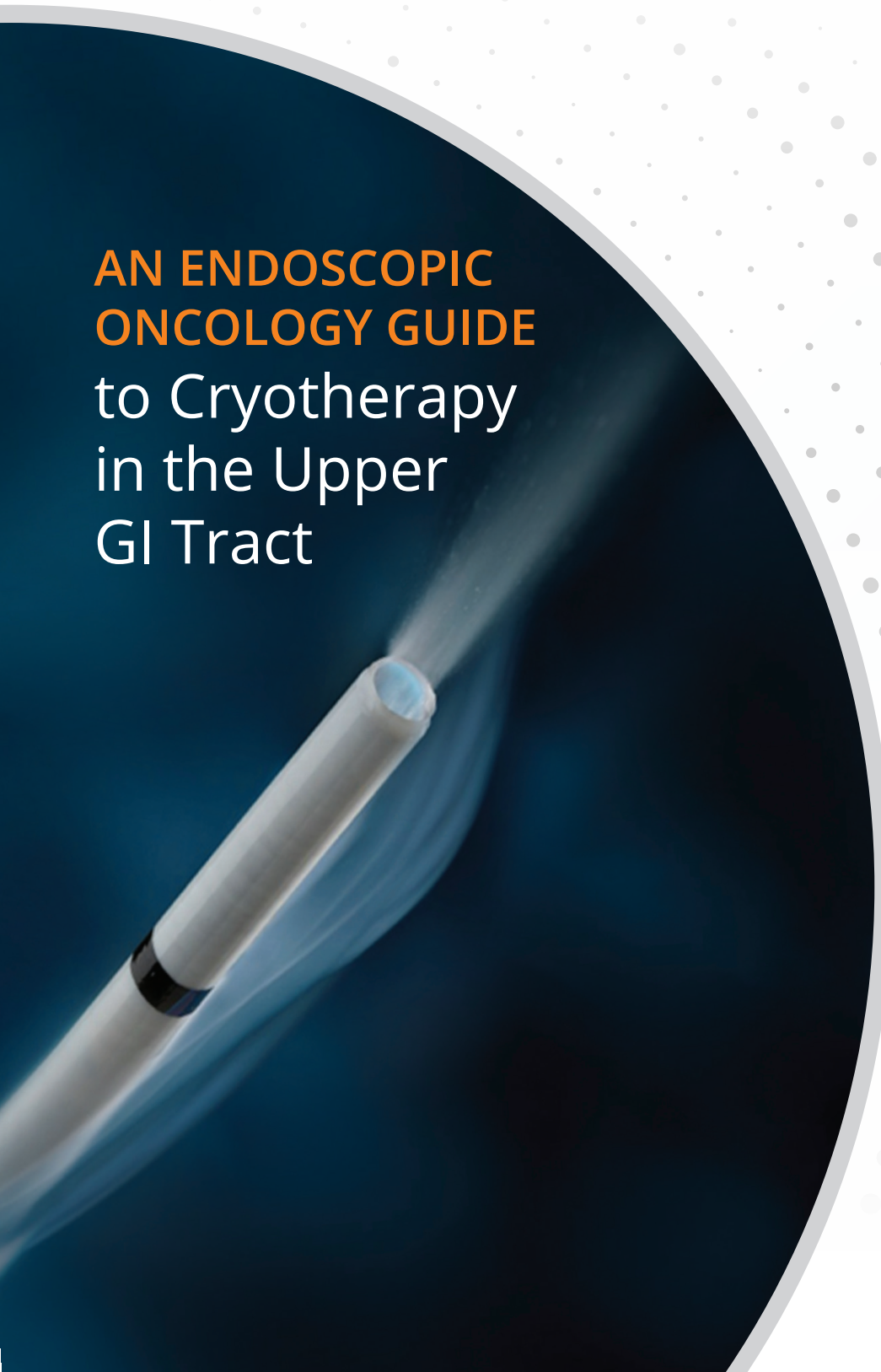


trūFreeze[®]

Spray Cryotherapy

**A LIFE-CHANGING¹⁵ GI INTERVENTION
FOR ESOPHAGEAL CANCER PATIENTS**

**AN ENDOSCOPIC
ONCOLOGY GUIDE**
to Cryotherapy
in the Upper
GI Tract



 **STERIS**

More than 49,000 people in the United States have Esophageal Cancer⁶

Most patients diagnosed with Esophageal Cancer are in **Advanced Stages**⁵

5-year survival rate for Esophageal cancer is **21.7%**⁶

There is a need for new therapies to help manage Esophageal Cancer

Regardless of Disease Stage, your patients can experience true benefits with trūFreeze:



