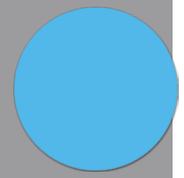
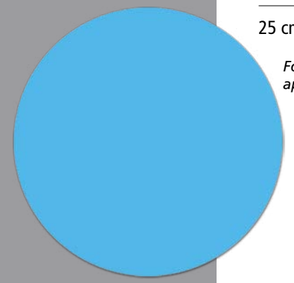
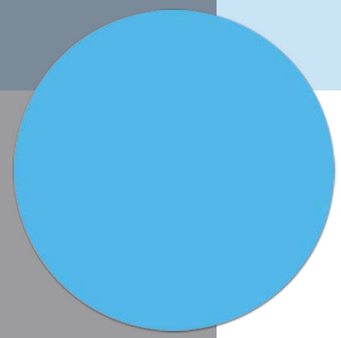


3 cm



5 cm



6 cm

## Exposure Lengths

***Cool-tip™ RF Ablation Single Electrode is available in multiple electrode and exposure lengths***

| Length | Tip Exposure |
|---|---|
| 10 cm | 2 cm, 3 cm |
| 14.4 cm | 0.7 cm |
| 15 cm | 1 cm, 2 cm, 3 cm, 4 cm** |
| 20 cm | 2 cm, 3 cm |
| 25 cm | 3 cm, 4 cm** |

*For single electrodes, ablations are approximately equal to exposure lengths.**

***Cool-tip™ RF Ablation Cluster Electrode is available in multiple electrode and exposure lengths.***

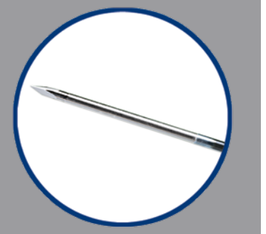
| Length | Tip Exposure |
|---|---|
| 10 cm | 2.5 cm |
| 15 cm | 2.5 cm |
| 20 cm | 2.5 cm |

***For cluster electrodes, ablations are approximately 4.5 cm.****

** Ablation size is dependent upon tissue vascularization, type, temperature and impedance.*

*** 4 cm tip exposure for the 15 cm and 25 cm electrodes are only available as part of a Cool-tip™ RF Ablation Switching Controller Electrode Kit.*

*Please see the lesion size chart for more information on the electrode options for specific lesion sizes.*



3 cm tip single electrode

2.5 cm tip cluster electrode

0.7 cm tip bone electrode

## Electrode – Design

- Electrode's unique, internally cooled design may reduce tissue charring and ablation time
- Straight needle electrode design allows for versatility and flexibility for use in a variety of percutaneous, intra operative and laparoscopic applications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Create and deliver innovative healthcare solutions, developed in collaboration with medical professionals, which enhance the quality of life for patients and improve outcomes for our customers and our shareholders.

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Covidien is the world leader in designing, manufacturing and marketing advanced energy-based medical systems and accessories worldwide. Covidien's ongoing research and product development continues to provide solutions for challenging surgical situations, and is committed to excellence in every aspect of business including:

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- Offering comprehensive professional education programs that enhance clinical practice
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**Coo-tip™ RF Ablation Electrode**

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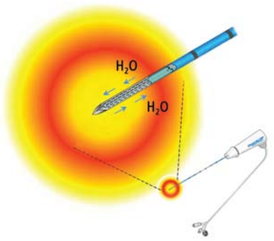
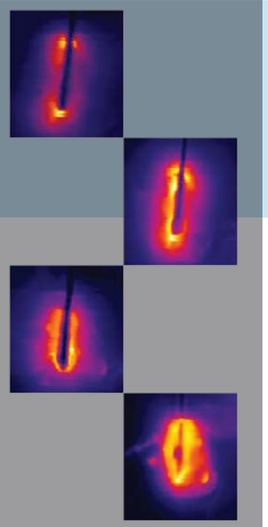



## Cool-tip™ RF Ablation Electrodes – Increased energy deposition for potentially larger ablation volume

Thermographic series of Cool-tip™ RF Ablation Electrode in ex vivo liver*

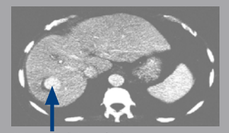


*animal model

A peristaltic pump circulates water through the electrode to cool the tissue adjacent to the active tip, maintaining lower impedance during the ablation cycle. This allows for increased energy deposition for potentially larger ablation volume, dependent upon tissue type and tip exposure.

## Design allows for precise and accurate placement and repeatability

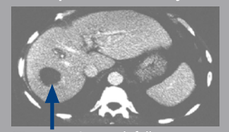
Pre-treatment



CT scan of 4 cm lesion

During treatment with Cool-tip™ RF Ablation System

After treatment with Cool-tip™ RF Ablation System



CT scan at six-month follow-up

- The electrode design allows for precise and accurate placement
- The Cool-tip™ RF Ablation Electrode is easy to place because of its small diameter
- The Cool-tip™ RF Ablation Electrode is easily imaged with ultrasound or CT scan


## Easy to Use

- Straight biopsy-like needle electrode
  - 17 gauge
  - Trocar-style tip
  - Easy to insert and reposition
  - Greater access to confined areas compared to deployable systems
- Ergonomic handle design easily fits into the CT gantry

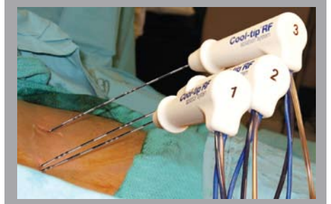
## Controllable

- Cluster electrode creates larger ablation zone compared to single electrode
- Bone electrode is specially designed for the ablation of osteoid osteoma tumors. Its short trocar tip needle exposure and increased tip bevel angle allows for even heat distribution. A metal cannula can be used to aid in the insertion of an electrode if the active tip and needle insulation extend beyond the end of the cannula.
- Thermocouple temperature monitor allows the electrode to measure ablation zone temperatures

## Precise

Cool-tip™ RF Ablation Electrode under ultrasound guidance


Cool-tip™ RF Ablation Electrodes during percutaneous ablation. The system allows up to three separate lesions to be ablated at one time.




- Biopsy-like needle design, with centimeter markings, allows physicians to easily see how far the electrode is inserted into the tissue
- Easily imaged using CT and/or ultrasound for improved predictability of ablation zone location