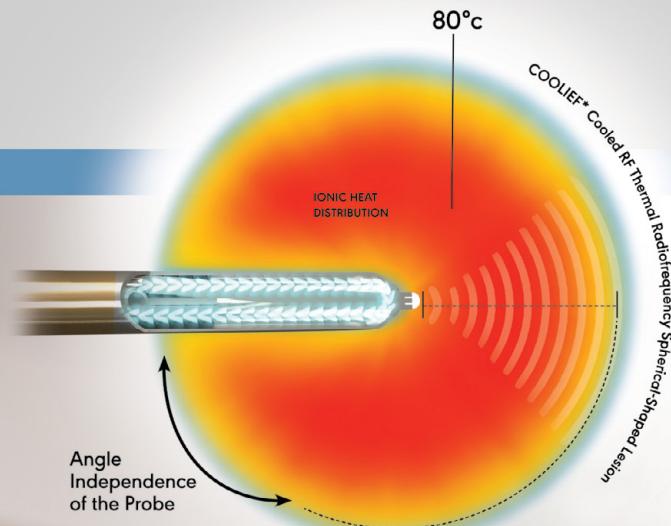


2019 COMPREHENSIVE REIMBURSEMENT RESOURCE GUIDE

COOLIEF* Cooled Radiofrequency (RF) System *Reshaping Thermal Radiofrequency*

Prepared by Musculoskeletal Clinical Regulatory Advisers, LLC.



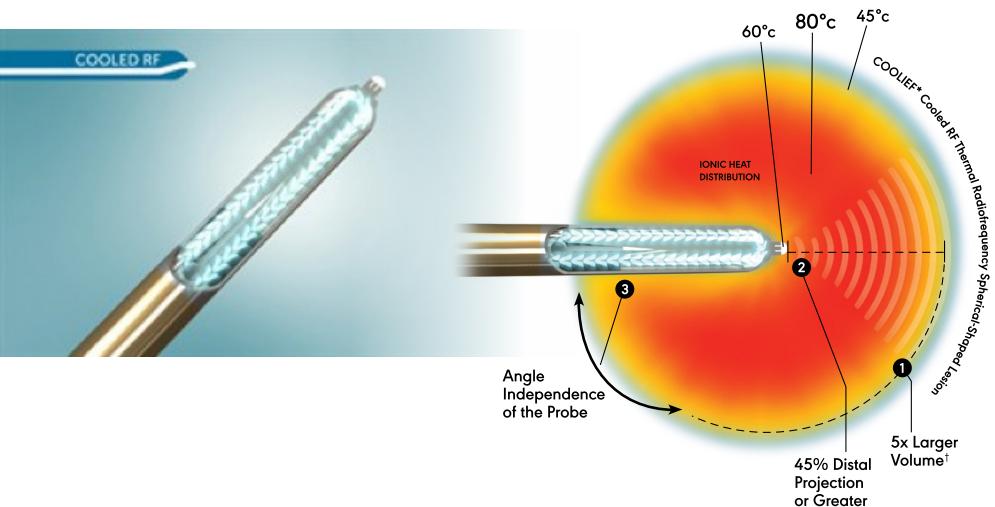


COMPREHENSIVE REIMBURSEMENT RESOURCE GUIDE

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The COOLIEF* Cooled Radiofrequency System - How It Works

A radiofrequency generator transmits a small current of RF energy through an insulated electrode placed within tissue. Ionic heating, produced by the friction of charged molecules, thermally deactivates the nerves responsible for sending pain signals to the brain. Delivering RF energy through water-cooled electrodes enables more RF energy to be safely delivered to target nerves creating spherically-shaped lesions.



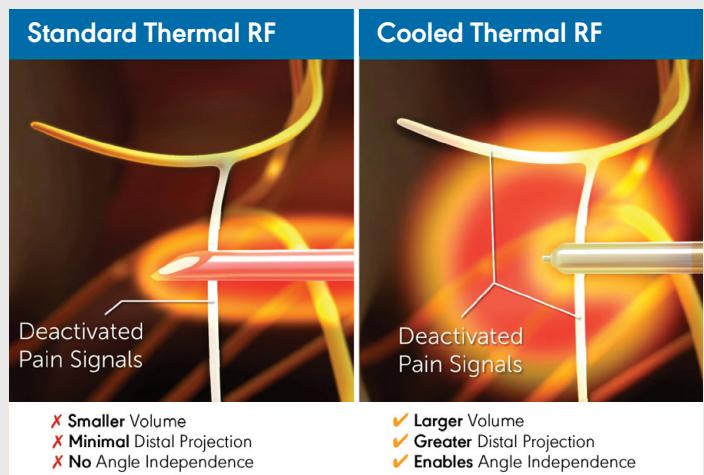
The 60°C ionic heat distribution creates tissue temperatures of 80°C or greater resulting in a five times larger volume than standard radiofrequency lesion that distally projects 45% or greater beyond the probe tip and enables angle independence of the probe. No longer limited to parallel placement, physicians can use the best approach angle to reach and treat nerves located within complex nerve courses. Sterile water circulates internally to cool the COOLIEF* probe while it delivers thermal radiofrequency energy to nervous tissue.

Standard Thermal RF Lesion

With standard RF, lesion size and shape are limited by the heat generated in tissue adjacent to the electrode. Ionic heat is concentrated at the probe and tissue interface, forming elliptically-shaped lesions immediately adjacent to the active tip.

Cooled Thermal RF Lesion

With cooled thermal RF, the moving fluid acts as a heat sink, removing heat away from where tip and tissue interface. Ionic heat is distributed further from the probe's active tip, creating large volume, spherically-shaped lesions.





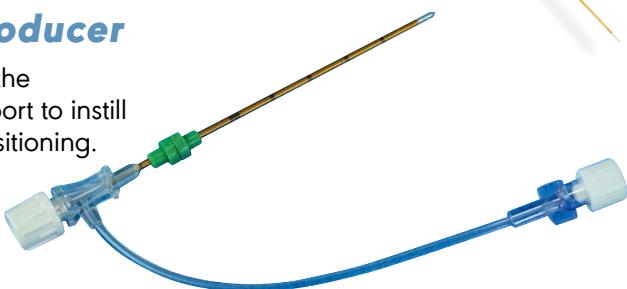
COOLIEF® Cooled RF Pain Management Radiofrequency Probe

The probe includes a 4-foot connecting cable and tubing extension to reach out of the sterile field. These are connected to the generator and peristaltic pump unit for RF energy delivery and internal cooling. A thermocouple in the probe measures cooled electrode temperature throughout the procedure. A radiopaque marker is located at the proximal end of the active tip. This marker defines the lesion location under fluoroscopy, confirming position and enhancing visualization.



COOLIEF® Cooled RF Fluid Delivery Introducer

The sterile, single use introducer provides a path for the probe to the nervous tissue. The Fluid Delivery Introducer provides a tethered port to instill fluids to maintain probe placement and reduce instances of repositioning.



COOLIEF® Cooled RF Pain Management Cooled RF Peristaltic Pump Unit

The pump unit is used to circulate cool sterile water during lesion formation.

COOLIEF® Cooled RF Pain Management Tube Kit

The sterile, single use tube kit is used for closed-loop circulation of sterile water through the probe. It includes a burette to hold water, connected to tubing that is inserted in the pump unit.



COOLIEF® Cooled RF Pain Management Radiofrequency Generator

The Pain Management Generator is the only RF generator compatible with COOLIEF® Cooled RF Pain Management System.



COOLIEF* COOLED RF FOR CERVICAL PAIN

Anatomically tailored cooled RF system offering relief in the cervical region by delivering large volume lesions where anatomy and nerve path are variable.