Safe and Well-tolerated at Any Stage^{2, 3, 4, 8}



Minimal Side Effects¹³



Improved Quality of Life²,
Dysphagia Relief^{3, 8}



Improved Results with Systemic Therapy^{1, 2, 12}



Prevents or Delays the Need for Stent Placement⁴

Expand Treatment Options for your Patients

The trūFreeze System

- Is indicated for use as a cryosurgical tool in the fields of dermatology, gynecology, and general surgery, to ablate benign (e.g., Barrett's Esophagus with high grade dysplasia and/or low-grade dysplasia) and **malignant** lesions.
- Is intended for the cryogenic destruction of tissue using Liquid Nitrogen spray that has a boiling point of -196°C requiring either active or passive venting during surgical procedures.



GEJ Tumor



Liquid Nitrogen Spray Cryotherapy



-196°C Flash Freeze of Tumor



Flash Freeze and Tissue Thaw Causes Instant Cell Death

CRYOTHERAPY: It's in the NCCN guidelines...

“ Long term relief from dysphagia can be achieved with endoscopic tumor ablation, PDT and cryoablation, or endoscopic placement of self-expanding metal stents.

– NATIONAL COMPREHENSIVE CANCER NETWORK GUIDELINES¹¹

trūFreeze is Safe and Well-Tolerated

- “ The analysis of this multicenter prospective study shows that **cryo in addition to systemic therapy** for palliation of esophageal cancer **is well tolerated with significant improvement in dysphagia and quality of life** and allowed patients to maintain their weight without the need for stenting or feeding tube placement.²
- “ Based on these data, liquid nitrogen spray cryotherapy appears to be **a reasonable alternative to esophageal stenting** for patients with treatment-naïve esophageal cancer who require palliation of dysphagia, including prior to initiation of systemic therapy. The treatment is safe and can be **administered at the time of staging EUS**.⁸
- “ Liquid Nitrogen Spray Cryotherapy **provided safe and effective palliation for esophageal cancer patients** who presented with dysphagia at index diagnosis.³
- “ Spray Cryotherapy appears to be an effective and safe modality to palliate esophageal cancer in appropriate candidates. **Majority of patients who undergo spray cryotherapy avoid the need for future stent placement**.⁴

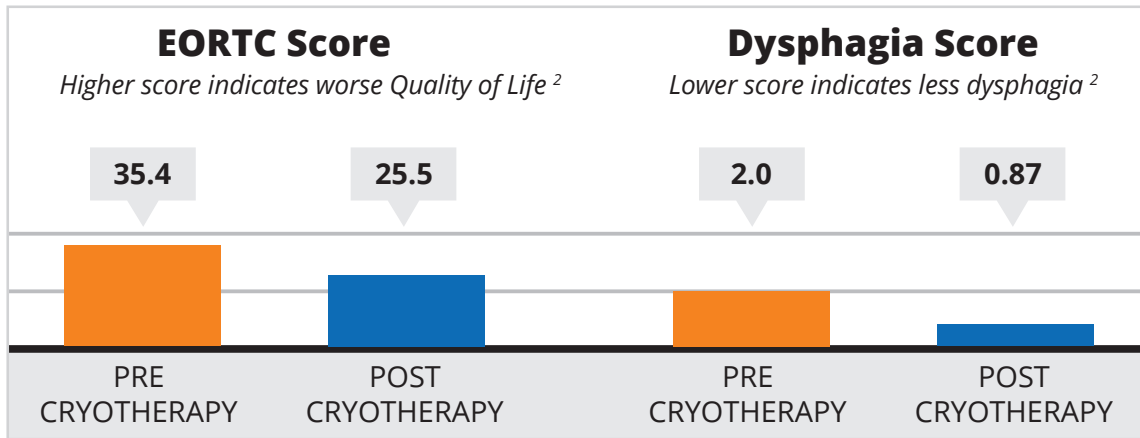


Squamous Cell Carcinoma

Dysphagia can occur in
MORE THAN 70%
of Esophageal Cancer patients⁷

trūFreeze Can Offer a Better Quality of Life and Palliate Dysphagia

A multicenter prospective study for palliation of inoperable esophageal cancer looked at 24 patients utilizing ~3 cryotherapy treatments per patient. ²

