



NITRO is CTL Amedica's exclusive and revitalized family of interbody implants, crafted entirely of the heavily researched and proven bio-ceramic material, silicon nitride. Next-generation NITRO implants harness all the innate advantages of silicon nitride, in combination with innovative enhancements for an even greater osteogenic and bacteriostatic response.



### **Precisely Sized Axial Pores**

The NITRO interbody fusion family incorporates precisely sized axial pores that promote capillary action and a pathway for bony through-growth



**FEATURES & BENEFITS** 

#### **Macro-Texturing**

Macro-texturing provides even greater surface area throughout the implant, increasing bony contact and enhancing innate bacteriostatic properties



# Integration Options and Configurations

The NITRO interbody fusion family offers a robust and comprehensive variety of standalone integration options, lordotic offerings, and size configurations Note: Standalone integration is pending market launch.



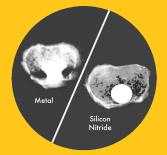
**Enhanced Osteogenic Response** 

NITRO implants have demonstrated superior protein absorption and increased osseointegration compared to other biomaterials<sup>1,2</sup>



## **Bacteriostatic Properties**

Silicon nitride possesses unique bacteriostatic properties, inhibiting the growth of bacteria<sup>2</sup>



### **Artifact-Free Imaging**

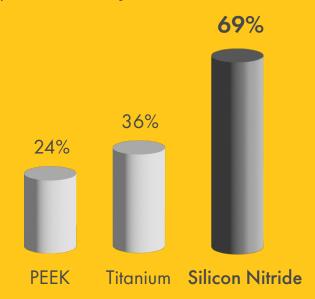
The biomaterial used in NITRO allows for artifact-free CT scan imaging, enabling clear visualization of the implant and surrounding tissues

<sup>1</sup> Webster TJ, Patel AA, Rahaman MN, Sonny Bal B. Anti-infective and osteointegration properties of silicon nitride, poly[ether ether ketone], and titanium implants [published online ahead of print July 31, 2012]. Acta Biomater. <sup>2</sup> Gorth DJ, Puckett S, Ercan B, Webster TJ, Rahaman M, Bal BS. Decreased bacteria activity on Si[3]N(4) surfaces compared with PEEK or titanium. Int J Nanomedicine. 2012;7:4829-4840.





# Percentage of new bone around NITRO implant at **90 days**<sup>1</sup>



1. Webster TJ, Patel AA, Rahaman MN, Sonny Bal B. Anti-infective and osteointegration properties of silicon nitride, poly(ether ether ketone), and titanium implants [published online ahead of print July 31, 2012]. Acta Biomater.