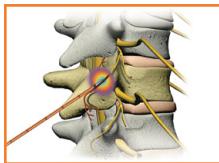
COOLIEF* COOLED RF FOR CHRONIC LUMBAR PAIN

Large volume, anatomy-specific lesion using perpendicular approach encompasses the medial branch nerve in one pass, eliminating the need for multiple passes.



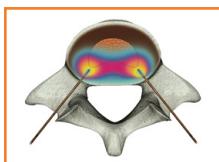
COOLIEF* SINERGY* COOLED RF FOR CHRONIC SACROILIAC JOINT PAIN

Large volume lesions ablate the variable target neural structures between the posterior sacral foramina and the painful SI joint.



COOLIEF* COOLED RF FOR CHRONIC THORACIC FACET PAIN

Large volume lesion size and position compensate for the variable course of the medial branch nerve, especially in the mid-thoracic levels.



COOLIEF* TRANSIDISCAL* COOLED RF FOR DISCOGENIC BACK PAIN

For intervertebral disc biacuplasty, bipolar probe placement straight into the disc creates large, reproducible lesion within a significant volume of the disc.



COOLIEF* COOLED RF FOR CHRONIC HIP JOINT PAIN

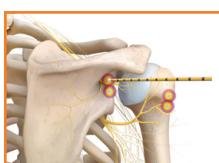
Now available to target and treat sensory branches of the obturator and femoral nerves innervating the hip joint.



COOLIEF* KNEE COOLED RADIOFREQUENCY

A Minimally-invasive option for genicular nerve ablation.

FDA-cleared to treat OA knee pain.



COOLIEF* SHOULDER COOLED RADIOFREQUENCY

Now available to target and treat chronic pain in the shoulder.



This guide provides physician, hospital outpatient and ambulatory surgery center coding with key considerations for addressing the status of the code options provided. 2019 Medicare national average reimbursement rates have also been included.

CPT Modifiers provide additional information about the reported procedure. Many times the specific modifier may reflect actual reimbursement of services. CPT modifier may describe whether multiple procedures were performed, why that procedure was necessary, where the procedure was performed on the body, how many surgeons worked on the patient, and other information that may be critical to a claim's status.

Please check specific guidelines for reporting individual cases. Additional documentation may be required to support procedures reported with modifier-59 or XS. A complete list of all modifiers is available in the 2019 AMA CPT book and online on the Medicare website. See also sample below.

SAMPLE CPT/HCPCS MODIFIERS

MODIFIER	DESCRIPTION
-22	Increased Procedural Services. When the work required to provide a service is significantly increased beyond the typical work required a modifier -22 may be appended. The documentation must support the increased services and the reasoning. (Examples include; increased time, technical difficulty, severity of patient condition, increased effort.)
-26	Professional Component. Some procedures have both a professional and technical component. When the modifier -26 is appended to the professional service the components may be paid separately per payor guidelines.
-50	Bilateral Procedure. When CPT codes are not identified as bilateral in the code description or parenthetical a modifier -50 may be appended when the procedure is performed bilaterally.
-51	Multiple Procedures. When more than one procedure is performed at the same session a modifier -51 is appended to additional procedures. It is not appended to codes listed as "add-on" codes.
-59	Distinct Procedural Service. Modifier -59 is used to report separate services that are distinct or independent and not normally reported together. Documentation must support the distinct service (Example; separate area of injury in extensive injuries)

Effective January, 1 2015 CMS has established four new modifiers to define specific subsets of the -59 modifier. Modifier -59 is still recognized but should not be used when a more descriptive modifier is available.

-XE	Separate Encounter. A Service That Is Distinct Because It Occurred During A Separate Encounter
-XS	Separate Structure. A Service That Is Distinct Because It Was Performed On A Separate Organ/Structure
-XP	Separate Practitioner. A Service That Is Distinct Because It Was Performed By A Different Practitioner
-XU	Unusual Non-Overlapping Service. The Use Of A Service That Is Distinct Because It Does Not Overlap Usual Components Of The Main Service



DEVICE CODES:

There are no specific HCPCS codes (C Code or pass-through code) for any of the COOLIEF* Cooled RF probe kits. The miscellaneous surgical supply code may be used to bill for the single-use probe kit; however, it is at the payer's discretion to provide additional reimbursement.

HCPCS CODING PATHWAY OPTIONS

HCPCS CODE ¹	HCPCS CODE DESCRIPTION
A4649	Surgical Supply; miscellaneous

CPT AND ICD-10-CM CODES:

The following tables illustrate potential CPT codes that can be used to denote COOLIEF* Radiofrequency Ablation as well as some of the common diagnoses and ICD-10-CM codes that may require cooled radiofrequency ablation as a treatment option. This partial list is provided for reference only and does not represent any particular case or suggested treatment.

Effective January 1, 2016, the AMA added guidelines for the facet denervation CPT codes (64633, 64634, 64635 and 64636) that state that these codes should not be used for non-thermal facet joint denervation including chemical, low-grade thermal energy <80 degrees Celsius), or any form of pulsed radiofrequency.

Note: The "Cooled RF Temp" (default setting of 60 degrees C) displayed on the COOLIEF* Cooled RF Generator refers to the cooled electrode temperature and does not reflect the surrounding tissue temperature. The heat generated from the radiofrequency energy produces thermal energy with average maximum tissue temperature of greater than 80°C.

Reference: COOLIEF* Cooled Radiofrequency Kit IFU

According to the AMA, as published in the CPT Assistant, December 2009, "To differentiate between the work when performing sacral nerve destruction of S1, S2, S3, and S4, each individually separate peripheral nerve root neurolytic block is reported as destruction of a peripheral nerve, using code 64640, Destruction by neurolytic agent; other peripheral nerve or branch. In this instance, code 64640 is reported four times. It is suggested that Modifier 59, Distinct Procedural Service, be appended as well."

AMA published clarification for the CPT Code 64640 in CPT Assistant January 2018, "Code 64640, Destruction by neurolytic agent; other peripheral nerve or branch, may be reported for each nerve destruction. Therefore, if destruction is performed on the superior medial and lateral branches and the inferior medial branch of the left genicular nerve, it would be appropriate to report code 64640 three times or report code 64640 once with three units of service based on payer preference. The coder should append modifier 59, Distinct Procedural Service, to the second and subsequent listings of code 64640 to separately identify these procedures."

¹2018 HCPCS, www.cms.gov

Modality Reimbursement Tool- 2019 Reimbursement Reference Guide: Radiofrequency Ablation-Facet Joints[†]

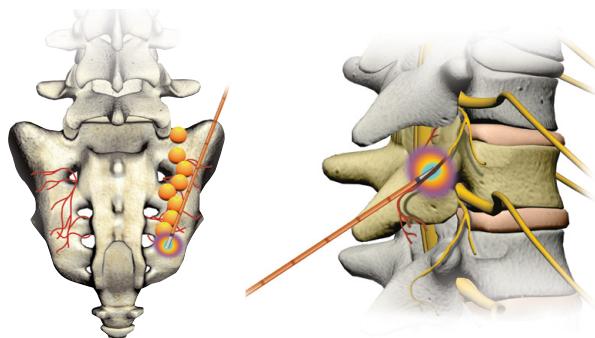


2019 Medicare national unadjusted payment rates.

COOLIEF® Cooled Radiofrequency (RF) technology is indicated for the creation of radiofrequency heat lesions in nervous tissue for the relief of pain.¹

