

# AVANOS

COOLiEF<sup>®</sup>  
Cooled Radiofrequency Treatment

## COOLIEF<sup>®</sup>: THE COOLED RF AUTHORITY

The First Clinically-Proven  
Cooled RF Treatment for Chronic Pain.



PROVEN BY LEVEL I  
EVIDENCE IN  
MULTIPLE MODALITIES



EFFECTIVE CHRONIC  
PAIN RELIEF FOR UP TO  
**24 MONTHS**<sup>1</sup>



DELIVERS UP TO **3.7X**  
MORE ENERGY THAN  
STANDARD RF



OVER **50** PEER-REVIEWED  
PUBLICATIONS  
SUPPORTING THE USE OF  
COOLIEF<sup>®</sup> COOLED RF



MARKET-LEADING  
INNOVATION IN COOLED RF  
FOR MORE THAN **10 YEARS**



FULL PORTFOLIO OF  
COOLED & STANDARD RF  
PRODUCTS & ACCESSORIES

Avanos is continuing to drive innovation with COOLIEF<sup>®</sup> Cooled Radiofrequency, the leading minimally-invasive and non-narcotic RF procedure that leads to better patient outcomes and improved physical functionality.

### A PROUD HISTORY OF FIRSTS

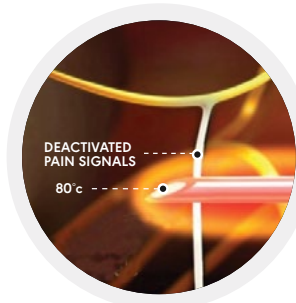
2001	2013	2014	2017	2018	2019
FDA Clearance of Pain Management Generator	Hip and Knee Modalities Launched	Multi-Cooled Radiofrequency Launched	FDA cleared to treat OA Knee pain	COOLIEF <sup>®</sup> Ultrasound-Guided Knee Technique Launched	Shoulder Modality Launched

## COOLIEF\* COOLED RADIOFREQUENCY

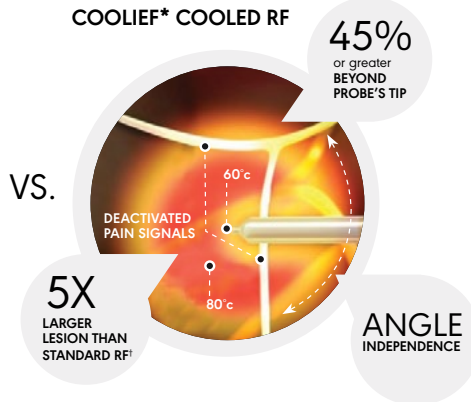
### Reshaping Thermal Radiofrequency Pain Relief

Specifically designed to treat complex anatomy of variable nerve courses, COOLIEF\* Cooled RF uses water-cooled technology<sup>2</sup> that enables more RF energy to safely deactivate pain-transmitting sensory nerves. This creates a larger, spherical lesion that distally projects 45% or greater<sup>3</sup> beyond the probe's tip, allowing physicians to approach the target nerve from any angle. These features increase the likelihood of successful ablation and improve patient outcomes.

#### STANDARD RF



#### COOLIEF\* COOLED RF



†When compared to Stryker 20 ga standard RF lesion based upon testing conducted by Avanos and compared to Stryker's published information.

### Innovation That Leads To Better Patient Outcomes

# 83%

#### Pain Reduction

83% pain reduction in severe symptoms one year after treatment

# 200,000+

#### Treated

More than 200,000 patients treated with COOLIEF\* Cooled RF in the last 4 years

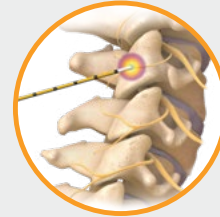
## GET YOUR PATIENTS BACK TO THE THINGS THAT MATTER.

Visit [RFAuthority.com](http://RFAuthority.com) or contact your local Avanos representative for more information or to obtain data from our clinical studies. **1-844-4AVANOS**

1: Ho KY, et al. Cooled radiofrequency denervation for treatment of sacroiliac joint pain: two-year results from 20 cases. *Journal of Pain Research*. 3 July 2013;6:505-11. 2: The "Cooled RF Set Temp" (Default Setting T = 60°C) displayed on the COOLIEF\* RF Generator refers to the cooled electrode temperature and does not reflect the immediate surrounding tissue temperature. The heat generated from the radiofrequency energy produces thermal energy with average maximum tissue temperatures greater than 80°C. 3: Kapural L, et al. Radiofrequency Intradiscal Biacuplasty for Treatment of Discogenic Lower Back Pain: A 12-Month Follow-Up. *Pain Medicine*. 2015; 16:425-31.

## COOLIEF\* COOLED RF MODALITIES

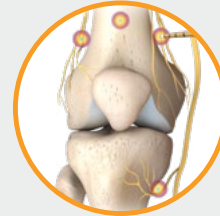
COOLIEF\* Cooled RF Kits offered in appropriately sized active tips to achieve desired lesion sizes - 2mm, 4mm, 5.5mm and 6mm.



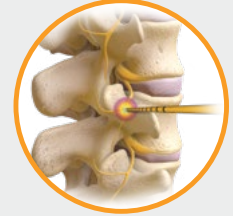
CERVICAL



HIP



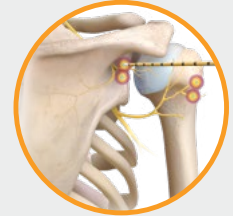
KNEE



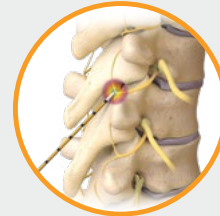
LUMBAR



SACROILIAC JOINT



SHOULDER



THORACIC



VERTEBRAL DISC

# AVANOS

[avanospainmanagement.com](http://avanospainmanagement.com)



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