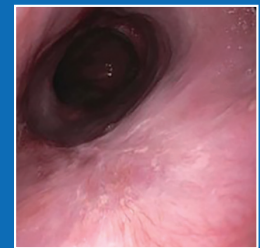
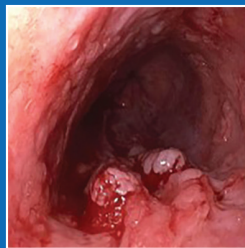


- EORTC score **improved significantly** from 35.4 to 25.5 ($p < 0.001$) ²
- Dysphagia score **improved** from 2.0 to 0.87 ($p < 0.001$) ²
- Patients maintained weight without stent or feeding tube placement ²

A Prospective pilot clinical trial evaluated the safety and efficacy of liquid nitrogen spray cryotherapy when administered prior to chemotherapy as well as the ability to provide dysphagia relief. ³

- Primary outcome of dysphagia improvement occurred in 71% of patients at 1 week and 50% of patients at 2 weeks using a baseline Mellow-Pinkas dysphagia score ³
- 67% of patients with locally advanced cancer who completed chemoradiation did NOT have residual tumor cells on mucosal biopsy ³
- 56% of patients had a clinical complete remission ³

Tumor regression in a patient was seen with each successive cryotherapy treatment of malignant lesions. ¹³



Common Stent Challenges:

Complications from stents can often occur in patients ¹⁴

50% of esophageal cancer patients who have stents require **reintervention** ⁹

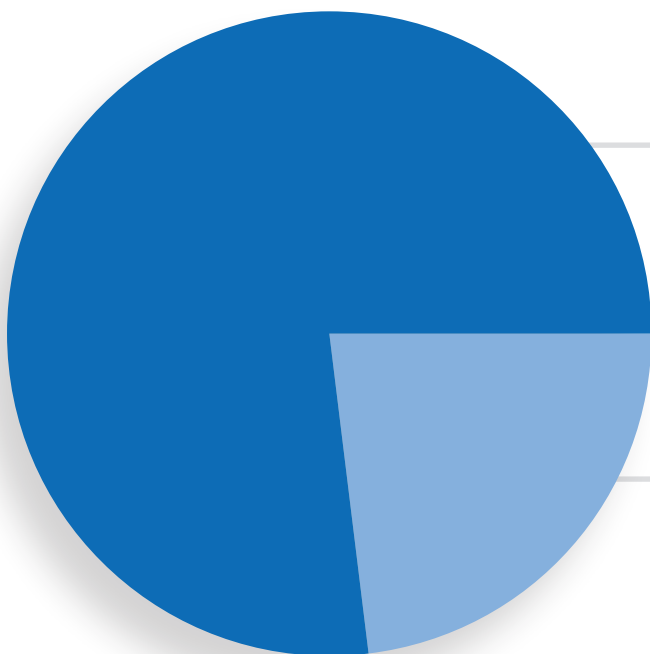
Stent migration can occur in up to 30% of patients ⁷



trūFreeze Can Prevent or Delay Stent Placement

Mayo Clinic (Rochester, MN) performed a database review of esophageal cancer patients treated with spray cryotherapy of esophageal cancer palliation. Primary outcome was time to subsequent palliative stent placement. ⁴

- 56 Patients (Average of ~3.6 cryotherapy treatments – ranging from 1-12 per patient) ⁴
 - 73% Adenocarcinoma ⁴
 - 27% Squamous cell carcinoma ⁴