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.²

Therapeutic Procedures		Physician					Outpatient Hospital			Ambulatory Surgery Center	
CPT/HCPCS CODE	DESCRIPTION	TOTAL OFFICE RVU	IN-OFFICE PAYMENT	TOTAL FACILITY RVU	IN-FACILITY PAYMENT	GLOBAL DAYS	APC	STATUS INDICATOR	HOPD PAYMENT	PAYMENT INDICATOR	ASC PAYMENT
64633	Paravertebral facet joint nerve(s), (fluoroscopy or CT); cervical or thoracic, single facet joint	11.89	\$428.50	6.43	\$231.73	10	5431	J1	\$1,631.48	G2	\$781.71
(+)64634	Paravertebral facet joint nerve(s), (fluoroscopy or CT); cervical or thoracic, each additional facet joint	5.34	\$192.45	1.95	\$70.28	10	N/A	N	Bundled	N1	Bundled
64635	Paravertebral facet joint nerve(s), (fluoroscopy or CT); lumbar or sacral, single facet joint	11.76	\$423.82	6.34	\$228.49	10	5431	J1	\$1,631.48	G2	\$781.71
(+)64636	Paravertebral facet joint nerve(s), (fluoroscopy or CT); lumbar or sacral, each additional facet joint	4.85	\$174.79	1.71	\$61.63	10	N/A	N	Bundled	N1	Bundled
64640-59 or XS ³	Other peripheral nerve neurolytic	3.86	\$139.11	2.69	\$96.95	10	5443	T	Included in primary procedure	P3	\$91.17
A4649	Surgical supply miscellaneous	For cost reporting					For cost reporting			For cost reporting	



KEY
 (+) Indicates Add-on code - Multiple procedure reduction does not apply
 In Office Payment - Physician payment for in office service
 In Facility Payment - Physician payment for in facility service

OPPS/ASC INDICATORS
 J1 – Hospital Part B Services paid through comprehensive APC
 N/N1 – Items and services packaged onto APC rates
 G2 – Payment based on OPPS relative payment rates
 P3 – Payment based on MPFS office (non-facility) PE RVUs
 T – Multiple procedure payment reduction applies

MODIFIERS
 -59 – Distinct procedural service
 -XS – Distinct procedural service on separate structure
 -50 – Bilateral procedure (when applicable)
 -LT, RT – Left, right indicator (when payor guidelines require)

Disclaimers: Information provided is derived from a variety of public sources as of March 25, 2019 and is intended for general purposes only. It does not constitute reimbursement or legal advice. It is not intended to increase or maximize reimbursement by payer. Avanos encourages providers to submit accurate and appropriate claims for payment. It is always the provider's responsibility to determine medical necessity for the procedure as well as the number of levels/nerves denervated, the proper delivery of any services and to submit appropriate codes, charges, and modifiers for services that are rendered. Avanos recommends that you consult with your payers, reimbursement specialists and/or legal counsel regarding coding, coverage, and reimbursement matters. Payer policies vary and should be verified prior to treatment for limitations on diagnosis, coding, or site of service requirements.



ICD-10-CM Diagnosis Code Options—Facet Joint[†]

The following list provides examples of possible diagnoses impacting radiofrequency ablation procedures in the Facet Joint. It is not intended to be a complete or comprehensive list. This guide is provided for informational and educational purposes only and does not reflect nor represent any specific case or procedure. Providers are always responsible for accurate coding assignment based on the documented medical record.

Sample ICD-10-CM⁴ Diagnosis Code Options

LUMBAR & SACRAL REGION		CERVICAL & THORACIC REGION	
G54.1	Lumbosacral plexus disorders	M50.23	Other cervical disc displacement, cervicothoracic region
G54.4	Lumbosacral root disorders, not elsewhere classified	M50.30	Other cervical disc degeneration, unspecified cervical region
G54.8	Other nerve root and plexus disorders	M50.31	Other cervical disc degeneration, high cervical region
G55	Nerve root and plexus compressions in diseases classified elsewhere	M50.32	Other cervical disc degeneration, mid- cervical region
M25.551	Pain in right hip	M50.33	Other cervical disc degeneration, cervicothoracic region
M25.552	Pain in left hip	M50.00	Cervical disc disorder with myelopathy, unspecified cervical region
M45.0	Ankylosing spondylitis of multiple sites in spine	M50.01	Cervical disc disorder with myelopathy, high cervical region
M45.7	Ankylosing spondylitis of lumbosacral region	M50.02	Cervical disc disorder with myelopathy, mid-cervical region
M45.8	Ankylosing spondylitis sacral and sacrococcygeal region	M50.03	Cervical disc disorder with myelopathy, cervicothoracic region
M48.8X7	Other specified spondylopathies lumbosacral region	M48.02	Spinal stenosis, cervical region
M48.8X8	Other specified spondylopathies sacral and sacrococcygeal region	M48.01	Spinal stenosis, occipito-atlanto-axial region
M46.1	Sacroiliitis, not elsewhere classified	M48.03	Spinal stenosis, cervicothoracic region
M47.817	Spondylosis without myelopathy or radiculopathy, lumbosacral region	M99.21	Subluxation stenosis of neural canal of cervical region
M47.26	Other spondylosis with radiculopathy, lumbar region	M99.31	Osseous stenosis of neural canal of cervical region
M47.27	Other spondylosis with radiculopathy, lumbosacral region	M99.41	Connective tissue stenosis of neural canal of cervical region
M47.816	Spondylosis without myelopathy or radiculopathy, lumbar region	M99.51	Intervertebral disc stenosis of neural canal of cervical region
M47.896	Other spondylosis, lumbar region	M99.61	Osseous and subluxation stenosis of intervertebral foramina of cervical region
M47.897	Other spondylosis, lumbosacral region	M99.71	Connective tissue and disc stenosis of intervertebral foramina of cervical region
M54.5	Low back pain	M54.2	Cervicalgia
M54.30	Sciatica, unspecified side	M54.12	Radiculopathy, cervical region
M54.31	Sciatica, right side	M54.13	Radiculopathy, cervicothoracic region
M54.32	Sciatica, left side	M50.11	Cervical disc disorder with radiculopathy, high cervical region
M54.40	Lumbago with sciatica, unspecified side	M50.12	Cervical disc disorder with radiculopathy, mid-cervical region
M54.41	Lumbago with sciatica, right side	M50.13	Cervical disc disorder with radiculopathy, cervicothoracic region
M54.42	Lumbago with sciatica, left side	M54.11	Radiculopathy, occipito-atlanto-axial region
M43.27	Fusion of spine, lumbosacral region	M54.6	Pain in thoracic spine
M43.28	Fusion of spine, sacral and sacrococcygeal region	M54.14	Radiculopathy, thoracic region
M53.2X7	Spinal instabilities, lumbosacral region	M51.14	Intervertebral disc disorders with radiculopathy, thoracic region
M53.2X8	Spinal instabilities, sacral and sacrococcygeal region	M47.814	Spondylosis without myelopathy or radiculopathy, thoracic region
M53.86	Other specified dorsopathies, lumbar region	M47.24	Other spondylosis with radiculopathy, thoracic region
M53.87	Other specified dorsopathies, lumbosacral region	M47.25	Other spondylosis with radiculopathy, thoracolumbar region
M53.88	Other specified dorsopathies, sacral and sacrococcygeal region	M47.815	Spondylosis without myelopathy or radiculopathy, thoracolumbar region
M54.08	Panniculitis affecting regions of neck and back, sacral and sacrococcygeal region	M47.894	Other spondylosis, thoracic region
M54.07	Panniculitis affecting regions of neck and back, lumbosacral region	M45.3	Ankylosing spondylitis of cervicothoracic region
M54.17	Radiculopathy, lumbosacral region	M45.4	Ankylosing spondylitis of thoracic region

[†]References: CPT 2019 Professional Edition, 2018 American Medical Association (AMA); CPT is a trademark of the AMA. All Rights Reserved.

