known contraindications.

Warnings / Precautions / Adverse Events

A thorough understanding of the technical principles, clinical applications, and risks associated with cryoablation procedures is necessary before using Galil Medical products to conduct cryoablation. Use of such products should be restricted to use by or under the supervision of physicians trained in cryoablation procedures with a Galil Medical Cryoablation System.

A full list of the warnings, precautions, and adverse events can be found by referencing the respective device Instructions for Use document or Cryoablation System User Manual.