77%

no stent needed over follow-up of ~25 months ⁴

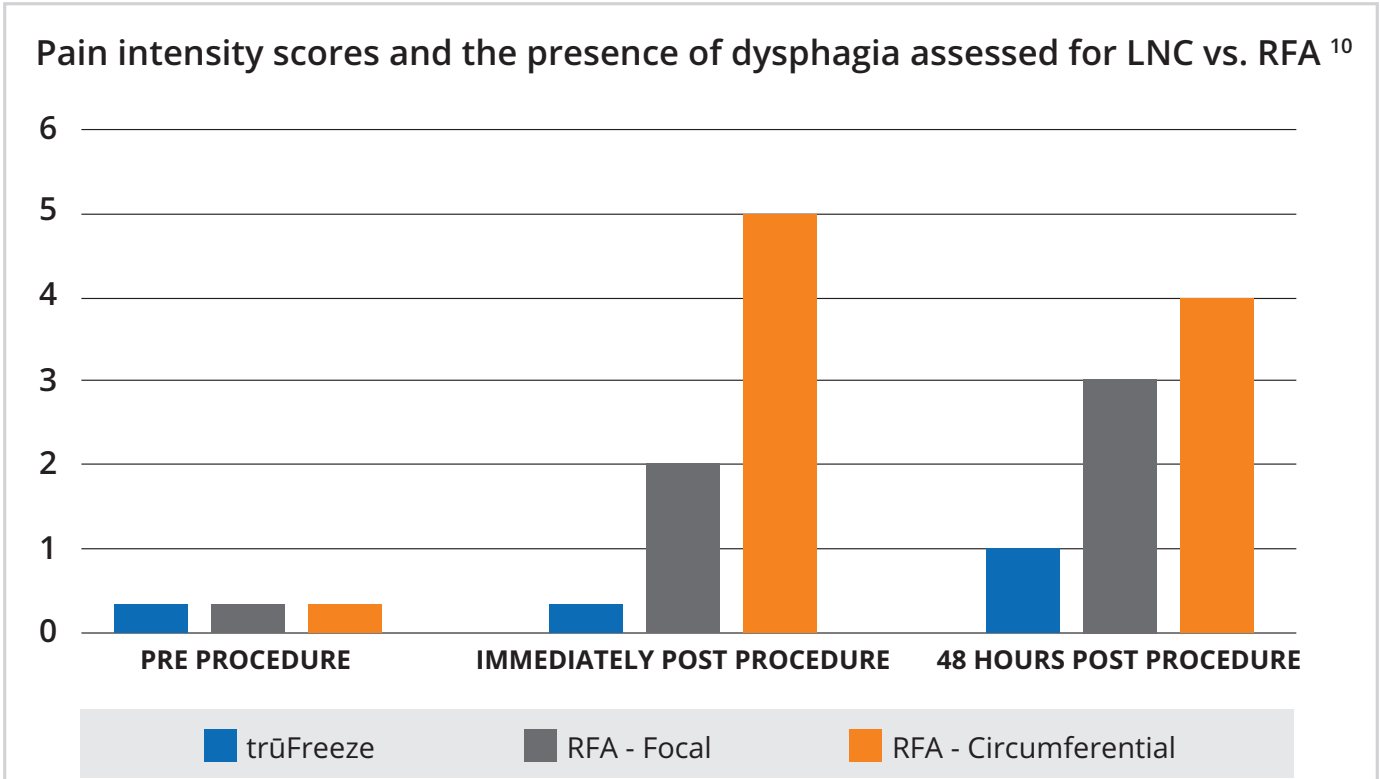
23%

of patients needing stent were **delayed > 1 year** ⁴



trūFreeze Produces Minimal Post Procedural Side-Effects

Many physicians choose Liquid Nitrogen Cryotherapy (LNC) over RFA for intramucosal cancer or even in palliation of bulky cancer given its unique mechanism of action and deeper tissue injury compared with RFA . ¹⁰



“ We see a clear **reduction in post-procedural pain** and increased toleration with **trūFreeze cryotherapy** in our large patient population as compared to other modalities of **ablation for Barrett’s esophagus and cancer**, which allows us to **improve the patient experience**.

- NEIL R. SHARMA, MD
 President, Parkview Cancer Institute / Program Director, Advanced Interventional Endoscopy & Fellowship / Director, Interventional Oncology & Surgical Endoscopy Programs (IOSE) / Assistant Professor of Medicine, Indiana University



trūFreeze, In Conjunction with other Systemic Therapy, Is Safe,¹² Well-Tolerated,² and May Offer Additional Survival Benefits¹

Multicenter prospective study for palliation of inoperable esophageal cancer for patients receiving cryotherapy in addition to systemic therapy²

- Conclusion showed that cryotherapy in addition to systemic therapy for esophageal cancer is well-tolerated.²