2019 Medicare Physician Fee Schedule RVU multiplied by conversion factor, effective January 1, 2019, www.cms.gov

2019 Medicare OPPS Final Rule, www.cms.gov

2019 Medicare ASC CN2 Payment Rates, 12-21-18, www.cms.gov

1. www.accessdata.fda.gov/cdrh_docs/pdf16/K163236.pdf

2. COOLIEF® Cooled Radiofrequency Kit Instructions for Use, 2017-07-12.

3. 2019 CPT Assistant

4. 2019 ICD-10-CM, www.cms.gov

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Modality Reimbursement Tool-

2019 Reimbursement Reference Guide:

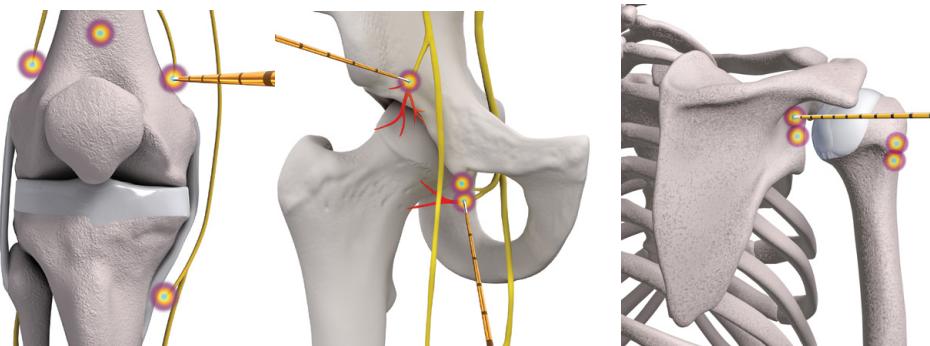
Radiofrequency Ablation-Knee and Hip Joints, Shoulder[†]

2019 Medicare national unadjusted payment rates.

COOLIEF® Cooled Radiofrequency (RF) technology is indicated for the creation of radiofrequency heat lesions in nervous tissue for the relief of pain.¹ COOLIEF® Cooled Radiofrequency (RF) is indicated for creating radiofrequency lesions of the genicular nerves for the management of moderate to severe knee pain of more than 6 months with conservative therapy, including medication, in patients with radiologically-confirmed osteoarthritis (grade 2-4) and a positive response ($\geq 50\%$ reduction in pain) to a diagnostic genicular nerve block.²

The "Cooled RF Set Temp" (Default Setting $T = 60^{\circ}\text{C}$) 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

Therapeutic Procedures		Physician					Outpatient Hospital			Ambulatory Surgery Center	
CPT/HCPCS CODE	DESCRIPTION	TOTAL OFFICE RVU	IN-OFFICE PAYMENT	TOTAL FACILITY RVU	IN-FACILITY PAYMENT	GLOBAL DAYS	APC	STATUS INDICATOR	HOPD PAYMENT	PAYMENT INDICATOR	ASC PAYMENT
64640	Other peripheral nerve neurolytic	3.86	\$139.11	2.69	\$96.95	10	5443	T	\$764.84	P3	\$91.17
64640-59 or XS ⁴	Other peripheral nerve neurolytic	3.86	\$69.55	2.69	\$48.47	10	5443	T	\$382.42	P3	\$45.58
77002, 77002-26	Fluoroscopic guidance for needle placement	2.86	\$103.07	0.79	\$28.47	N/A	N/A	N	Bundled	N	Bundled
76942, 76942-26	Ultrasound guidance for needle placement	1.61	\$58.02	0.91	\$32.80	N/A	N/A	N	Bundled	N	Bundled
A4649	Surgical supply miscellaneous	For cost reporting					For cost reporting			For cost reporting	



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MODIFIERS
 -59 - Distinct procedural service
 -XS - Distinct procedural service on separate structure
 -50 - Bilateral procedure (when applicable)
 -LT, RT - Left, right indicator (when payor guidelines require)

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ICD-10-CM Diagnosis Code Options—Knee, Hip & Shoulder[†]

The following list provides examples of possible diagnoses impacting radiofrequency ablation procedures in the knee and hip regions. It is not intended to be a complete or comprehensive list. This guide is provided for informational and educational purposes only and does not reflect nor represent any specific case or procedure. Providers are always responsible for accurate coding assignment based on the documented medical record.

Sample ICD-10-CM ⁵ Diagnosis Code Options		
KNEE REGION		SHOULDER REGION
M17.10	Unilateral primary osteoarthritis, unspecified, knee	M12.552 Traumatic arthropathy, left hip
M17.0	Bilateral primary osteoarthritis of knee	M13.851 Other specified arthritis, right hip
M17.11	Unilateral primary osteoarthritis, right knee	M13.852 Other specified arthritis, left hip
M17.12	Unilateral primary osteoarthritis, left knee	M13.0 Polyarthritis, unspecified
M17.5	Other unilateral secondary osteoarthritis of knee	M13.151 Monoarthritis, not elsewhere classified, right hip
M17.2	Bilateral post-traumatic osteoarthritis of knee	M13.152 Monoarthritis, not elsewhere classified, left hip
M17.30	Unilateral post-traumatic osteoarthritis, unspecified knee	M07.651 Enteropathic arthropathies, right hip
M17.31	Unilateral post-traumatic osteoarthritis, right knee	M07.652 Enteropathic arthropathies, left hip
M17.32	Unilateral post-traumatic osteoarthritis, left knee	M12.851 Other specific arthropathies, not elsewhere classified, right hip
M17.4	Other bilateral secondary osteoarthritis of knee	M12.852 Other specific arthropathies, not elsewhere classified, left hip
M12.561	Traumatic arthropathy, right knee	M25.551 Pain in right hip
M12.562	Traumatic arthropathy, left knee	M25.552 Pain in left hip
M13.169	Monoarthritis of knee	M25.559 Pain in unspecified hip
M13.161	Monoarthritis, not elsewhere classified, right knee	M19.011 Primary osteoarthritis, right shoulder
M13.162	Monoarthritis, not elsewhere classified, left knee	M19.012 Primary osteoarthritis, left shoulder
M12.869	Other specific arthropathies, not elsewhere classified, unspecified knee	M19.019 Primary osteoarthritis, unspecified shoulder
M07.661	Enteropathic arthropathies, right knee	M19.111 Post-traumatic osteoarthritis, right shoulder
M07.662	Enteropathic arthropathies, left knee	M19.112 Post-traumatic osteoarthritis, left shoulder
M07.669	Enteropathic arthropathies, unspecified knee	M19.119 Post-traumatic osteoarthritis, unspecified shoulder
M12.861	Other specific arthropathies, not elsewhere classified, right knee	M19.211 Secondary osteoarthritis, right shoulder
M12.862	Other specific arthropathies, not elsewhere classified, left knee	M19.212 Secondary osteoarthritis, left shoulder
M25.561	Pain in right knee	M19.219 Secondary osteoarthritis, unspecified shoulder
M25.562	Pain in left knee	M12.511 Traumatic arthropathy, right shoulder
M25.569	Pain in unspecified knee	M12.512 Traumatic arthropathy, left shoulder
HIP REGION		M12.519 Traumatic arthropathy, unspecified shoulder
M16.0	Bilateral primary osteoarthritis of hip	M12.811 Other specific arthropathies, not elsewhere classified, right shoulder
M16.11	Unilateral primary osteoarthritis, right hip	M12.812 Other specific arthropathies, not elsewhere classified, left shoulder
M16.12	Unilateral primary osteoarthritis, left hip	M12.819 Other specific arthropathies, not elsewhere classified, unspecified shoulder
M16.7	Other unilateral secondary osteoarthritis of hip	M13.111 Monoarthritis, not elsewhere classified, right shoulder
M16.2	Bilateral osteoarthritis resulting from hip dysplasia	M13.112 Monoarthritis, not elsewhere classified, left shoulder
M16.30	Unilateral osteoarthritis resulting from hip dysplasia, unspecified hip	M13.119 Monoarthritis, not elsewhere classified, unspecified shoulder
M16.31	Unilateral osteoarthritis resulting from hip dysplasia, right hip	M07.611 Enteropathic arthropathies, right shoulder
M16.32	Unilateral osteoarthritis resulting from hip dysplasia, left hip	M07.612 Enteropathic arthropathies, left shoulder
M16.4	Bilateral post-traumatic osteoarthritis of hip	M07.619 Enteropathic arthropathies, unspecified shoulder
M16.51	Unilateral post-traumatic osteoarthritis, right hip	M25.511 Pain in right shoulder
M16.52	Unilateral post-traumatic osteoarthritis, left hip	M25.512 Pain in left shoulder
M16.6	Other bilateral secondary osteoarthritis of hip	M25.219 Pain in unspecified shoulder
M12.551	Traumatic arthropathy, right hip	

[†]References: CPT 2019 Professional Edition, 2018 American Medical Association (AMA); CPT is a trademark of the AMA. All Rights Reserved.

