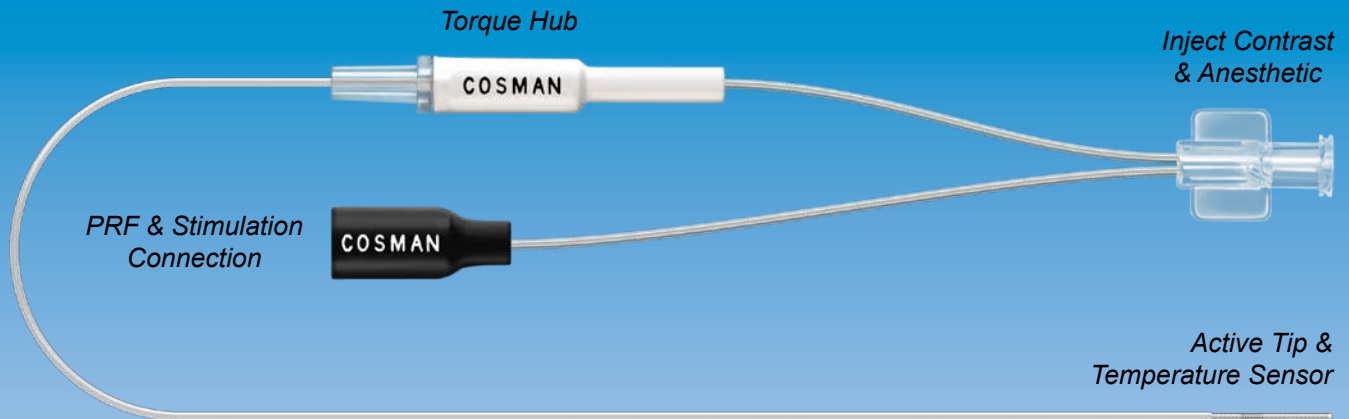


COSMAN

The Leader in RF Medicine Since 1952

Reig-Cosman
Epidural Electrode



Guidable Electrode



Introducer Cannula

RCE

Epidural Pulsed RF Pain Management

U.S. Patent 7,862,563
and Patents Pending

Treat Neuropathic Pain

Target multiple spinal nerve roots and dorsal root ganglia via a single needle placement with epidural Pulsed RF.

Ergonomic and Versatile

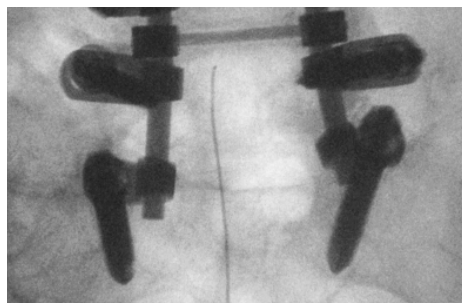
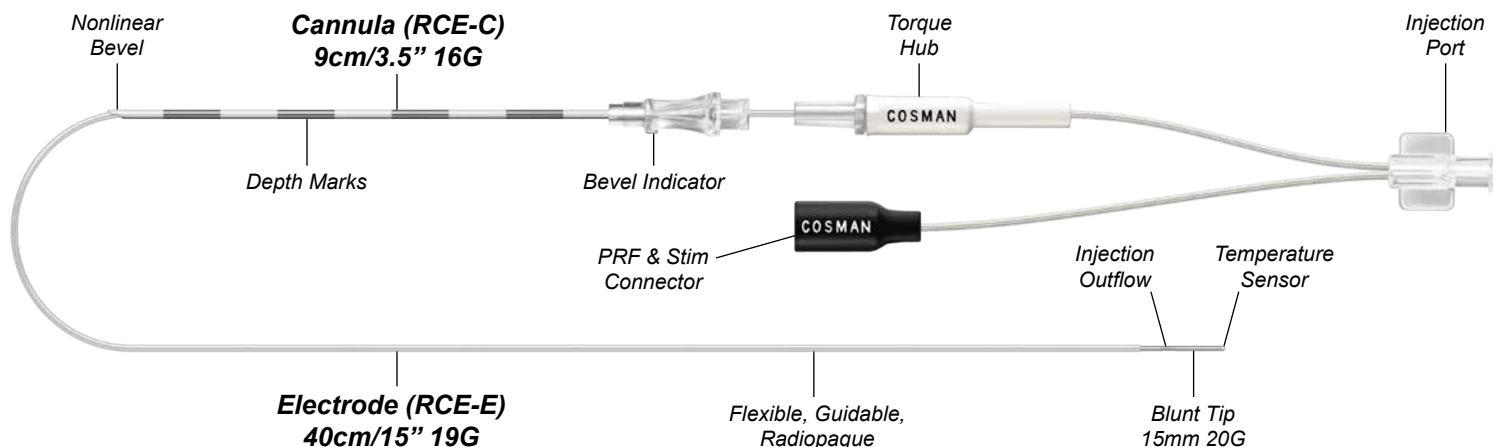
Inject, stimulate and apply PRF at same time with integrated fluid port, torque hub, thermocouple, and generator connector.