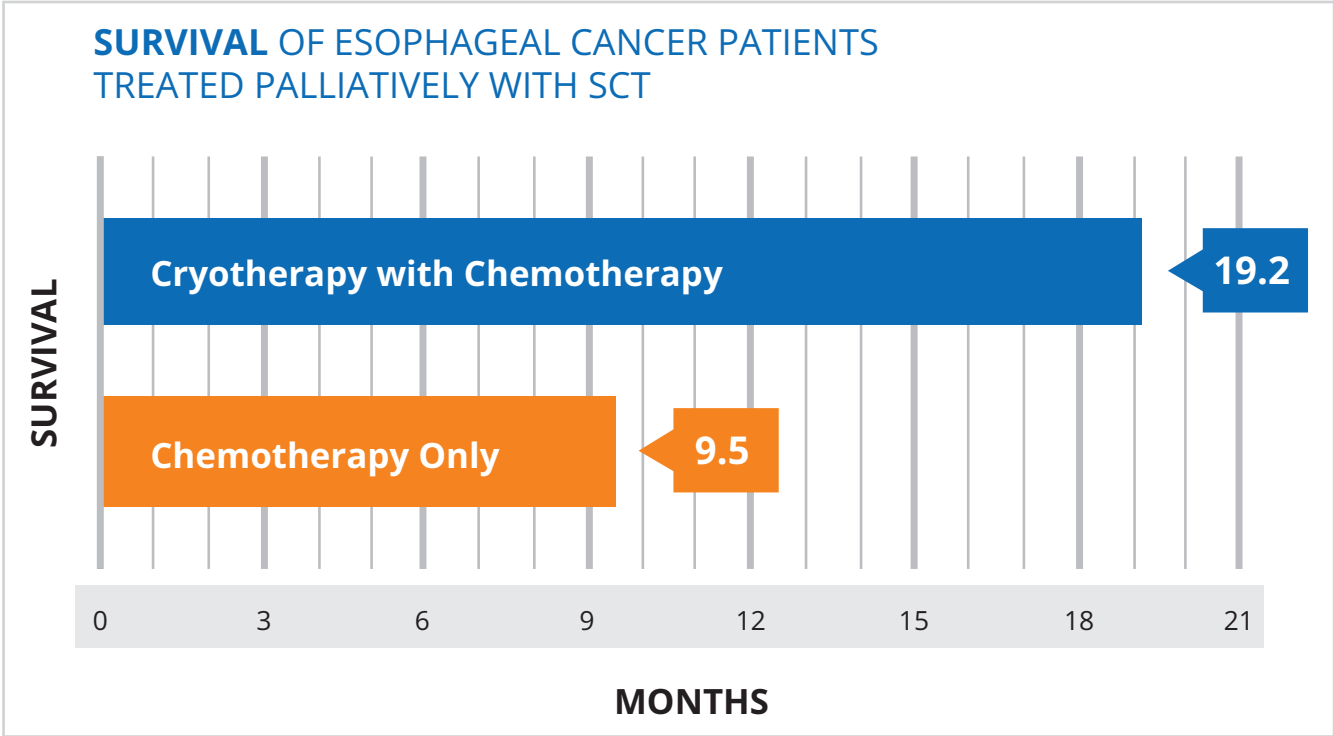
Multicenter prospective study of 48 adult inoperable esophageal cancer patients who received average of 3.3 spray cryotherapy procedures with concurrent systemic therapy.¹²

- Liquid Nitrogen Spray Cryotherapy was safe and improved dysphagia and quality of life without causing reflux¹²
- **More intensive cryotherapy** treatment showed a **greater improvement in dysphagia** (at least 2 cryo sessions in 3 weeks)¹²
- More improvement in dysphagia with 30 second freeze cycle¹²



Cancer Treatment Centers of America sought to investigate the impact of endoscopic spray cryotherapy (SCT) on the overall survival in metastatic esophageal cancer. ¹

- 83 patients with stage IV esophageal cancer ¹
- 39 patients received chemotherapy ONLY ¹
- 44 patients received chemotherapy and palliative liquid nitrogen spray cryotherapy ¹
- **The median overall survival rate was 19.2 months when cryotherapy was used with chemotherapy and 9.5 months when chemotherapy was used by itself ¹**



Ask your Gastroenterologist about **trūFreeze Cryotherapy** to Expand the Continuum of Care for your Esophageal Cancer Patients!

Visit www.steris.com/trufreeze or email truFreeze@steris.com for more information.

Additional Resources

Click the hyperlinks or scan the QR codes below to access additional resources.

- [The Role of Cryotherapy in the Treatment of Esophageal Cancer](#)



- [Treating Advanced Esophageal Cancer with truFreeze Cryotherapy \(PATIENT TESTIMONIAL\)](#)



truFreeze[®]
Spray Cryotherapy



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Spray Cryotherapy

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STERIS
5960 Heisley Road
Mentor, OH 44060-1834 - USA
Customer Service: 800-548-4873