2019 Medicare Physician Fee Schedule RVU multiplied by conversion factor, effective January 1, 2019, www.cms.gov

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2019 Medicare ASC CN2 Payment Rates, 12-21-18, www.cms.gov

COOLIEF® Cooled Radiofrequency Kit Instructions for Use, 2017-07-12.

1. www.accessdata.fda.gov/cdrh_docs/pdf16/K163236.pdf

2. www.accessdata.fda.gov/cdrh_docs/pdf16/K163461.pdf

3. COOLIEF® Cooled Radiofrequency Kit Instructions for Use, 2017-07-12.

4. 2019 CPT Assistant

5. 2019 ICD-10-CM, www.cms.gov

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Disclaimer: Information provided is derived from a variety of public sources as of March 25, 2019 and is intended for general purposes only. It does not constitute reimbursement or legal advice. It is not intended to increase or maximize reimbursement by payer. Avanos encourages providers to submit accurate and appropriate claims for payment. It is always the provider's responsibility to determine medical necessity for the procedure as well as the number of levels/nerves denervated, the proper delivery of any services and to submit appropriate codes, charges, and modifiers for services that are rendered. Avanos recommends that you consult with your payers, reimbursement specialists and/or legal counsel regarding coding, coverage, and reimbursement matters. Payer policies vary and should be verified prior to treatment for limitations on diagnosis, coding, or site of service requirements.



Pain Management Procedures- 2019 Reimbursement Reference Guide[†]:

Therapeutic Procedures		Physician				Outpatient Facility	
CPT CODE	DESCRIPTION	TOTAL OFFICE RVU	IN-OFFICE PAYMENT	TOTAL FACILITY RVU	IN-FACILITY PAYMENT	HOPD	ASC
64635	Paravertebral facet joint nerve(s), (fluoroscopy or CT); lumbar or sacral, single facet joint	11.76	\$423.82	6.34	\$228.49	\$1631.48	\$781.71
64636	Paravertebral facet joint nerve(s), (fluoroscopy or CT); lumbar or sacral, each additional facet joint	4.85	\$174.79	1.71	\$61.63	Bundled	Bundled
64633	Paravertebral facet joint nerve(s), (fluoroscopy or CT); cervical or thoracic, single facet joint	11.89	\$428.50	6.43	\$231.73	\$1631.48	\$781.71
64634	Paravertebral facet joint nerve(s), (fluoroscopy or CT); cervical or thoracic, each additional facet joint	5.34	\$192.45	1.95	\$70.28	Bundled	Bundled
64640	Other peripheral nerve neurolytic	3.86	\$139.11	2.69	\$96.95	\$764.84	\$91.17
77002, 77002-26	Fluoroscopic guidance for needle placement	2.86 n/a	\$103.07 n/a	n/a 0.79	n/a \$28.47	n/a n/a	n/a n/a
64490	Injection(s), diagnostic or therapeutic agent, paravertebral facet joint w/ image guidance cervical or thoracic; single level	5.39	\$194.25	3.03	\$109.20	\$764.8	\$394.00
64491	Injection(s), diagnostic or therapeutic agent, paravertebral facet joint w/ image guidance cervical or thoracic; second level	2.68	\$96.58	1.72	\$61.99	Bundled	Bundled
64492	Injection(s), diagnostic or therapeutic agent, paravertebral facet joint w/ image guidance cervical or thoracic; third & any additional levels	2.70	\$97.31	1.74	\$62.71	Bundled	Bundled
64493	Injection(s), diagnostic or therapeutic agent, paravertebral facet joint w/ image guidance lumbar or sacral; single level	4.91	\$176.95	2.58	\$92.98	\$764.84	\$394.00
64494	Injection(s), diagnostic or therapeutic agent, paravertebral facet joint w/ image guidance lumbar or sacral; second level	2.49	\$89.74	1.49	\$53.70	Bundled	Bundled
64495	Injection(s), diagnostic or therapeutic agent, paravertebral facet joint w/ image guidance lumbar or sacral; third & any additional levels	2.49	\$89.74	1.51	\$55.42	Bundled	Bundled
64479	Injection(s), anesthetic agent and/or steroid, transforaminal epidural, with imaging guidance; cervical or thoracic, single level	6.95	\$250.47	3.76	\$135.51	\$764.84	\$394.00
64480	Injection(s), anesthetic agent and/or steroid, transforaminal epidural, with imaging guidance; cervical or thoracic, each additional level	3.42	\$123.25	1.80	\$64.87	Bundled	Bundled
64483	Injection(s), anesthetic agent and/or steroid, transforaminal epidural, with imaging guidance; lumbar or sacral, single level	6.44	\$232.09	3.19	\$114.96	\$764.84	\$394.00
64484	Injection(s), anesthetic agent and/or steroid, transforaminal epidural, with imaging guidance; lumbar or sacral, each additional level	2.79	\$100.55	1.49	\$53.70	Bundled	Bundled
64447	Injection, anesthetic agent; femoral nerve, single	3.46	\$124.70	1.91	\$68.83	\$598.81	\$66.31
64450	Injection, anesthetic agent; other peripheral nerve or branch	2.19	\$78.93	1.28	\$46.13	\$598.81	\$49.37
64999	Unlisted procedure, nervous system	n/a	n/a	n/a	n/a	n/a	n/a
62290	Injection procedure for discography, each level, lumbar	9.62	\$346.70	4.81	\$173.35	n/a	n/a
62291	Injection procedure for discography, each level, cervical or thoracic	9.28	\$334.44	4.65	\$167.58	n/a	n/a
72295	Discography, lumbar, radiological supervision and interpretation	2.90	\$104.51	1.23	\$44.33	n/a	n/a
76942	Ultrasonic guidance for needle placement	1.61	\$58.02	0.91	\$32.80	n/a	n/a

References:

CPT 2019 Professional Edition, 2019 American Medical Association (AMA); CPT is a trademark of the AMA. All Rights Reserved.
2019 Medicare Physician Fee Schedule RVU multiplied by conversion factor, effective January 1, 2019, www.cms.gov
2019 Medicare OPPS Final Rule, www.cms.gov
2019 Medicare ASC CN2-payment rates www.cms.gov

[†]Information provided is derived from a variety of public sources as of March 25, 2019 and is intended for general purposes only. It does not constitute reimbursement or legal advice. It is not intended to increase or maximize reimbursement by payer. Halyard encourages providers to submit accurate and appropriate claims for payment. It is always the provider's responsibility to determine medical necessity for the procedure as well as the number of levels/nerves denervated, the proper delivery of any services and to submit appropriate codes, charges, and modifiers for services that are rendered. Halyard recommends that you consult with your payers, reimbursement specialists and/or legal counsel regarding coding, coverage, and reimbursement matters. Payer policies vary and should be verified prior to treatment for limitations on diagnosis, coding, or site of service requirements.



Documentation of a patient's medical history, conservative therapies performed and clinical reason for any service or procedure is the key to a positive reimbursement scenario. When a RF procedure is indicated by the physician, the patient's medical record should clearly state the reason for the procedure as well as the expected outcomes and recommended therapies to follow. This documentation will support claim review and pre-authorization alike. Follow-up or staged procedures will depend on the initial documentation to support medical necessity. The following general documentation guidelines should be followed for all payors.