Temperature & Safety

Confirm position by stimulation, x-ray, contrast, aspiration. Limit thermal effects with PRF temperature control at 42°C.

Low Cost and High Quality

Quality epidural devices at a practical price. Cosman's 60-year experience yields cost savings for our customers.

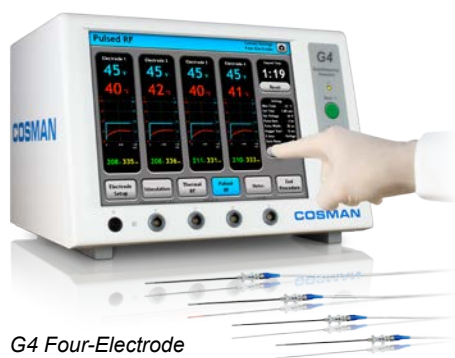


RCE Caudal Approach to Lumbar Sacral Roots

RCE Epidural Pulsed RF for Neuropathic Pain

The Reig-Cosman Electrode (RCE) was developed with Dr. Enrique Reig, MD, PhD, FIPP of the Clinica del Dolor de Madrid, Spain, using Cosman technology.* The RCE provides for injection, stimulation, and temperature-controlled epidural Pulsed RF in a single x-ray guidable electrode. The RCE is indicated for percutaneous nerve blocks with local anesthetic solution or for radiofrequency lesioning of peripheral nerve tissue.

Epidural Pulsed RF (PRF) at the dorsal nerve roots and dorsal root ganglia (DRG) can be used to treat radicular neuropathy.^{1,2,3} Epidural placement enables treatment of multiple spinal levels via a single needle, and targeting of nerves inaccessible due to normal anatomy, foraminal stenosis, or hardware.^{1,2,3} Temperature control at 42°C limits thermal effects and ensures safety.^{1,2,3,4}



G4 Four-Electrode RF Generator

1. Lifford R, Ghazi A, Cosman ER Jr. A Novel Technique to Deliver Epidural PRF for the Management of Persistent Lumbar Radicular Pain in Failed Back Surgery Syndrome. Presented at: 7th WIP World Congress. May 7-10, 2014. Maastricht.
2. Bhaskar A, Cosman ER Jr. A Novel Technique to Deliver Epidural PRF for the Management of Lumbar Radicular Pain. Presented at: 1st WIPF Word Pain Symposium. November 14-17, 2013. Kolkata, India.
3. Shamov et al. Epidural Pulsed Radiofrequency Treatment in Patients with Subacute Discogenic Radicular Pain. J Spine Neurosurg 2014; 3: 1-5.
4. Cosman ER Jr, Cosman ER Sr. Electric and thermal field effects in tissue around radiofrequency electrodes. Pain Medicine 2005; 6(6): 405-424.

* Dr. Reig receives no economic benefit from the sale of the RCE.

Unique PRF features of the G4

- Voltage: 5 – 100 V
- Pulse Width: 2 – 30 msec
- Pulse Rate: 1 – 10 Hz
- Time: 5 sec – 30 min
- Temperature: 37 – 90°C
- Automatic E-Dose⁴ Pulse Width Control: Fix 42°C, 45 V, and 2 Hz × 7.5 min = 900 pulses

Part #	Description
RCE-E401519-P	Epidural RF Electrode, 40cm/15", 15mm tip, 19G, 10/pk sterile
RCE-C916S-P	Epidural Cannula, 9cm/3.5", 16G, sigmoid bevel, 10/pk sterile
CB114-TC	Sterilizable cable, ~3 m, RCE-E401519 to G4 or RFG-1A/B
DGP-PM-5,10,25	Disposable ground pad, 5, 10, or 25/pk
G4, RFG-1A/B	Four-output or one-output RF generators