Clinical/Operational notes should contain the following details:

- Patient name and Medical Record Number
- Pre-operative and Post-operative diagnosis
- Clearly defined procedure(s)
- Date of procedure
- Anesthesia, Consent, Complication if applicable
- Clear description of the procedure(s) in detail
- Post-procedure evaluation
- Impression

EXAMPLES:

Procedure Descriptions:

- Radiofrequency ablation of the posterior and lateral annulus fibrosus
- Radiofrequency ablation of LT/RT L5 Dorsal Ramus and LT/RT L4 medial branch
- Sacroiliac Joint Ablation - Lateral Branches of LT/RT S1, S2, S3
- C3 facet joint radiofrequency denervation
- T4 Medial Branch Radiofrequency denervation
- Genicular knee radiofrequency ablation
 - Superolateral genicular branch from the vastus lateralis
 - Superomedial genicular branch from the vastus medialis
- L/R articular branch of femoral nerve radiofrequency denervation
- L/R articular branch of obturator nerve radiofrequency denervation

Procedure Details:

- Probe placement, size of probe and number of probes used (if multiple)
- Use of guided fluoroscopy, gauge and number of introducer needle(s), and location
- Hz to stimulate nerve and maximum volts to determine finalization and safe needle and electrode placement
- Number and anatomical location of lesions created, tissue temperature and minutes of treatment
- Associated tissue impediment noted



In order to facilitate coverage access for a proposed procedure, the physician may request a pre-authorization from the patient's private insurance carrier. Some health plans require pre-authorization for all surgical procedures. Requesting pre-authorization may only involve a simple contact by the physician's office to verify benefits and acquire an approval number to submit with the claim. Alternatively, pre-authorization may require that the physician provide more substantive information about the case.

To prepare a pre-authorization request that requires additional information beyond basic coding, the physician's staff must provide technical information about the procedure and the unique technology involved. The treating physician must also establish the medical necessity for the procedure, as it applies to the specific patient.

Typically, the pre-authorization process and/or appeal process may require submitting some or all of the following documentation:

- Patient clinical notes, including documentation of prior conservative care
- Supporting technical information in the form of the FDA registration letter, peer-reviewed clinical literature, clinical trial information and other available technical resources
- Description of the technology and its use in this patient's case
- Description of medical necessity of the procedure for the specific patient

STAGES OF THE PRE-AUTHORIZATION PROCESS:

INITIATE PRE-AUTHORIZATION

Verify benefits and submit clinical information and literature on device.

PEER TO PEER

Opportunity for the treating physician to discuss the medical necessity of the case with a Medical Director at the health plan.

1ST LEVEL APPEAL

Expedited/Standard - Opportunity to request a Medical Director that did not review the initial submission. There may be one or two levels of internal appeals.

2ND LEVEL APPEAL

Expedited/Standard - Opportunity to request a Medical Director that did not review the initial submission as well as the peer to peer.

EXTERNAL APPEAL

Following appeal denial at all available internal levels, the patient should pursue an External Appeal with the applicable State Department of Insurance.



PRE-AUTHORIZATION/LMN

Providers, please note: Coverage requirements will typically vary by payor. Therefore, physicians may seek pre-authorization for the procedure, during which time health plans will determine whether the procedure is covered as described in the pre-authorization submission.

This template and the information provided herein are intended to provide context for the procedure and related coding. Providers should select the procedure, diagnosis, and technology coding that best represents each patient's medical condition and treatment and should reflect the services and products that are medically necessary for the treatment of that patient. Providers must ensure that all statements made to insurance carriers are true and correct.

[SITE LETTERHEAD]

[DATE]

[NAME OF INSURANCE COMPANY]

[ATTN:]

[FAX #:]

RE: [PATIENT NAME]
[INSURANCE IDENTIFICATION NUMBER]
[REFERENCE #:]
[PRIMARY CPT CODE:]
[PRIMARY DX:]

Dear Utilization Review Manager:

On behalf of my patient, [PATIENT NAME], this letter serves as a pre-authorization request and provides clinical information on this patient's condition. It also serves as a formal request for coverage by [INSURANCE COMPANY] for the medically necessary health care services captioned above. This letter and its supporting documents will provide you with a better depiction of this patient's clinical history and this patient's need for the [COOLIEF* COOLED THERMAL RF]. It is my sincere hope that this additional information will inform your decision to approve this procedure.

Description of Procedure: [PHYSICIAN MAY INSERT DETAILED PROCEDURE DESCRIPTION FOR SPECIFIC TECHNOLOGY/ANATOMY INCLUDING THE USE OF [COOLIEF* COOLED THERMAL RF PROCEDURE, CHOOSE ONE BELOW]

COOLIEF* Cooled Thermal RF is a non-invasive thermal radiofrequency procedure, and the only known RF system using water-cooled technology to deactivate pain-causing sensory nerves. By safely delivering more RF energy through water-cooled electrodes, large volume, spherical shaped lesions can be created that distally project 45% beyond the probe's tip to enable angle independence of the probe. The heat generated from the COOLIEF* Cooled Thermal RF system provides thermal energy with average maximum tissue temperature of greater than 80 degrees C. This method has been clinically proven to provide up to **24 months of pain relief, improved physical function and reduced drug utilization.** COOLIEF* is FDA-cleared.



Summary of the Key Benefits of COOLIEF® Cooled Thermal RF:

- Only currently known water-cooled thermal radiofrequency system
- Physical function is significantly improved
- Pain and disability are decreased
- Clinically proven to provide up to 24 months of pain relief
- May reduce drug utilization

Patient's Clinical Need for COOLIEF® COOLED THERMAL RF: [PATIENT NAME] is a [AGE] [GENDER] who presented to me with [DESCRIBE SYMPTOMS WITH SPECIFICITY]. Prior treatments have included [DESCRIBE CONSERVATIVE CARE, USE OF MEDICATIONS, PRIOR TREATMENTS, and PHYSICAL AIDS].

In a discussion with [INSERT MR/MS] following an exam, a decision was made to move forward with a COOLIEF® Cooled Thermal RF procedure as a minimally invasive, outpatient procedure to treat chronic pain.

Should you have further questions or concerns, please do not hesitate to call me at [INSERT PHYSICIAN TELEPHONE NUMBER]. Thank you for your immediate attention and anticipated authorization of these services for your insured.

Sincerely,

[PHYSICIAN NAME], [DEGREE]



When a third-party health plan denies a procedure in accordance with their medical policy guidelines, there is a process available to appeal that decision. Insurance carriers provide this check and balance to allow for reconsideration of the decision per their plan provisions and applicable state regulations. The process will vary depending on the plan and regulatory requirements; however, there are basic steps that can assist the provider in appealing the initial denial.

To present an effective appeal, follow these steps:

1. Carefully review the denial reason and understand the specific health plan's policy;
2. Write an appeal letter clearly addressing the specific denial reasons;
3. Provide supporting information including product details and FDA registration; and
4. Submit the appeal on time.

The following additional considerations may be helpful:

1. If the health plan is self-funded (employer based), patients can contact their Human Resources (HR) department to assist in the patient's appeal of the decision. HR departments may have contacts within the health plan that can provide helpful support.
2. The patient can contact the health plan directly and is the policy-holder with an influence on the decision.
3. There are multiple steps in the appeal process and providers and patients may exercise these rights according to their third party payor and state guidelines.

WRITING THE APPEAL LETTER

When appealing a denial, the first step is often composing a letter to the health plan that initially reviewed the case. This letter is submitted by the provider on behalf of the patient, with the patient's approval, and should outline the reasons the denial should be overturned.

Detailed information regarding the denial reason should be prepared utilizing the case specific information in the denial, as well as the more general technology specific information and supporting clinical literature.



First, collect all the information required to support the appeal:

- Denial letter
- Health plan contracts and provider agreements
- Applicable medical policy guidelines from the health plan (website access is often a good resource for general policy)
- Literature supporting the technology
- FDA registration letter
- Safety and effectiveness documentation
- Peer-reviewed literature references (when available)

In drafting an appeal letter, consider the following:

- Did the reviewer miss information about the technology?
- Did the reviewer overlook a case specific detail?
- Does the health plan clearly understand the procedure?
- Was the information provided about the case correctly submitted?
- Review the plan's official policy online for more detailed understanding of the denial reason

Be mindful of details, including:

- Patient's name
- Subscriber's name
- Policy number
- Description of exact service denied
- Date denied



COOLIEF* COOLED RF PRIOR-AUTHORIZATION APPEAL LETTER

Providers, please note: Despite the filing of a prior-authorization request, certain commercial health plans may still elect not to cover or grant prior-authorization for this procedure without further information and clinical evidence supporting its use. Should prior-authorization be denied, the physician requesting coverage should immediately file a written appeal with the health plan and request reconsideration of the coverage decision. When requesting a prior-authorization appeal it is important to remember that payors may require all elements of a procedure to be prior-authorized per their payor guidelines. To assist you, the following example is offered as a starting point for your prior-authorization denial appeal and reconsideration request.

[SITE LETTERHEAD]

[DATE]

[NAME OF INSURANCE COMPANY]

[ATTN:]

[FAX #:]

RE: [PATIENT NAME]
[INSURANCE IDENTIFICATION NUMBER]
[REFERENCE #:]
[PRIMARY CPT CODE:]
[PRIMARY DX CODE:]

Dear Utilization Review Manager:

Please accept this letter on behalf of [PATIENT NAME], as an appeal to [INSURANCE COMPANY]'s decision to deny coverage for the recommended [PROCEDURE]. It is my understanding, per [INSURANCE COMPANY]'s denial letter dated [INSERT DENIAL LETTER DATE], that this procedure has been denied because [REASON FOR DENIAL].

I respectfully request that [INSURANCE COMPANY] reconsider its denial and provide authorization for this treatment option. I believe this denial was made in error. This letter and its supporting documents will provide you with a better depiction of this patient's clinical history and this patient's need for [COOLIEF* COOLED RF].

Description of Procedure: [PHYSICIAN MAY INSERT DETAILED PROCEDURE DESCRIPTION FOR SPECIFIC TECHNOLOGY/ANATOMY INCLUDING THE USE OF [COOLIEF* COOLED RF PROCEDURE, CHOOSE ONE BELOW]

COOLIEF* is a non-invasive thermal radiofrequency procedure, and the only known RF system using water-cooled technology to deactivate pain-causing sensory nerves. By safely delivering more RF energy through water-cooled electrodes, large volume, spherical shaped lesions can be created that distally project 45% beyond the probe's tip to enable angle independence of the probe. The heat generated from the COOLIEF* radiofrequency system provides thermal energy with average maximum tissue temperature of greater than 80 degrees C. This method has been clinically proven to provide up to **24 months of pain relief, improved physical function and reduced drug utilization**. COOLIEF* is FDA-cleared.



Please consider the following references in support of COOLIEF* procedures:

- Cohen, S., Randomized Placebo-controlled Study Evaluating Lateral Branch Radiofrequency Denervation for Sacroiliac Joint Pain, *Anesthesiology*, August 2008, V. 109, No. 2, pages 279-287.
<http://anesthesiology.pubs.asahq.org/article.aspx?articleid=1922283>
- Davis T. Cooled RF Ablation Superior to Corticosteroids in Knee Osteoarthritis. *Pain Medicine News* [Internet]. 2017Feb2; Available from: <http://www.painmedicinewebs.com/Multimedia/Article/02-17/Cooled-RF-Ablation-Superior-to-Corticosteroids-in-Knee-Osteoarthritis/40262/ses=ogst?enl=true>
- Petersohn, J., Conquergood, L., Leung, M. Acute Histologic Effects and Thermal Distribution Profile of Disc Biacuplasty Using a Novel Water-Cooled Bipolar Electrode System in and in vivo Porcine Model Pain Medicine Journal, Vol 9., Issue 1, pp 26-32 Jan/Feb 2008. <https://academic.oup.com/painmedicine/article/9/1/26/1869892>
- Kapural, L., et al Histological Changes and Temperature Distribution Studies of a Novel Bipolar Radiofrequency Heating System in Degenerated and Nondegenerated Human Cadaver Lumbar Discs *Pain Medicine*, Vol 9, Issue 1, 1, Jan 2008, pp 68-75. <https://academic.oup.com/painmedicine/article/9/1/68/1870408>

Patient's Clinical Need for COOLIEF* system Procedure: [PATIENT NAME] is a [AGE] [GENDER] who presented to me with [DESCRIBE SYMPTOMS WITH SPECIFICITY]. Prior treatments have included [DESCRIBE CONSERVATIVE CARE, USE OF MEDICATIONS, PRIOR TREATMENTS, and PHYSICAL AIDS].

To assist in your reconsideration of this patient's clinical need for the intended procedure, a copy of the relevant clinical notes that support use of [COOLIEF* COOLED THERMAL RF] is enclosed to support you with your decision to overturn your initial denial of coverage for these services. It is my sincere hope that [INSURANCE COMPANY] will respond with a positive decision so that [PATIENT NAME] can benefit from the results of this procedure. Should you have further questions or concerns, please do not hesitate to call me at [INSERT PHYSICIAN TELEPHONE NUMBER]. Thank you for your immediate attention and reconsideration.

Sincerely,

[PHYSICIAN NAME], [DEGREE]
[PRACTICE NAME]



COOLIEF* SINERGY Sacroiliac Cooled Radiofrequency Pain Management System Description:

COOLIEF* SINERGY is an innovative radiofrequency treatment for chronic sacroiliac joint (SIJ) pain. The challenge of treating SIJ with thermal radiofrequency ablation is capturing the afferent lateral branches coursing between the painful sacroiliac region and the posterior sacral foramina. The COOLIEF* SINERGY sacroiliac Cooled RF pain management system enables placement of large volume lesions, which compensate for the known variability of nerve location and running course of the lateral branches of the posterior rami.

COOLIEF* TRANSDISCAL Disc Biacuplasty Cooled Radiofrequency Pain Management System Description:

The COOLIEF* TRANSDISCAL* Disc Biacuplasty Cooled RF Pain Management System uses the COOLIEF* Cooled RF system with a bipolar approach to deactivate nerves to treat symptomatic discogenic pain. Under fluoroscopy, two introducers are placed bilaterally in the posterolateral disc, and then two COOLIEF* TRANSDISCAL* Cooled thermal RF Probes are inserted. The water-cooled thermal probes deliver RF energy with enough power to heat a larger volume of disc tissue while eliminating overheating of adjacent tissue. The result is a large, reproducible lesion within a significant volume of the posterior of the disc.

COOLIEF* Lumbar Cooled Radiofrequency Pain Management System Description:

The COOLIEF* Cooled RF Pain Management System uses the cooled thermal RF platform for lumbar medial branch neurotomy. The COOLIEF* Cooled RF Pain Management System enables placement of a large-volume lesion encompassing the medial branch nerve in one pass, eliminating the need for multiple passes. Many patients may fail standard RF treatments, or have a challenging anatomy. The COOLIEF* Cooled RF Pain Management System enables perpendicular placement allowing "gun-barrel" access to target the nerve, compared to standard RF, in which parallel placement to nerve or multiple-pass lesioning is required to achieve optimal ablation.

COOLIEF* Thoracic Cooled Radiofrequency Pain Management System Description:

A major challenge in treating chronic, thoracic facet pain comes from the variable course of the medial branch nerve, particularly in the mid-thoracic levels. The COOLIEF* Cooled RF Pain Management System overcomes the challenge of the variable nerve course by enabling placement of a large-volume, reproducible lesion, of the size and position that can account for the medial branch variability.

COOLIEF* Cervical Cooled Radiofrequency System Description:

The COOLIEF* Cooled RF System is designed to address the unique anatomy of the cervical joints by employing water-cooled thermal technology anatomically tailored to offer relief in the cervical region. By delivering large volume lesions where anatomy and nerve path are variable, the lesion conforms around ridges and within crevices on irregularly shaped surfaces, enhancing the ability to capture the nerve.

COOLIEF* Hip Cooled Radiofrequency System Description:

COOLIEF* Cooled RF is a non-surgical, minimally invasive, non-narcotic treatment option for chronic hip joint pain. By performing this procedure in an outpatient setting, patients have the potential to return to an enhanced quality of life much sooner than with surgery and with reduced need for narcotics. This procedure is designed to treat complex anatomy of variable nerve courses through the creation of large volume spherical lesions. COOLIEF* is a clear choice for chronic joint pain patients who are not candidates for invasive procedures due to BMI, age, or other co-morbidities and offers an alternative therapy to injections associated with less than optimal outcomes.

COOLIEF* Knee Cooled Radiofrequency System Description:

COOLIEF* Cooled RF is a non-surgical, minimally invasive, non-narcotic treatment option for genicular neurotomy. This procedure can be done using fluoroscopic or ultrasound guidance. By performing this procedure in an outpatient setting, patients have the potential to return to an enhanced quality of life much sooner than with surgery—and with reduced need for narcotics. This procedure is designed to treat complex anatomy of variable nerve courses through the creation of large volume spherical lesions and is a clear choice for chronic joint pain patients who are not candidates for invasive procedures due to BMI, age, other co-morbidities and offer an alternative therapy to arthroscopic debridement or injections associated with less than optimal outcomes.

COOLIEF* Shoulder Cooled Radiofrequency System Description:

COOLIEF* Cooled RF is a non-surgical, minimally invasive, non-narcotic treatment option for patients with chronic shoulder joint pain in whom conservative measures have failed. This technique targets pure sensory branches of the shoulder joint, including the suprascapular, axillary, and lateral pectoral nerve. COOLIEF* Cooled RF of the shoulder is an outpatient procedure that uses large volume spherical lesions to ablate the nerves and stop the sensation of shoulder joint pain.

REIMBURSEMENT HOTLINE

To assist your office or facility, Avanos provides experienced reimbursement assistance for COOLIEF* Cooled Thermal RF procedures through our consultant, The Reimbursement Group (TRG). TRG provides physicians and hospital business staff with guidance to streamline the reimbursement process.

The staff at TRG is experienced in working with URAC Standards and Patient Protection and Affordable Care Act criteria.

TRG's certified medical coders, auditors, and nurse case managers are provided by Avanos to assist with your reimbursement needs, including:

- Filing pre-authorization requests for benefits on behalf of your patients
- Answers to questions related to CPT and ICD-10 codes
- Patient eligibility and benefits verification
- Assistance with filing pre-service appeals and claim denials
- Claim submission guidance
- Peer-to-peer support

Reimbursement specialists are available Monday through Friday from 8:00 am to 8:00 pm EST.

TRG can be reached at:

Phone: 1-855-779-6000

Fax: 224-433-5144

Email: coolief@trgltd.com

Note: TRG is HIPAA compliant and can promptly answer your questions and begin working directly with your insurance carriers for your COOLIEF* Cooled RF patients.



The following resources can provide support when preparing a pre-authorization for COOLIEF* cooled thermal radiofrequency procedure when performed in the office or other outpatient setting of care.

These resources have been referenced in this guide and can be utilized when required. They can be accessed in the accompanying Tool Kit.

- COOLIEF* Product Brochures
- Instructions for Use (IFU)

For ICD-10-CM/PCS code mappings access the following links.

- <http://www.cms.gov/Medicare/Coding/ICD10/2018-ICD-10-PCS-and-GEMs.html>
- <http://www.cms.gov/Medicare/Coding/ICD10/2018-ICD-10-CM-and-GEMs.html>

The following links can also provide information to assist providers when procedures and technologies are considered for reimbursement.

- AMA CPT Code Search Tool
- Medicare Physician Fee Schedule Look-up Tool
- National Association of Insurance Commissioners (NAIC) Homepage
- OMHA ALJ Appeal Status Information System (AASIS)

<https://www.avanos.com/reimbursement-information.aspx>



Per Medicare Guidelines: CPT 64640 and CPT 64633-64636 are billed as a bilateral procedure (modifier 50) when both sides of the body are addressed. The codes have an indicator of (1) per Medicare guidelines. Meaning - The 150 percent payment adjustment for bilateral procedures applies. If the code is billed with the bilateral modifier 50 or is reported twice on the same day by any other means (e.g., with RT and LT modifiers, or with 2 in the units field), the payment is based on the lower of the total actual charge for both sides or 150 percent of the fee schedule amount for a single code. If the procedure is reported as a bilateral procedure and is also reported with other procedures on the same day, the **bilateral adjustment is applied before applying any multiple procedure rules.**

SI Joint Bilateral

LEVEL	CPT CODE
L5	64635-50
S1	64640-50,59 or XS
S2	64640-50,59 or XS
S3	64640-50,59 or XS

Lumbar Bilateral

LEVEL	CPT CODE
1st Level	64635-50
2nd Level	+64636-50
3rd Level	+64636-50

Hip Bilateral

NERVE	CPT CODE
Femoral Nerve (1st Nerve)	64640-50
Obturator Nerve (Additional Nerve)	64640-50, 59 or XS

Thoracic Bilateral

LEVEL	CPT CODE
1st Level	64633-50
2nd Level	+64634-50
3rd Level	+64634-50

Cervical Bilateral

LEVEL	CPT CODE
1st Level	64633-50
2nd Level	+64634-50
3rd Level	+64634-50

Knee Bilateral

LEVEL	CPT CODE
1st Nerve	64640-50
2nd Nerve	64640-50, 59 or XS
3rd Nerve	64640-50, 59 or XS
4th Nerve	64640-50, 59 or XS

+ Denotes Add-on code. Multiple procedure reductions do not apply.

Fluoroscopic guidance included in CPT for SI, Lumbar, Cervical and Thoracic RF (no separate billing)

*Bill for fluoroscopic guidance, when used, 77002-26, Physician Billing Only



Use modifier -59 or XS when performing RF on multiple nerves (2nd, 3rd, 4th unilateral side) in physician office setting and when performing nerve injections (64450, 64447) during the same encounter as RF. For HOPD and ASC, bill only for first facet joint (using 64633 or 64635).

SI Joint

LEVEL	CPT CODE
L5	64635
S1	64640-59 or XS
S2	64640-59 or XS

Lumbar

LEVEL	CPT CODE
1st Level	64635
2nd Level	+64636
3rd Level	+64636

Hip

NERVE	CPT CODE
Femoral Nerve (1st Nerve)	64640
Obturator Nerve (Additional Nerve)	64640-59 or XS

Thoracic

LEVEL	CPT CODE
1st Level	64633
2nd Level	+64634
3rd Level	+64634

Cervical

LEVEL	CPT CODE
1st Level	64633
2nd Level	+64634
3rd Level	+64634

Shoulder

LEVEL	CPT CODE
1st Nerve	64640
2nd Nerve	64640-59 or XS
3rd Nerve	64640-59 or XS

NERVE	CPT CODE
Unlisted Spine	22899
Unlisted Nervous System	64999

+ Denotes Add-on code. Multiple procedure reductions do not apply.

Fluoroscopic guidance included in CPT for SI, Lumbar, Cervical and Thoracic RF (no separate billing)

*Bill for fluoroscopic guidance, when used, 77002-26, Physician Billing Only

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